## **COVID-19: DRDO's Contribution**



Mon, 21 April 2020

# DRDO's AI brains launch SAMPARC App to track COVID-19 patients

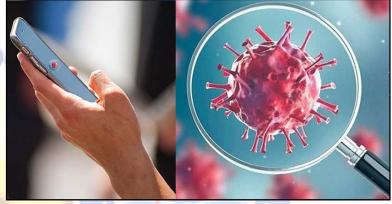
By Anantha Krishnan M

Bengaluru: The Defence Research and Development Organisation (DRDO) have come out with yet another solution to aid India's ght against COVID-19.

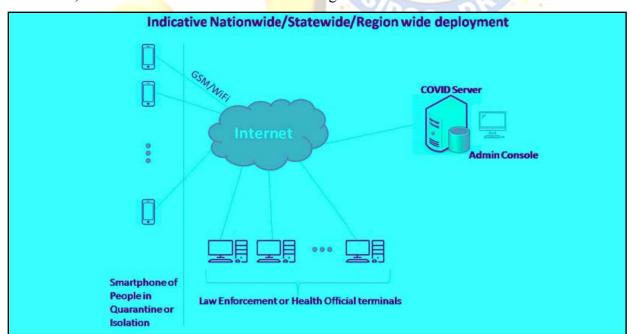
Sources confirm to Onmanorama that the Centre for Artificial Intelligence and Robotics (CAIR), one of the most sensitive and less-talked about laboratories of DRDO based out of

Bengaluru has already offered various state governments an information technology-driven approach to enable tracking of people under quarantine.

One of DRDO Young Scientists Labs (DYSL) dedicated to Artificial Intelligence (opened by Prime Minister Narendra Modi this January), too have partnered with CAIR in this societal mission.



A team of 20 scientists is said to have worked behind developing this solution called SAMPARC, which means: Smart Automated Management of Patients and Risks for COVID-19.



#### **Tracking Patients**

SAMPARC is a software that includes an App that would be installed on the smart phones of the patients. It is a server-side application that would be used by the state authorities to track the patients. Hosted exclusively for the use of state governments, it took scientists about three weeks to

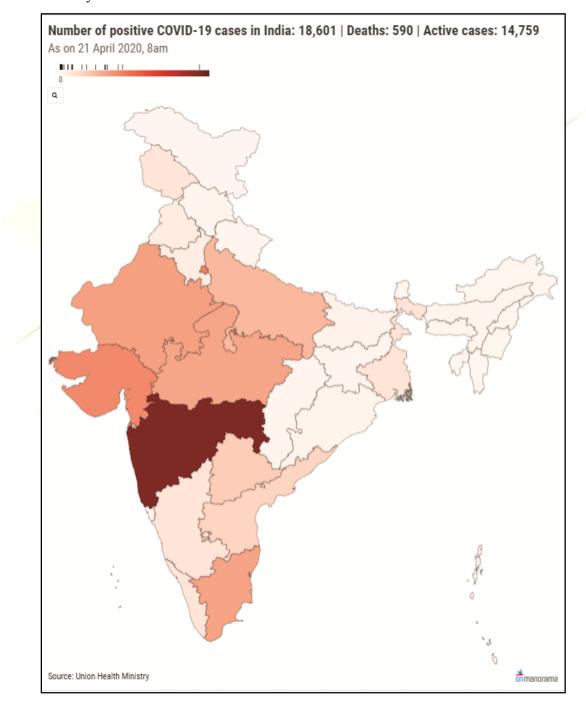
develop it. The launch version of the App was released during the first week of April to the Uttar Pradesh government.

The scientists are already working on the next version of the software based on the feedback from the users. Several state governments, including Maharashtra where the COVID-19 cases have shot up, are set to use this App.

"The initial stages of the deployments are with UP, Maharashtra and Nagaland. Based on their inputs from initial deployment and discussions, we have incorporated additions. Large scale usage is expected to happen in due course," an official said.

Unlike several other DRDO labs, CAIR has always remained under the radar owing to the sensitive missions being handled.

