

COVAX

CEPI



Accelerating Technology Transfer for mRNA Vaccines

Vision

Improve health (security) in LMIC through sustainable, regional production of vaccines



Objective 1

Establish **sustainable mRNA capacity** in regions with existing vaccine production capacity



Objective 2

Establish **sustainable mRNA capacity** in regions with no current vaccine production capacity

Reminder: 2 potential approaches for technology transfer to increasing capacity and supply

1

Bilateral technology transfer

Manufacturer 1

➔ Vaccine

Process transfer

Manufacturer 2

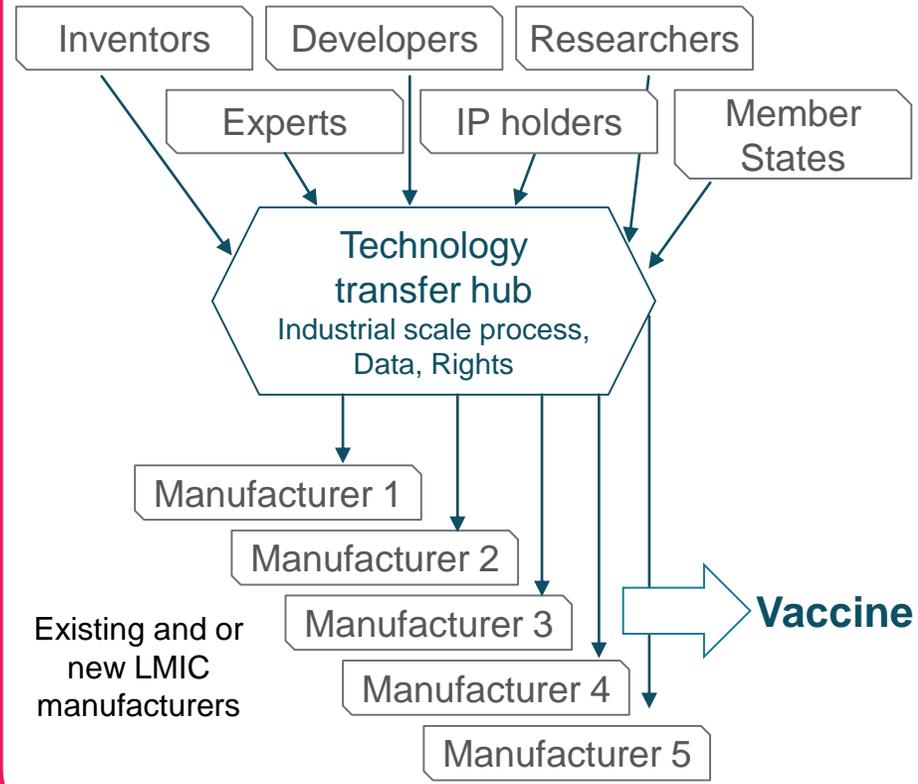
➔ Vaccine

Need win-win:

