

SOLUTIONS TO EQUITABLE DISTRIBUTION OF VACCINES

EQUITABLE DISTRIBUTION OF VACCINES

Vaccination has emerged as a road towards a gradual pandemic exit as many parts of the world continue to cope with increases in new coronavirus illnesses caused by the highly transmissible Omicron version of the virus. Despite the controversy over the vaccines' effectiveness against the new strains, this is the case.

It is vital to ensure that individuals have access to a COVID-19 vaccine in order to combat the COVID-19 pandemic. Equitable Immunization distribution emphasises vaccination of vulnerable groups and regions while also protecting individuals who have not received the vaccine.

It therefore ensures that everyone has equal access to the vaccine while focusing on fairness and overcoming access restrictions. This also includes personalising vaccine messaging to specific communities and recognising common access barriers.

Addressing the challenge the leaders of the world have come together so that all populations have access to vaccines. Many efforts have been made in this regard including the COVAX Facility established by the WHO.

While these do address the problem of equal access to vaccines, are all the population still getting vaccinated and why does it matter?

Why Equitable Distribution: For global health, a fair and equitable distribution of the COVID-19 vaccination is critical. It can stop the virus from spreading, limit the risk of new variants emerging and avoid hospitalizations and deaths all around the world.

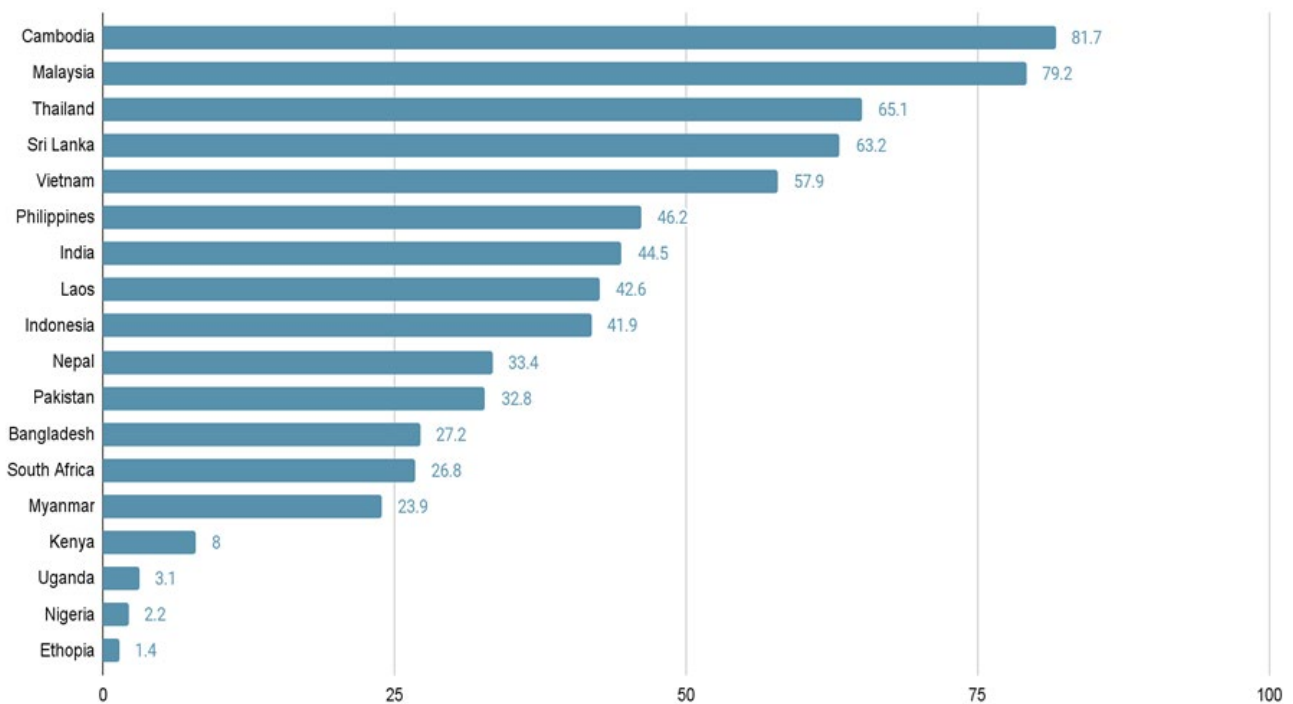
- ▶ Protecting vulnerable individuals and communities
- ▶ Increasing the chances of herd immunity
- ▶ Slowing the spread of COVID-19
- ▶ Reducing the emergence of new variants

However, vaccine manufacturing, distribution, and administration have all been inconsistent and inequitable over the world. Many people, however, have not been vaccinated due to a lack of access to the vaccine, putting themselves and their communities at risk. In some cases, this is also due to people opting out of getting the shot.



Let us look into some data of fully vaccinated people in the developing countries.