SAMPARC is meant only for tracking and not for contact tracing. "Therefore, it does not need any private information of the patient except his/her location of quarantine and the current location of the patient, as well as their photographs," says the official. It would function based on authentic information fed by the state officials and not based on crowd sourced data.



#### **Colour Codes**

The system would enable geo-fencing, AI-based automated face recognition (between sulfide taken during registration and subsequent selfies sent by the patient), and would have the capability to display the information to the state officials on a map which can be colour-coded to depict hotspots and containment zones.

"From the perspective of the patients, honest usage of SAMPARC could give them an option of home isolation instead of isolation in a government facility," the official added.

SAMPARC is expected to drastically reduce the overhead of tracking every patient under home isolation, thereby reducing the load on the state machinery. With SAMPARC, the officials can easily track the violators and can also perform random checks. The violators would be shown in red on a map if they break the geo-fence or their selfie(s) does not match; would be shown in blue if their smart phones stop sending periodic updates; and in green if everything is found satisfactory.

"Once the period of quarantine or isolation is over, the patients can uninstall the App from their smart phones," adds the ofcial.

(The writer is an independent aerospace and defence journalist, who blogs at Tarmak007 and tweets @writetake.)

https://english.manoramaonline.com/news/nation/2020/04/20/drdo-cair-ai-samparc-app-track-covid19-patients.html

# **THE FINANCIAL EXPRESS**

Tue, 21 April 2020

# Ministry of Defence joins fight against Coronavirus, provides food packets, medical supplies and health care assistance

Country's leading defence technology company has taken initiative by setting up a community kitchen to supply around 500 food packets every day until the crisis is over By Huma Siddiqui

Be it fighter aircraft, or helicopters, missiles or tanks, Defence PSUs, Ordnance Factory Board (OFB) and companies have all ramped up their resources and are working round the clock to help the government fight against the global pandemic COVID-19.

#### **BrahMos Aerospace**

Country's leading defence technology company has taken initiative by setting up a community kitchen to supply around 500 food packets every day until the crisis is over.

"Till date more than 8000 food packets have been distributed and the kitchen staff, while maintaining the basic standards of hygiene and cleanliness is working dedicatedly to prepare the food," a senior executive of the company shared with Financial Express Online.

According to the Ministry of Defence (MoD) "DPSUs,

OFBs, and defence companies which are the critical institutions under the Department of Defence



"All technical details of these equipment are available to industries for production at free of cost from DRDO," Reddy stated. (Photo Credit: BrahMos Aerospace)

Production (DDP), are putting in their manpower and resources to fight COVID-19."

These are all working round the clock using the expertise they have and sharing it with the private sector to ensure that there is no shortage of medical supplies including the PPEs, hand sanitizers, masks, gloves, ventilators, and other medical devices. "Also, they have identified isolation beds and facilities in their own hospitals" stated the MoD.



Assuring the private industry of DRDO's Photo Credit: BrahMos Aerospace sharing complete know-how with those seeking it, Chairman Defence Research and Development Organisation (DRDO) Dr G Satheesh Reddy, said "The focus is on indigenization of the components that are required in various medical devices and supplies. DRDO is working on test kits, goggles, oxygen cylinders, Viral Transport Mediums (VTMs) and critical components for the ventilators."

Also, R&D is going on in the DRDO labs on reusability of the PPE fabrics.

While DRDO is in the process of developing more than 20 products, newly developed products like UV sanitisation box, handheld UV device, COVSACK (COVID Sample Collection Kiosk), foot-operated fumigation device, touch-free sanitisers and face shield have already been handed over.

"All technical details of these equipment are available to industries for production at free of cost from DRDO," Reddy stated.

#### Contributions by Hindustan Aeronautics Limited (HAL)

As has been reported earlier this DPSU located in Bengaluru has set up an isolation ward facility where three beds have been identified in ICU, 30 beds in wards and a building has been readied with 30 rooms.

The aerospace company has also been involved in manufacturing and distributing PPEs to Doctors in various Hospitals in Bangalore, and has manufactured 160 aerosol boxes. These aerosol boxes have been distributed to various Government Hospitals in Bengaluru, Mysore, Mumbai, Pune, Uttar Pradesh, Telangana, Andhra Pradesh and Tamil Nadu.