- Constraints
- Capacity to absorb

2

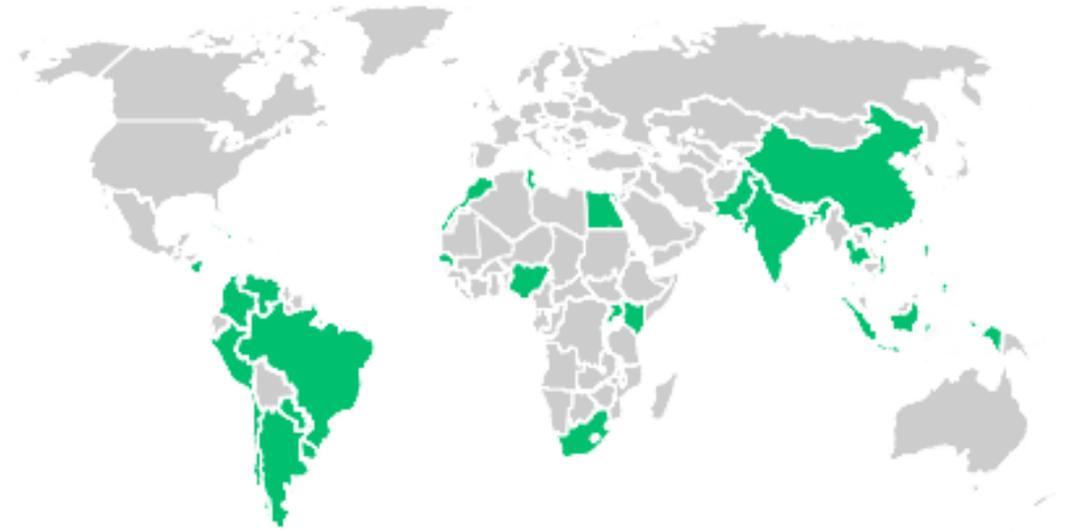
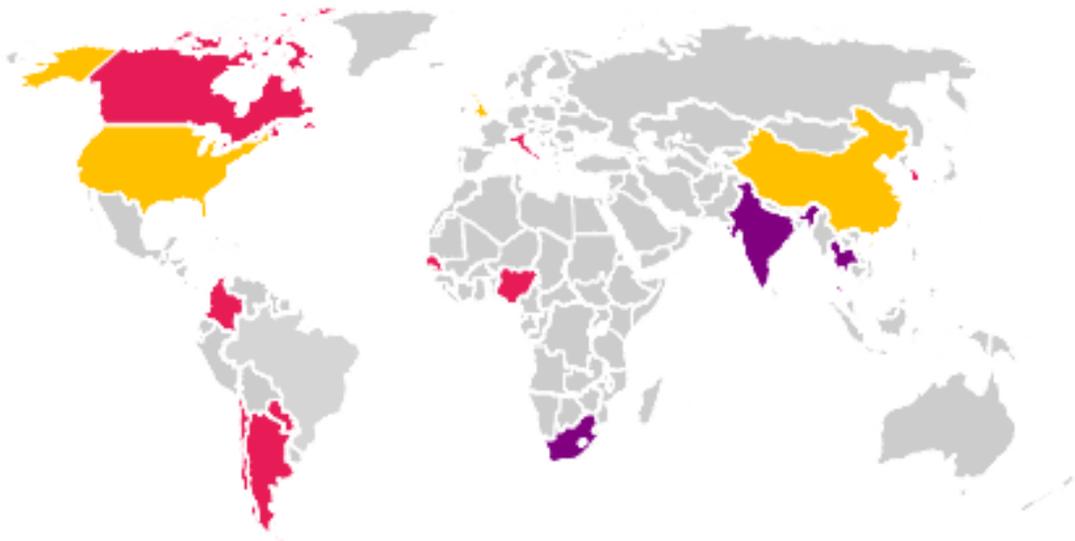
Multilateral technology transfer technology hub model - including and beyond Covid



Reminder: Expression of interest to host hub / provide technology- replies included requests to receive technology

20+ Responses from potential tech donors and/or sites for hubs

30+ Responses from countries/ manufacturers more likely to be possible recipients



February 2022 status



Technology Transfer Hub at Afrigen in South Africa

- First batches of mRNA vaccine produced.
- Training of recipients starting in March



Selection of Technology Recipients who submitted Expression of Interest

spokes – identified to receive technology and establish manufacturing

Announced so far:

- AFRO: South Africa, Senegal, Nigeria, Kenya
- EMRO: Tunisia, Egypt, Pakistan
- SEARO: Bangladesh, Indonesia
- PAHO: Brazil, Argentina
- WPRO: Vietnam
- EURO: Serbia

Other EOIs still being reviewed/discussed with member state

- Where there is already some mRNA vaccine production capacity in the country
- Need to establish utility /need and identify appropriate recipient.