Percentage of Population Fully Vaccinated



LET US LOOK INTO SOME DATA OF FULLY VACCINATED PEOPLE IN THE DEVELOPING COUNTRIES.

According to the statistics 58.6 % of the world population is fully vaccinated as on the 4th of Jan 2022. ¹

Some of the **major reasons for having good vaccination rates** in certain countries can be listed as follows:

1. **Fund allocation by the Government to secure supplies of vaccines-**
 - a. **Cambodia:** It is worthwhile to note that **Cambodia has the highest percentage of fully vaccinated at 81.7%**. One of the reasons for this was because the government allocated \$170 million to purchase vaccines, including the Oxford-AstraZeneca jab, which has enabled Cambodia to achieve one of the highest vaccination rates in Southeast Asia. ²
 - b. **Thailand at 65.1%** as the country has secured the vaccines ³

¹ https://ourworldindata.org/covid-vaccinations?country=OWID_WRL

² <https://www.aa.com.tr/en/asia-pacific/cambodia-hits-covid-19-vaccination-target-of-10m-people/2409670>

³ (<https://www.straitstimes.com/asia/se-asia/thailand-to-hit-100-million-covid-19-jabs-but-vaccine-hesitancy-lingers-in-restive>)

2. **Strong Healthcare System in place along with the country's preparedness for vaccination drives:**

- a. **Malaysia** also has been able to achieve **79.2% rate** as it was able to secure vaccines for its population and also has a strong healthcare system and was able to strategise the use ⁴
- b. **Srilanka** was able to get to **63.2%** with availability of vaccines and a strong healthcare system in place. ⁵

Looking at the ones at the bottom of the chart some of the major reasons for low vaccination rates seen are:

1. **Disparity in securing vaccines in comparison to wealthy nations:**

- a. **Bangladesh is at 27.2%** as it was slow to get supplies and also administer them-marking the case of disparity between wealthy and developing nations ⁶
- b. **South Africa is at 26.8%** and has been receiving uneven supplies, being dependant on donations, help and COVAX and vaccine hesitancy is also being considered as one of the causes for the low rate of vaccination. One can also note that the new variant of COVID-19 was first detected in South Africa and low vaccination rates could be one of the reasons. ⁷

2. **Lack of funds, Uneven Supplies, lack of good management and logistical barriers along with vaccine hesitancy :**

- a. **Nigeria** at 2.2% struggled with lack of supply followed by uneven supplies and lack of capacity to manage the shots given shorter shelf life of vaccines received ⁸
- b. **Ethiopia** is at 1.4% and the reasons remain - disparity in securing vaccines, uneven vaccine supplies coupled with non-established healthcare system, vaccine logistical problems like storage and distribution and vaccine hesitancy.

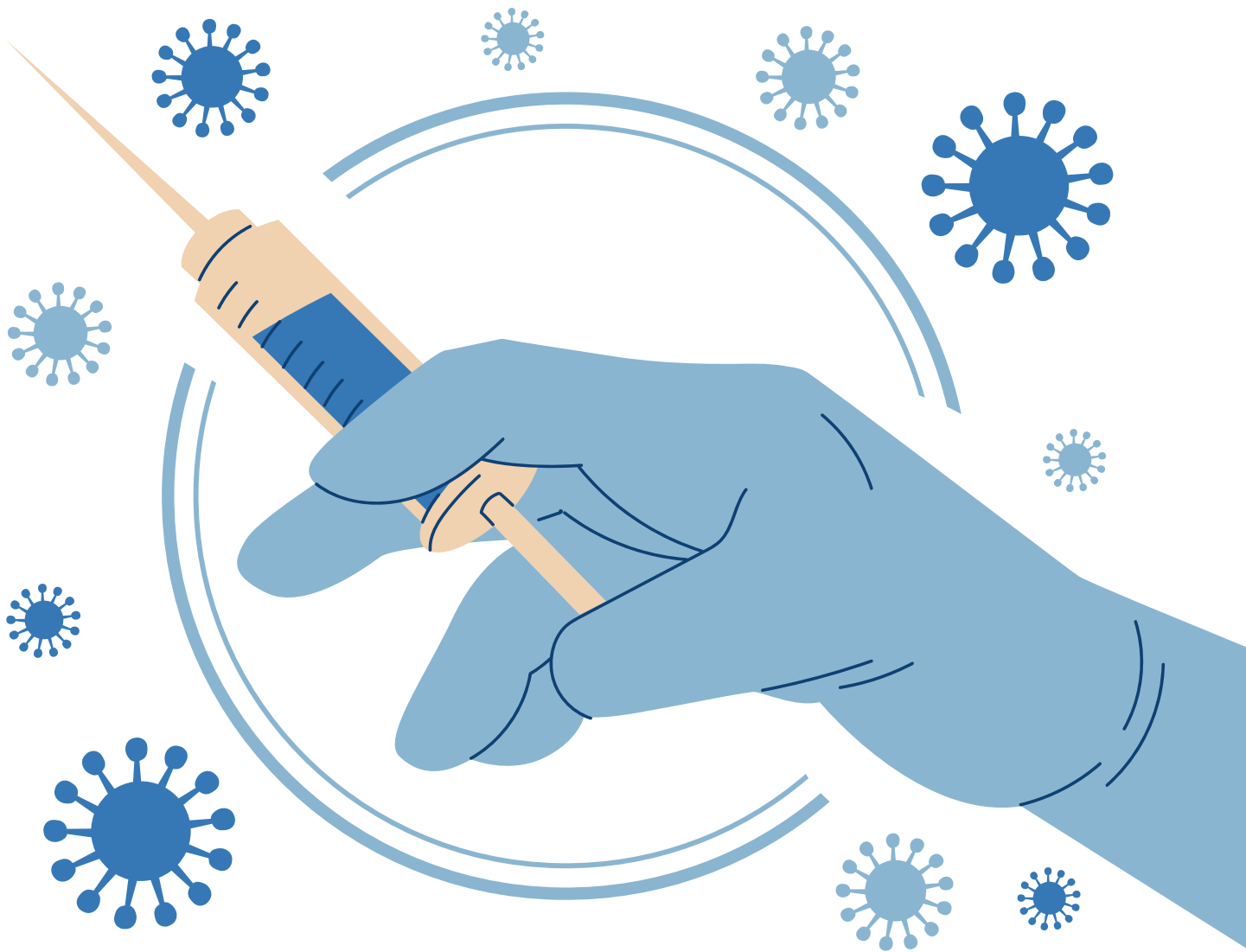
⁴ (<https://www.eastasiaforum.org/2021/09/24/malaysias-rapid-vaccination-cant-outrun-its-covid-19-failures/>)