#### **Bharat Electronics Limited (BEL)**

This DPSU has under the directions of Ministry of Health and Family Welfare (MoH&FW) has manufactured and delivered 30,000 ventilators — all done within two months.

It is due to the joint efforts of DRDO which initially designed and developed it and this was improved on by local Mysore located company M/s Skanray, and BEL manufacturing it. With this week according to the MoD, BEL is expected to manufacture 5000 ventilators. And the schedule that has been chalked out, BEL will manufacture 10,000 in May and another 20,000 in June. Both DRDO and BEL are working on making components in India.

#### **Bharat Dynamics Limited (BDL)**

This company is in the process of developing a prototype of a ventilator. This will be tested and certified early next month, which will be followed by manufacturing. This project will be completed with the help of a startup based in

#### **Bharat Earth Movers Limited (BEML)**

This company is playing the most important role in the manufacturing of ventilators by BEL & M/s Skanray. BEML has so far manufactured 25 sets of five components and is working on more for the mass production of ventilators.

https://www.financialexpress.com/defence/ministry-of-defence-joins-fight-against-coronavirus-provides-food-packets-medical-supplies-and-health-care-assistance/1933980/





# অতিবেগুনি রশ্মিতেই কাবু করোনা, DRDO-র যন্ত্রে ভাইরাস মুক্ত হবে মোবাইল-ব্যাগ-টাকা Coronavirus tamed by Ultraviolet Rays: DRDO's equipment will make mobile-bag-money virus free

By Sulaya Singha

**অর্ণব আইচ:** অতিবেগুনি রশ্মিতেই কাবু করোনা ভাইরাস। মোবাইল, মানিব্যাগ, ফাইল, টাকা যা-ই হোক না কেন, আলট্রাভায়োলেট রশ্মি বা ইউভিসি তার উপর ফেলা হলেই করোনা ধুয়ে-মুছে সাফ। এই রশ্মি নষ্ট করে ফেলবে কোভিড-১৯-এর আরএনএ। এমনই যন্ত্র নিয়ে এল প্রতিরক্ষা মন্ত্রকের ডিফেন্স রিসার্চ অ্যান্ড ডেভেলপমেন্ট অর্গানাইজেশন বা ডিআরডিও (DRDO)।



ডিআরডিও'র আওতায় খাকা দু'টি গবেষণাগার ডিফেন্স ইন্সটিটিউট অফ ফিজিওলজি অ্যান্ড অ্যালায়েড সায়েন্সেস (ডিপাস) ও ইন্সটিটিউট অফ নিউক্লিয়ার মেডিসিন অ্যান্ড অ্যালায়েড সায়েন্সেস (ইনমাস) যৌখভাবে তৈরি করেছে দু'টি যন্ত্র। আবার দক্ষিণ নাভাল কমান্ডও 'ইউভি রে' দিয়ে সাফ করার জন্য বানিয়েছে একই ধরনের যন্ত্র। ডিআরডিও সূত্রে জানা গিয়েছে, দু'টি যন্ত্রের মধ্যে একটি হচ্ছে 'ইউভি স্যানিটাইজেশন বক্স' ও অন্যটি হচ্ছে 'হ্যান্ড হেল্ড ইউভি ডিভাইস'। সেনাবাহিনী বা সরকারি অফিসগুলি নিজেদের জন্য এগুলি ব্যবহার করতে পারবেই। এছাডাও সাধারণ মানুষের হাতেও যাতে এই যন্ত্রগুলি পৌঁছে দেওয়ার চেষ্টা করছেন ডিআরডিও আধিকারিকরা।

ডিআরডিও'র বিশেষজ্ঞদের মতে, অতিবেগুনি রিশ্ম বা 'আলট্রাভায়োলেট সি লাইট' ক্ষমতা রাখে কোভিড-১৯ বা করোনা ভাইরাসের জেনেটিক বস্তু নষ্ট করে দেওয়ার। এই রিশ্মি কিছুক্ষণের জন্য কোনও বস্তুর উপর ফেলা হলে ভাইরাসের আরএনএকে ধ্বংস করে। এই বিষয়ে ভাইরাস বিশেষজ্ঞ ডা. সিদ্ধার্থ জোয়ারদার জানান, ইউভি রিশ্মি ভাইরাসের ডিএনএ ও আরএনএ দু'টিকেই নষ্ট করতে সক্ষম। এই রিশ্মি ভাইরাসের আরএনএ ভেঙে ফেলতে পারে। তার ফলে আর নতুন করে ভাইরাস তৈরি হতে পারবে না। ভাইরাস না বাড়তে পারলে সংক্রমণও ছড়াবে না।