Next steps for technology recipients



HQ and Afrigen Hub working with MS / applicant to review calendar for training and technology transfer

Not all recipients at same level of capacity to absorb technology transfer

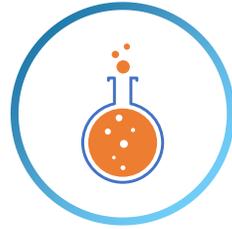
- Experienced biomanufacturing human resources
- Quality management systems
- Available suitable infrastructure

As required:

- applicant institutes to be prioritized for general training in biomanufacturing prior to technology transfer
- Field visits to review existing infrastructure / plans for infrastructure to assess suitability for equipment installation and mRNA production
- Discussion with MS/institution on target facility size (dose/year)
 - Capex, Opex, cost of maintenance etc.

Biomanufacturing Workforce Training hub

to enhance LMIC Vx
production efforts in
collaboration with
WHO Academy



Upskill **technicians** (hands-on GMP training) and **engineers & managers** (hands-on GMP training + placement in a pharma company)



Support **specialized WHO hub and spoke model** for production of biologics (first one is SA mRMA hub)



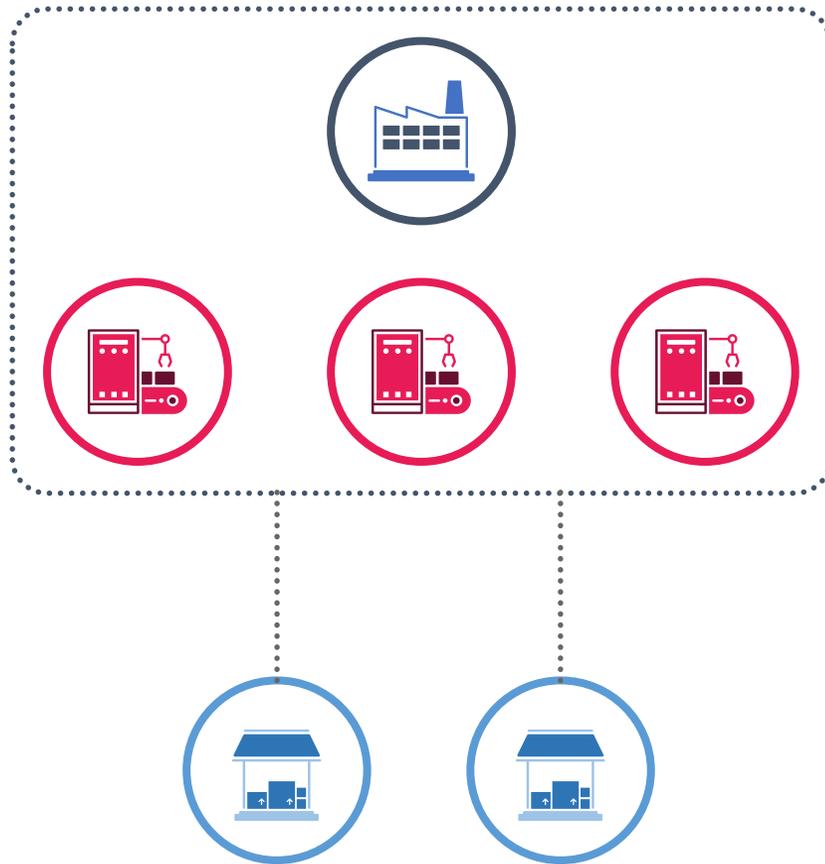
Facilitate **knowledge sharing** between LMIC manufacturers and **strengthen collaboration**



Ensure **inclusiveness and gender equality** in science and biomanufacturing in particular

WHO Biomanufacturing Workforce Training Hub network

Network of global hubs



Global Training hub In South Korea

- largest training center
- resources and infrastructure to teach all modules

Partner hubs, still to be identified on a need-basis:

- support main hub
- resources and infrastructure to teach specific training modules

Regional hubs and partner to regional hubs, still to be identified on a need-basis:

- additional local training centers in LMICs
- limited training infrastructures
- benefits of being closer, less expensive and using local languages