⁵ (<https://www.who.int/srilanka/news/detail/18-09-2021-sri-lanka-vaccinates-50-per-cent-of-total-population>)

⁶ (<https://www.orfonline.org/research/covid-19-vaccination-agenda-in-bangladesh/>)

⁷ (<https://www.bbc.com/news/59462647>)

⁸ (<https://www.reuters.com/business/healthcare-pharmaceuticals/exclusive-up-1-million-covid-vaccines-wasted-nigeria-last-month-2021-12-08/>)



These bring to light the **barriers to Equitable Distribution of Vaccines:**

1. **Lack of vaccines access in a country**
2. **Logistical barriers-** These include health infrastructure, local storage and delivery mechanisms and capacity for more effective pandemic preparedness and response.
3. **Vaccine hesitancy-** Vaccine hesitancy encompasses a refusal to vaccinate, delaying vaccines, or using certain vaccines but not others. Interestingly, this trend was identified by the WHO as one of the top ten global health threats in 2019⁹
4. **Financial constraints**
5. **The not so convenient digital infrastructure:** The digital infrastructure used to set up vaccine appointments has created significant obstacles for individuals without certain technical resources. As vaccine distribution accelerates, we should pause to think through what problems are already apparent, and what changes we might make to mitigate those problems¹⁰
6. **Bureaucratic Roadblocks such as requirement of local ID etc for getting vaccinated**

⁹ (<https://www.american.edu/sis/news/20210309-how-equitable-is-the-distribution-of-covid-19-vaccines.cfm>)

¹⁰ (<https://www.brookings.edu/techstream/how-to-build-more-equitable-vaccine-distribution-technology/>)⁵ (<https://www.orfonline.org/research/covid-19-vaccination-agenda-in-bangladesh/>)



Some of the solutions that we can look into could include:

- ▶ **Increased vaccine financing** : It can help more individuals be vaccinated in low-income countries and communities. The COVID-19 Vaccines Global Access Fund, for example, transfers funds from high-income nations to low-income countries in order to promote immunisation.
- ▶ **Increase in vaccine production:** Producing enough dosages for the entire world's population and delivering them to those who need them all throughout the world remains a monumental challenge, one that is unparalleled in scale, speed, and complexity. Increased vaccine manufacture will demand more cross-sector collaboration to address current shortages. For Eg: The Biotechnology Innovation Organization (BIO), the Developing Countries Vaccine Manufacturers' Network (DCVMN), and the International Federation of Pharmaceutical Manufacturers and Associations (IFPMA), which represent many of the companies behind the historic scale-up of vaccine manufacturing, have released independent data confirming that production of COVID-19 vaccines increased from zero to 11,2 billion doses in just one year.¹¹
- ▶ **Accelerating the transfer of technology and know-how:** COVID-19 vaccine production ramps up will depend on technology transfer—the capabilities and processes that can speed vaccines from development to manufacturing.

Eg: mRNA vaccine Technology Transfer Hub established in South Africa in response of the flagrant inequities in access to COVID-19 vaccines in low- and middle-income countries, especially in Africa.