ডিআরডিও'র বিশেষজ্ঞরা জানিয়েছেন, হাতে বা সঙ্গে থাকা জিনিসের থেকেও ছড়াতে পারে করোনা। তার মধ্যে যেমন রয়েছে মোনাইল ফোন বা ট্যাব, তেমনই রয়েছে মানিব্যাগ, টাকা বা ফাইলের কভার। এই বস্তুগুলিতে যদি করোনা ভাইরাস থাকেও, ইউভি রশ্মি তাকে নষ্ট করবে। তার জন্যই তৈরি করা হয়েছে 'ইউভি বক্স'। এই বাক্সের ভিতরই রয়েছে 'ইউভিসি ল্যাম্প'। সেগুলি বাক্সের ভিতর সার বেঁধে রাখা। বাক্সের



ভিতর রাখতে হবে বস্তুগুলি। ল্যাম্প থেকে রশ্মি বস্তুর উপর পড়লে নষ্ট হচ্ছে ভাইরাস। আবার এই ল্যাম্পগুলি ওজোন গ্যাস ভৈরি করে। বস্তুর যে অংশে রশ্মি লাগছে না, সেই অংশে থাকা ভাইরাস নষ্টে সাহায্য করে ওজোন গ্যাসও। কেউ যদি আংটি খুলে এই বাক্সে রাখেন, তাও ফলপ্রসৃ হতে পারে।

আবার বাড়ি বা অফিসের চেয়ার, ফাইল, পোস্টে বা কুরিয়রে আসা কোনও চিঠি বা জিনিস, এমনকী ডেলিভারি অ্যাপে আসা থাবার বা ওষুধের প্যাকেটের উপর থাকা করোনা ভাইরাস কাবু করতে গেলে ব্যবহার করা যেতে পারে 'হ্যান্ড হেল্ড ডিভাইস'। এই ডিভাইস থেকে বের হওয়া রিশ্মি মিনিটখানেকের মধ্যেই ধ্বংস করবে ভাইরাসের বাড়বাড়ন্ত। ডিআরডিও'র দাবি, স্যানিটাইজেশন করার জন্য অনেক সময় যে রাসায়নিকগুলি ব্যবহার করা হয়, সেগুলি ক্ষতিকর। কিন্তু অভিবেগুনি রিশ্মি পরিবেশ বান্ধব ও সেদিক থেকে ক্ষতিকর নয়। তবে ভাইরাস বিশেষজ্ঞদের মতে, অভিবেগুনি রিশ্মি বস্তুর উপর থাকা ভাইরাস ধ্বংস করলেও শরীরের সংস্পর্শে এলে তা মানুষের ক্ষতি করতেই পারে। বিশেষ করে চোথের পক্ষে এই রিশ্মি খুবই ক্ষতিকর। তাই বাড়িতে খুব সাবধানে ব্যবহার করতে হবে এই যন্ত্র। বিশেষ করে যে বাড়িতে শিশুরা রয়েছে, সেই বাড়িতে এই যন্ত্র ব্যবহার না করাই ভাল বলে জানিয়েছেন বিশেষজ্ঞরা।

https://www.sangbadpratidin.in/india/drdo-makes-new-device-to-kill-deadly-coronavirus/

ज्ञान प्रसार एवम् विस्तार के 50 वर्ष

## **COVID-19: DRDO/ATIRA/Railway Contribution**

## THE TIMES OF INDIA

Tue, 21 April 2020

# DRDO partners with Ahmedabad-based textile association to make N-99 masks in India

The Ahmedabad Textile Industry's Research Association (ATIRA) in collaboration with the Defence Research and Development Organisation has produced a high quality cloth to make masks of 99 per cent filter efficiency.