¹¹ (http://www.dcvmn.org/IMG/pdf/bio_dcvmn_ifpma_covid-19_press_release_16december2021.pdf)

- ▶ **Overcoming logistical challenges:** Creating a good healthcare infrastructure, using local supply chain network, more access to and building more cold-chain facilities, ensuring good packaging methods, making vaccines available to walk-ins and at more medical centres and good vaccine delivery tracking mechanisms would help circumvent the logistical issues. Eg: eVIN (Electronic Vaccine Intelligence Network) an indigenously developed technology system in India digitizes vaccine stocks and monitors the temperature of the cold chain through a smartphone application. eVIN aims to support the Government of India's Universal Immunization Programme by providing real-time information on vaccine stocks and flows, and storage temperatures across all cold chain points in these states.
- ▶ **Prioritizing vaccination access :** Immunizations can be distributed more equitably based on need. The initial vaccine recipients in the United States, for example, were medically frail people, those in nursing homes, and those over the age of 65 and in Srilanka vaccine deployment was initiated with coverage of frontline workers and then expanded progressively to all over 60 and, now, over 30 years of age.



“Considering social and societal benefits, states need to guarantee UHC -free access to prevention (National immunization programs as a part of this) and accessible care for all populations as a basic minimum”
By Ivana Haluskova, Vaccine industry Expert, France

- ▶ **Addressing vaccine hesitancy:** Providing educational and personalised messaging to vulnerable people, particularly in low-income communities, may motivate them to get vaccinated. Also good social engagement strategies could help.
- ▶ **Building stronger health systems for the future:** Invest intelligently to establish stronger health systems that are better prepared to deal with emergencies and mitigate their long-term consequences.
- ▶ **Fostering partnerships:** The international effort to combat the epidemic is centred on partnerships between poorer nations, bilateral donors, Multilateral Development Banks, UN agencies, foundations, international health organisations, the commercial sector, and civil society organisations. Eg: The Access to COVID-19 Tools Accelerator (ACT-A), for example, brings



together governments, scientists, businesses, civil society, philanthropists, and global health organisations to support the development and equitable distribution of tests, treatments, and vaccines in order to speed up the end of the pandemic. The World Bank, in collaboration with WHO and the Global Fund, is leading the health systems connection, which helps nations build their capacities and infrastructure in order to deliver COVID-19 tools in-country.



“Public - private partnership opens the doors to finance the most adapted approach given country differences and specificities” by By Ivana Haluskova, Vaccine Industry Expert, France

- ▶ **Aiding the country’s readiness for massive vaccination campaigns :** In November 2020, in anticipation of the availability of safe and effective vaccines for COVID-19, the World Bank, in collaboration with governments, WHO, UNICEF, the Global Fund, and Gavi, conducted readiness assessments in more than 100 low- and middle-income countries, examining key indicators such as cold chain and logistics, population prioritisation, budgeting, healthcare personnel training, safety surveillance, and public engagement strategies.

Most countries are ready to begin immunizations, according to the country evaluations, with 85 percent having established national vaccination programmes and 68 percent having vaccine safety procedures in place to collect information on any adverse responses. WHO with its CRD stream is also working with various countries to aid introduction of COVID-19 Vaccines.

Summary:

To summarise, fair vaccination distribution and administration are critical to ending the COVID-19 pandemic, as evidenced by the emergence of a new variant – Omicron – from one of the least immunised regions. Not only does vaccination aid in pandemic control, but huge inequalities between the vaccinated and unvaccinated will soon play out in cross-border situations, limiting opportunities in areas such as travel, tourism, and education, as well as broader access to mobility and employment opportunities, all of which have an economic impact.

To save lives, terminate the epidemic, and create a better future with the least amount of economic effect around the globe, it is critical that everyone works together to ensure an equal distribution of vaccines.

Source:

1. <https://www.medicalnewstoday.com/articles/equitable-distribution-of-vaccines>
2. <https://blogs.worldbank.org/health/world-health-day-fair-access-covid-19-vaccines-developing-countries>

EQUITABLE DISTRIBUTION - THOUGHTS FROM OUR LEADERS



Rajinder Suri,
CEO, DCVMN International,
Switzerland



Dr. Raj Ghosh,
Senior Advisor, Vaccine Delivery,
Bill & Melinda Gates Foundation,
India

1. **Equitable distribution of vaccines is the only way out of the Covid-19 pandemic. With all efforts driven towards reaching this goal, can you tell us how your organisation is supporting equitable distribution of vaccines?**

Rajinder Suri, CEO, DCVMN International, Switzerland :
"Right from the time the genomic sequence of SARS-COV-2 virus has been made available in early 2020, Developing Country Vaccine manufactures, have been working shoulder to shoulder with their Industrialized counterparts, academia and research institutes to ensure rapid development and manufacturing of COVID-19 Vaccines.

There are three key areas where DCVM's have excelled;

- ▶ Effective Utilization of various platform technologies
- ▶ International Collaborations leading to rapid scale up and scale out of vaccine manufacturing
- ▶ Catering to the needs of most vulnerable countries and populations where there was high disease burden in terms of mortality and morbidity.

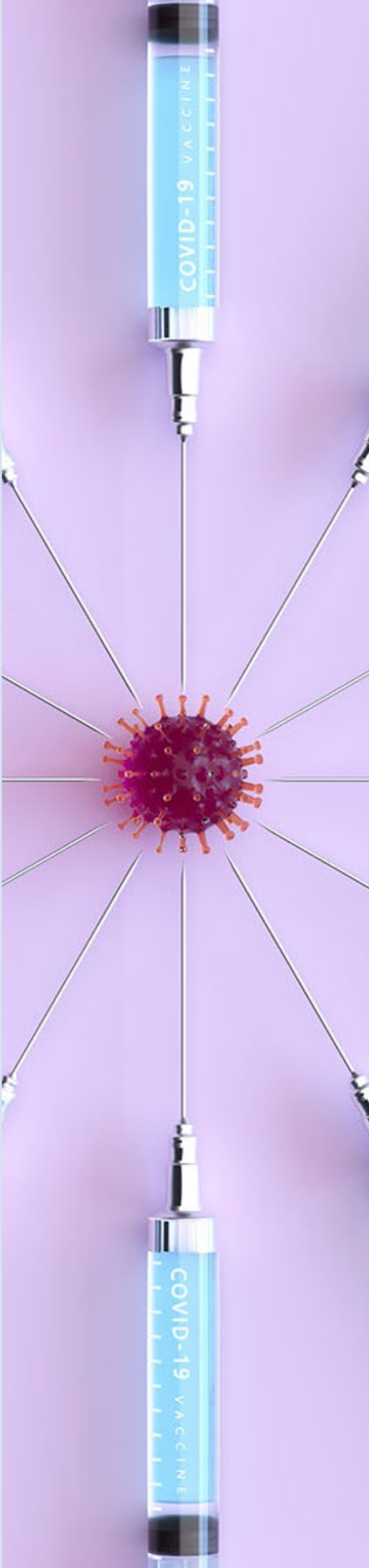
In DCVM network we have not only received tech transfers from companies like Astra Zeneca, J & J and Pfizer but have also transferred technology within DCVMs e.g. from Sinovac, Sinopharm & Bharat Biotech to other member companies.

I am pleased to share that out of around 10 Billion doses manufactured in 2021 ~ 60% contribution came from DCVMN, however, it is important to note that the pandemic is not yet over and we need to gear up further to meet this unprecedented challenge because more than 80% of the world's vaccines have gone to G20 countries while just 7.1% of people in LICs have received at least one dose and just 1 in 4 health workers in Africa have been vaccinated so far!"

Dr. Raj Ghosh, Senior Advisor, Vaccine Delivery, Bill & Melinda Gates Foundation, India: "The founding philosophy of Bill & Melinda Gates's work across the world is that every life has equal value. The same philosophy drives our work for Covid 19 solutions including vaccination. In Covid Vaccination, the Foundation works with a range of -partners to facilitate Covid-19 vaccines reach as many people as possible and as quickly as possible.

From the early days of the pandemic, the Foundation has been working to overcome some of barriers that stand in the way of delivering solutions like vaccines, lifesaving drugs and diagnostics. The Foundation has supported development of high-quality vaccines with speed to supporting equitable vaccine delivery and has worked with national governments and partners in maintaining a high demand for the vaccines in the community.

From the beginning the Foundation has been working to build up manufacturing capacity in low-and-middle -income



countries, facilitating transfer of technologies between companies, securing raw materials, and financing procurement and delivery so that safe and secure vaccines reach people everywhere. And the Foundation continues to advocate for countries with supply to share doses with those without sufficient doses as soon as possible and for COVAX to be fully funded to execute its commitments to reach vaccines to everyone everywhere.

The Gates Foundation works with governments and global and local partners to ensure that everyone who needs a vaccine can get them. The Foundation will use its resources to ensure that work continues and succeeds”

2. In your opinion, how do you think can we reduce barriers of region, socioeconomic class and status?

Rajinder Suri, CEO, DCVMN International, Switzerland : “In my opinion there’s an urgent need to address the vaccine inequity across regions and socioeconomic classes which has been very well demonstrated by some of the countries during this pandemic and to achieve this mission, we need to expand vaccine manufacturing capabilities in all regions especially Africa through active collaboration and fostering partnerships and for this DCVMN is now more important than ever.”

Dr. Raj Ghosh,Senior Advisor, Vaccine Delivery,Bill & Melinda Gates Foundation,India: “The essence of a vaccine delivery campaign rests on the three aspects of supply, access and demand. These at first sight seem to be standalone public health challenges that need to be solved with unique strategies and solutions. But as one studies these deeply, one understands their interdependence.