ATIRA is developing the cloth material for preparation of five lakh 'N-99 masks', which it says would be better in quality than the N-95 masks that have been in huge demand of late in the fight against coronavirus.

While the N-95 respirator is able to filter 95 per cent of the very small airborne particles, the efficiency of the N-99 mask to filter such particles will be 99 per cent.

The Ahmedabad-based textile research association claims it is the only facility in the country to produce filter cloth for N-99 masks.

"Ninty nine per cent filtration is the highest among all types of masks available in India. There were many challenges initially, but with the untiring efforts of our highly competent scientists and research technicians, we were able to successfully develop this cloth and produce it on large scale," ATIRA director Pragnesh Shah told PTI.

The N-99 mask has five layers out of which two are of nano mesh which are inside and three outer layers are of cloth, he said.

"Currently, the filter cloth is manufactured at a state-of-the-art facility of ATIRA as per the WHO guidelines. The Government of India and the Defence Research and Development Organisation (DRDO) have recognised the efficiency of these masks, Shah said.

The high quality cloth for over 3.5 lakh masks has already been handed over to DRDO, while production of more such material is going on, said ATIRA deputy director Deepali Palawat, who is heading the project.

"This project is the finest example of collaboration and coordination with the government. It was difficult to procure raw materials during the lockdown. The government has moved mountains to help us procure the raw materials and provided full support during the lockdown," she said.

Palawat said it was difficult to convert the research centre into a production unit but a 15-member ATIRA staff, including scientific officers and technicians, are working round-the-clock to fulfil DRDO's order of five lakh masks.

"The DRDO is getting these masks ready for health ministry officials, doctors of the All India Institute of Medical Sciences (AIIMS) and top defence cadre, she said.

"We are happy that we are able to help the Indian government and people during such unprecedented times. Our partnership with DRDO has yielded something noteworthy for the country," ATIRA council member Punit Lalbhai said.

ATIRA is a renowned body set up here in 1947 by textile mills as an autonomous non-profit R&D institution.

Its activities cover various aspects, from fibre to finished fabrics in traditional textiles as well as technical textiles in the arena of geo-textiles, nano web technology and composites, as per the association's website.

https://timesofindia.indiatimes.com/gadgets-news/drdo-partners-with-ahmedabad-based-textile-association-to-make-n-99-masks-in-india/articleshow/75248233.cms



# Ahmedabad textile body in collaboration with DRDO develops high quality cloth to make 'N-99' masks

ATIRA is developing the cloth material for preparation of five lakh 'N-99 masks', which it says would be better in quality than the N-95 masks that have been in huge demand of late in the fight against coronavirus

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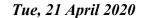
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https://www.news18.com/news/india/ahmedabad-textile-body-in-collaboration-with-drdo-develops-high-quality-cloth-to-make-n-99-masks-2584715.html

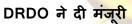




# रेलवे ने एक दिन में बनाई इतनी PPE kit, कोरोना से लड़ाई हो जाएगी आसान

देश इस समय कोरोना वायरस (Coronavirus) महामारी covid 19 से लड़ रहा है। इस लड़ाई में भारतीय रेलवे भी महत्वपूर्ण योगदान दे रहा है। भारतीय रेलवे के Northern Railways जोन के एक

कारखाने ने रविवार 1914।2929 को एक दिन में 1003 कवरऑल (PPE kit) बना कर नया रिकॉर्ड बनाया है। देश में डॉक्टरों और अस्पतालों में काम कर रहे कर्मचारियों की जरूरत को ध्यान में रखते हुए उत्तर रेलवे ने रोज लगभग 1000 कवरऑल बनाने का लक्ष्य रखा है। देश में इस समय बड़े पैमाने पर PPE kit की जरूरत है रेलवे का ये प्रयास कोरोना से लड़ाई में काफी मददगार साबित होगा। उत्तर रेलवे के चीफ मैकेनिकल इंजीनियन (CME) अरुण अरोड़ा के मुताबिक इस समय पूरी द्निया में PPE kit की कमी है। ऐसे में उत्तर रेलवे की जगाधरी वर्कशॉप में बनाए जा रहे PPE kit कोरोना से लड़ाई में काफी मददगार साबित होगी। फिलहार वर्कशॉप में रोज एक हजार किट बनाई जा रही है। मई तक इसे 2000 प्रतिदिन तक ले जाने का लक्ष्य है। रेलवे की ओर से तैयार की जा रही किट की कीमत बाजार में उपलबध किट की तुलना में लगभग आधी है।