In Covid times the socioeconomically disadvantaged population have been disproportionately impacted. This is reflected in the many surveys conducted by both government and non-government agencies. For example, the sudden cessation of any income in the already economically weaker sections of the society, the insecurity of employment in a vast segment of unorganized sector, the inability to access health and other facilities in face of a disrupted transport system and their general day to day priorities like food and shelter that override their demand for good health have all contributed to the socioeconomically marginalised section of the Society being left out.

There are four ways to reduce the barrier to services to the socio economically weaker sections in the society.

The first is to ensure that their priorities around food, shelter and other basic amenities are addressed. Unless these priorities are met, people will rightfully continue to prioritize these over their health issues.

The second issue is around supply. Authorities will have to ensure that there is uninterrupted supply of vaccines, drugs



and diagnostics at the point of care for all segments of society and particularly about this segment because they have less resources to avail services elsewhere other than their nearest point of care.

The third issue is access. Services must be delivered as close as is feasible for the program to reach the population. Access must consider delivering affordable health care from delivery points that are approachable, accessible, and acceptable to the community. The services must be also delivered at a time that considers the availability of the population to seek the services.

The fourth issue is about demand. The socioeconomically section of the society is vulnerable to misinformation, disinformation, and lack of information. The awareness program for this group must be tailor made to address their lifestyle, literacy status and cultural tastes. Every rumor about any safety issues of services must be addressed with speed and with correct information in a language they understand. Most importantly, the correct message must be delivered by people who the community trusts”

3. How are the vaccine stakeholders working towards equitable distribution of vaccines?

Rajinder Suri, CEO, DCVMN International, Switzerland

Rajinder Suri, CEO, DCVMN: “ This pandemic indeed brought the whole World together! It was a global collaboration which was seen at its best. Various stakeholders and international agencies like WHO, CEPI, GAVI and BMGF supported by various Governments like G-7 and G-20 and International banks in terms of funding and manufacturers from both Industrialised and Developing Countries launched a massive initiative, Access to COVID Tools-Accelerator (ACT-A), is the only global, end-to-end solution for equitable access, from research to rollout, with three pillars including COVAX the vaccine pillar.

In 2021 itself around 800 million doses have been distributed through COVAX to 144 Countries Worldwide and it’s planning to roll out another ~1.2 billion doses in the first half of 2022 taking the total to over 2 billion doses in the geographies which matter most including all countries of Africa! I You would agree that this is a great example of equitable distribution in practice!”

4. What do you think are the major roadblocks faced and the possible solutions?

Rajinder Suri, CEO, DCVMN International, Switzerland : “

No one had ever imagined such a big impact of the pandemic in terms of lives and livelihoods lost, not to talk of the economic impact. Already we have lost 5.4 million precious lives and we may lose another 5 Million lives in 2022 if not controlled. IMF estimates loss of over \$ 5.3 trillion in economy by 2024 in addition to \$ 12.5 Trillion already lost. In fact entire journey



from research to development and manufacturing has been full of complexities and bottlenecks but the most critical three roadblocks have been:

- i) Shortages of critical single use materials largely due to trade barriers and production capacities
- ii) Absence of early funding to develop and scale up vaccine manufacturing
- iii) Limited Tech transfers due to several factors including lack of trained manpower in sufficient numbers

Most of these have now been resolved, thanks to initiatives taken up with Governments by several stake holders including WHO, WTO, CEPI and Manufacturers Associations like IFPMA, BIO and DCVMN through COVAX Manufacturing & Supply Chain Task Force.

In addition WHO has launched mRNA hubs in South Africa, Brazil and Argentina to prepare trained work force while International agencies and banks are introducing various innovative financing schemes to help augment global capacity building. Manufacturers are already scaling up their manufacturing capacity.”

5. Any thoughts on how can we address physical and logistical obstacles, such as being unable to drive to a vaccination location and cold chain logistics?

Dr. Raj Ghosh, Senior Advisor, Vaccine Delivery, Bill & Melinda Gates Foundation, India: “There are many delivery interventions that have been tried by program planners to overcome physical and logistical obstacles. The primary goal of these interventions has been to deliver these services particularly vaccines, drugs, and diagnostics as close to the population as possible. Some of these include door-to-door services, small community centers, cluster approaches where multiple teams cover small areas with common geographical boundaries in clusters. The drive-in vaccination centers at the malls, markets have also been popular. In India, Covid vaccines are also being delivered by drones to remote and difficult to reach areas

One of the aspects that needs attention in these times is awareness about these services. Unless utilization of these community- and people friendly services is high, the socio-economically disadvantaged population will continue to be missed”

2022 SPEAKER

ADVISORY BOARD MEMBERS



Dr. Ranjan Chakrabarti,
Former Vice President - Global
Biologics, **United States**
Pharmacoepia, India



Dr. Milind Gore,
(Former) Emeritus Scientist G,
National Institute of
Virology, India



Dr. Ivana Haluskova,
Vaccines Industry
Expert, **France**



Dr. Dhananjay Patankar,
Biopharma
Professional, **India**



Keynote Speaker
Sandeep Majumdar,
SVP Operations -Biologics,
Intas Pharmaceuticals Ltd, India



Keynote Speaker
Dr. Sudeep Kumar,
SVP,
Biological E Ltd,India



Keynote Speaker
Prasad Deshpande,
Senior Vice President & Global
Head – Supply Chain Management,
Central Engineering,
Biocon Ltd,India



Keynote Speaker
Samir Desai,
President & Head,
BU Biologics, **Cadila**
Healthcare Ltd, Zydus Cadila, India



Keynote Speaker
Dr. Atin Tomar,
CEO,
Yapan Bio,India



Keynote Speaker
Dr. Vibha Jawa,
Executive Director,
Bristol Myers Squibb, USA



Keynote Speaker
Dr. SK Jana,
Director - R&D and
Manufacturing,
Serum Institute of India



Keynote Speaker
Rajinder Kumar Suri,
CEO, **DCVMN**
International, Switzerland



Keynote Speaker
Dr. Kapil Maithal,
President,
Vaccines & Diagnostics
Cadila Healthcare Ltd.,India



Keynote Speaker
Dr. Bakulesh Khamar,
ED, **Cadila**
Pharmaceuticals Ltd,India



Keynote Speaker
Dr. G V J A Harshavardhan,
Director, **Bharat Biotech**
International Ltd.,India



Keynote Speaker
Dr. Kutub Mahmood,
Scientific Director, **Path,USA**



Dr. Shaligram Rane,
VP- Quality,
Lupin Ltd, India



Dr. Vasan Sambandamurthy
Expert- New Drugs & Vaccines,
India



Dr. Subhadeep Sinha,
Senior Vice President, Global
Head- Clinical Research,
Pharmacovigilance & Medical
Affairs - **Hetero Drugs Ltd.,India**



Dr. Ravi Prakash Mathur,
Vice President And Global Head
Of Logistics And Supply
Chain Excellence,
Dr. Reddy's
Laboratories Ltd.,India



Dr. Shashwati Basak PhD,
Biopharma Professional &
Independent Consultant,
Expert In Cell And
Gene Therapy,India



Dr. Ravi Ganapathy,
Head Vaccine
Development Dept,
International Vaccine
Institute, South Korea



Dr. Raj Shankar Ghosh,
Senior Advisor, Vaccine Delivery,
**Bill & Melinda Gates
Foundation,India**



Dr. Milind Gore
(Former), Emeritus Scientist,
Scientist G, **National Institute
Of Virolog Pune, India.**



Dr. Elena Smith,
Deputy Director,
Analytical Expert- Quality
(Protein Sciences Site),
Sanofi Pasteur,USA



Mrunal Gosavi,
Senior Research Fellow,
Communicable Diseases,
Interactive Research School
For Health Affairs,
Bharati Vidyapeeth, India



Vickram Srivastava,
Head Of Planning - Global
Supply Chain, **Sun Pharmaceutical
Industries Ltd,India**



Vishal Sonje,
CMC Lead, **Europe,CEPI
(Coalition For Epidemic
Preparedness Innovations), India**



Dr. Sudarshan Reddy,
Founder & CEO,
**Oncosimis Biotech
Pvt Ltd, India**



Kumar Gaurav,
AGM,
Panacea Biotech, India



Dorcas Noertoft,
Senior Contracts Manager,
Covid-19 Response,
UNICEF,Denmark,Copenhagen



Dr. Sunil Gairola,
Executive Director,
**Serum Institute of India
Pvt.,Ltd. India, Pune**



Dr. Suresh Beri,
Addnl. Director,
**Serum Institute of
India Pvt.,Ltd., India, Pune**



Dr. Jayanta Bhattacharya,
Director, Adjunct Faculty & PI,
Translational Health Science &
Technology Institute | Department
of Biotechnology, IAVI – India
HIV Vaccine Translational
Research Laboratory, India



Dr. Manoj Chhikara,
AVP- R&D,
Biological E Ltd, India



Dr. Farshad Guirakhoo,
Chief Scientific Officer,
**Vaxxinity, Switzerland
USFDA India Office
Representative**



Dr. Vasan Sheshadri,
Sr. Principal Research Consultant,
CSIRO, Australia



Narasimha Nedunuri,
CEO, Clonz Biotech
Pvt. Ltd., India



R. Chandi Prasad,
Head-Packaging
Development, Aurobindo
Pharma Ltd.,India



Dr. Subhra Ranjan Chakrabarti,
Mission Director, National
Biopharma Mission, BIRAC,
Department of Biotechnology,
Govt. of India, India



Dr. Sanjeev Gupta, Ph.D.,
Sr. General Manager -Advanced
Biotech Lab, Ipca
Laboratories Ltd,India