कोरोना वायरस (coronavirus outbreak in India) covid 19 के संक्रमण को रोकने के लिए देश के डॉक्टर हर संभव प्रयास कर रहे हैं। डॉक्टरों की मदद के लिए भारतीय रेलवे (Indian Railways) ने अपनी वर्कशॉप में बड़े पैमाने पर व्यक्तिगत सुरक्षा उपकरण (PPE) बनाने

का फैसला लिया है। उत्तर रेलवे को रक्षा अनुसंधान एवं विकास संगठन (DRDO) से पीपीई को बनाने की मंजूरी मिल चुकी है।









#### डॉक्टर और मेडिकल स्टॉफ को मिलेगी मदद

PPE रेलवे सिहत अन्य अस्पतालों में कोरोना वायरस के इलाज में लगे रेलवे चिकित्सकों और अस्पताल के कर्मचारियों को आवश्यक सुरक्षा उपलब्ध करायेगा। रेलवे ने एक बयान में कहा, रेलवे के चिकित्सकों और पैरामेडिक्स के लिए हर रोज इस तरह के एक हजार सुरक्षा उपकरण बनाने के लिए रेलवे में आवश्यक प्रबंध किये जा रहे है।

### कोरोना में इलाज में लगे डॉक्टरों को रेलवे देगा PPE

रेलवे कोरोना के इलाज में लगे देश के अन्य डॉक्टरों को भी 50 प्रतिशत PPE कपड़ों की आपूर्ति करने पर विचार कर रहा है। इन सभी के लिए जगाधरी से सामग्री खरीदी जा रही है जो पंजाब में कई बड़े कपड़ा उद्योगों के करीब स्थित है। यमुनानगर स्थित विक्रेता से कच्चे माल का स्रोत तय करने का निर्णय लिया गया है और इसे कपड़ा मंत्रालय ने मंजूरी दे दी है। बयान में कहा गया है, "आने वाले दिनों में, उत्पादन सुविधाओं में और तेजी आ सकती है। कोरोना वायरस से निपटने में लगी अन्य सरकारी एजेंसियों द्वारा भारतीय रेलवे के इस कदम का स्वागत किया जा रहा है।

#### रेलवे ने 2500 कोचों को आइसोलेशन वार्ड में बदला

भारतीय रेलवे भी कोरोना वायरस के खिलाफ जंग में पूरी शिद्दत के साथ जुटी हुई है। रेलवे ने अब तक 2500 कोचों को कोरोना वायरस संदिग्ध के लिए आइसोलेशन वार्ड में तब्दील कर दिया है। यानी इन 2500 कोचों में 40 हजार आइसोलेशन वार्ड बनाए गए हैं। वहीं रेलवे अभी 5000 कोचों को आइसोलेशन वार्ड में तब्दील करने में जुटा है, जिसमें अब तक 2500 कोचों को कोरोना संदिग्धों के लिए आइसोलेशन वार्ड में तब्दील कर दिया गया है। इस तरह भारतीय रेलवे एक दिन में औसतन 375 कोच को आइसोलेशन वार्ड में बदल रहा है।

## मास्क और सेनेटाइजन का भी हो रहा है प्रोडक्शन

उत्तर रेलवे ने 19.04.2020 तक 32682 मास्क और 4715 लीटर सेनेटाइजर बनाया है। वहीं रेल कारखानों में प्रोडक्शन के दौरान सोशल डिस्टेंसिंग भी मेंटेन की रही है। रेलवे का NER जोन रक्षक नाम से आइसोलेशन कोच तैयार कर रहा है।

https://www.zeebiz.com/hindi/railways/photo-gallery-indian-railways-ppe-kit-northern-railways-workshops-fabricates-1003-coveralls-in-a-single-day-gets-drdo-thumbs-up-25171

# The Indian **EXPRESS**

Tue, 21 April 2020

# Railways to make one lakh coveralls by May 31 for Covid-19 frontline staff

Railways' coverall samples were passed by the DRDO laboratory in Gwalior, following which it picked up material from the four government-authorised suppliers of raw material for PPEs to stitch the coveralls

By Avishek G Dastidar

New Delhi: Indian Railways is targeting to make 1 lakh coveralls by May 31 for the country's frontline staff battling the COVID-19 outbreak. As of now, it has procured raw material for 60,000 of this critical Personal Protective Equipment (PPE) and distributed it among its various zones.