Dr. Ashok Kumar Patra,
Director Biologics
Development, Imgenex
India Pvt. Ltd., India



Dr. Ratnesh Jain,
Course Co-ordinator-
Bioprocess Technology &
Innovation Ambassador,
Institute of Chemical
Technology,India



Dr. Anurag . S Rathore,
Coordinator, DBT Center of
Excellence for Biopharmaceutical
Technology and Professor,
Department of Chemical
Engineering, Indian Institute
of Technology, Delhi, India



Dr. Abhishek Mathur,
Director- Global R&D
Operations (Biologics),
Amgen

DOWNLOAD BROCHURE

2022 CALENDAR OF EVENTS

March

12th Edition
VACCINES
WORLD SUMMIT 2022

2-3 March 2022 | Physical

BIOLOGICS
FESTIVAL INDIA
2022

2-3 March 2022 | Physical

9th Edition
BIOLOGICS
MANUFACTURING
ASIA 2022

29 - 31 March 2022 | Hybrid

ASEPTIC
FILL-FINISH
& PACKAGING
ASIA 2022

29-30 March 2022 | Hybrid

6th Edition
BIOLOGISTICS
WORLD ASIA 2022

29 - 31 March 2022 | Hybrid

May

10th Edition
BIOLOGICS
WORLD
TAIWAN 2022

11-12 May 2022 | Physical

2nd Edition
STEM CELLS
& REGENERATIVE
MEDICINE ASIA 2022

11-12 May 2022 | Physical

June

BIOLOGICS
CONTRACT MANUFACTURING
ASIA 2022

8 - 9 June 2022 | Hybrid

11th Edition
BIOLOGICS
MANUFACTURING
KOREA 2022

22 - 23 June 2022 | Physical

3rd Edition
BIOLOGISTICS
WORLD KOREA 2022

22 - 23 June 2022 | Physical

6th Annual
CELL & GENE THERAPY
WORLD EAST-ASIA 2022

22 - 23 June 2022 | Physical

August

4th Edition
BIOLOGICS
WORLD
JAPAN 2022

24-25 August 2022 | Physical

BIOLOGISTICS
WORLD JAPAN 2022

24-25 August 2022 | Physical

September

6th Edition
CELL & GENE THERAPY
WORLD ASIA 2022

14 - 15 September 2022 | Hybrid

October

2nd Edition
BIOLOGICS
CONTRACT MANUFACTURING
EUROPE 2022

19 - 20 October 2022 | Hybrid

BIOLOGISTICS
WORLD EUROPE 2022

19 - 20 October 2022 | Hybrid

November

4th Edition
VACCINE
WORLD ASIA CONGRESS 2022

10 - 11 November 2022 | Hybrid

2ND ANNUAL
VACCINE
SUPPLY CHAIN
SUMMIT 2022

10 - 11 November 2022 | Hybrid



IMAPAC

Imagine Your Impact

A VARIETY OF PRODUCTS TO CATER TO GLOBAL BIOPHARMACEUTICAL INDUSTRY'S MARKET INTELLIGENCE AND BUSINESS CONNECTIONS NEEDS

B2B EVENTS

Thought-leadership, industry knowledge-sharing and quality networking are at the core of IMAPAC's B2B events

"Create an engaging experience for your audiences, explore our B2B Events Solutions."

[LEARN MORE](#)

360 MARKETING SOLUTIONS

Expand your reach and influence! Be it with customized events, digital marketing solutions, content creation or thought-leadership.

"Tap into our pool of audience that spans across various sub-sectors and regions critical in the burgeoning APAC biopharmaceutical sector."

[LEARN MORE](#)

DASHBOARDS

A quick-view analytics tool to power your decisions. Access region or country-specific data to uncover pipeline information, product focus.

"**Customize the dashboard based on your needs.** Drill down to the data you need using custom views."

[LEARN MORE](#)

CUSTOM RESEARCH

Based on your objectives and budget, you can customize a package to one that best meets your intelligence needs. This allows you to maximize your ROI without spending on items that are not in line with your strategies.

"With access to a database of **60,000+ life science professionals**. We conduct research with a highly -qualified audience."

[LEARN MORE](#)

REPORTS

Discover in-depth market information of the growing biopharmaceutical sector.

[LEARN MORE](#)





IMAPAC

Imagine Your Impact

Helping the Global Biopharmaceutical Industry Generate Tangible Growth

IMAPAC is the one-stop shop of market intelligence and business connections for the global biopharmaceutical industry. We help companies expand their influence, make data driven decisions through our industry intelligence, and link up with other biopharmaceutical professionals to exchange knowledge and engage in quality networking. At the core of IMAPAC is our mission to help biopharmaceutical businesses globally generate tangible growth. At the same time, our heart lies in giving back to society. We empower the next generation by equipping underprivileged children with an education.

Just Imagine Your Impact

For every speaker and delegate participating in our events, a child from a developing country gets to go to school for an entire year.