Railways' coverall samples were passed by DRDO laboratory in Gwalior following which it picked up material from the four government-authorised suppliers of raw material for PPEs to stitch the coveralls.

While raw material for 60,000 coveralls is already distributed among all zonal railways, the same for another 40,000 has been requisitioned and will reach by April-end so that the figure touches a lakh by end of May. The coveralls that Railways is making are for half the cost of those available in the market, officials said.

Including GST, the railway coverall costs Rs 447 per piece, whereas the ones available in the market are for Rs 808.50.

"We have tied up with the government-approved raw material suppliers. What we are making are not just cheaper but also superior in quality compared to what is available in the market," said Arun Arora, Principal Chief Mechanical Engineer of Northern Railway, which got its coverall

samples passed by the DRDO lab and then sent the design and tutorial videos to other zones to follow. Northern Railway is also the nodal procurement body for coverallrelated material in all of Indian Railways.

On Monday, for two consecutive days, the workshops and other units of Northern Railway together stitched over 1,000 coveralls a day. So far the zone has made 3467 coveralls and has supplied to railway hospitals and elsewhere as well. It is Including GST, the railway coverall costs Rs 447 per piece, whereas targeting to make over 10,000 coveralls by the ones available in the market are for Rs 808.50. (Express Photo)



month-end. In the overall pool of a lakh coveralls by Indian Railways, this zone is gearing up to make around 40,000-50,000.

However, in what could prove to be a setback, the UP government Monday shut down the two main workshops in Lucknow where these PPE items were being made—one in Alambagh and the other in Charbagh as part of containment measures. A stitching facility identified in Noida has also been shut down for the same reason. However, officials maintained that despite these hurdles, they would be able to achieve the target. "We expect to make around 40,000-50,000 coveralls in Northern Railway alone by May 31," Arora said.

Recently, at least 30,000 PPEs that arrived from China as donations did not pass Indian tests. There has also been complaints of spurious coveralls in the market. India requires around 15 million coveralls by June. The government has pressed into service several manufacturers to meet the demand and is also exploring various options to import.

Uttar Pradesh's Madhyanchal Vidyut Vitaran Nigam Limited has sought 100 litres of hand sanitiser from Northern Railway, which has so far made 4798 litres of it.

On Monday, the district administration in Dhanbad shut down the Divisional Railway Manager's office as containment and quarantine measures.

https://indianexpress.com/article/india/indian-railways-coveralls-masks-coronavirus-covid-19-6371515/

# **DRDO Technology**



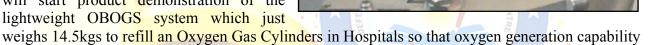
Tue, 21 April 2020

# DRDO's OBOGS developed for LCA-Tejas will now save critically ill Patients

Indigenous On-Board Oxygen Generating System (OBOGS) Developed by the Defence Research and Development Organisation (DRDO) for the Tejas Mk2 program now will be used to fight the Chinese Virus affected Patients as DRDO has now proposed to use them as oxygen generation plant for Critically ill Patients.

DRDO believes that the modified OBOGS system developed to produces oxygen inside the aircraft can be used to refill an Oxygen Gas Cylinder in Hospitals for patients who are in critical care units.

idrw.org has been informed that DRDO will start product demonstration of the lightweight OBOGS system which just



in far fetched areas can be maintained in light of the possible shortage of Oxygen Gas Cylinders.

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https://idrw.org/drdos-obogs-developed-for-lca-tejas-will-now-save-critically-ill-patients/#more-225618

ज्ञान प्रसार एवम् विस्तार के 50 वर्ष