DCVMN 23rd ANNUAL GENERAL MEETING
Africa Forum: “Kick the Tyres”

Dr Nicaise Ndemi
Chief Science Advisor
Africa Centres for Disease Control and Prevention

Friday, 21st October 2022
Vision for African vaccine manufacturing

To ensure Africa has timely access to vaccines to protect public health security, by establishing a sustainable vaccine development and manufacturing ecosystem in Africa.
The AU has set a goal to ensure 60% of the vaccines administered in Africa are locally manufactured and mandated the PAVM to oversee this task.

**Context**

The African Union calls for a New Public Health Order aimed at safeguarding the health and economic security of the continent.

The first pillar of the New Public Health Order is expanding manufacturing of vaccines, diagnostics and therapeutics.

The African Union has set a goal to increase vaccine manufacturing on the African continent to meet 60% of the demand by 2040 and mandated the Partnerships for African Vaccine Manufacturing (PAVM) to develop a Framework for Action to execute this ambition to be enabled by the Framework for Action.

1. Other pillars include: Strengthened public health institutions, Strengthened public health workforce, Respectful, action-oriented partnerships.
The PAVM was established under the Africa CDC with four broad objectives to guide its operations.

**PAVM’s four broad objectives**

- **Steward a continental strategy** that maintains scale and cost-competitiveness of local manufacturing and promotes equity and security for all.
- **Support partnerships to create a conducive business environment** that will encourage the emergence of a thriving manufacturing base.
- **Play intermediary and partner role** between Member States and the global community of supporters on an as-needed basis.
- **Communicate updates and serve as the central source of information for Africa Vx manufacturing.**
The PAVM made significant progress since inception crossing many important milestones in 2021.

Facilitated the African Vaccine Manufacturing Summit which mandated PAVM and set the target ambitions.

May
Operationalised the PAVM, setting up a task force of 7 workstreams consisting >60 members which hosted >30 hours of workshops and >100 hours of working sessions.

November
The PAVM was approved by AU Executive Council and will be presented to AU Assembly of Heads of State in February 2022.

6-7 December
Hosted a successful Stakeholder Engagement Event in Kigali where significant decisions were made on the FFA bold programs.

17 December
Finalised Draft 1.0 of the FFA that was peer reviewed by independent experts and scientists.

-12-13 April
-17 December
-11,457 Views on Day 1 of the Summit
-5,269 Views on Day 2 of the Summit
-~90 Speakers and panelists both virtually and in person
-8 Roundtable sessions

The PAVM was approved by AU Executive Council and will be presented to AU Assembly of Heads of State in February 2022.
The PAVM has maintained its momentum into the implementation phase of the initiative in 2022.

- **February 2022**: Framework for Action officially released to general public
- **March 2022**: Bold program task-teams reconvened with weekly meetings to drive implementation
- **June 2022**: Project Management Office (PMO) to oversee implementation of FFA set up

**Additional Notes**
- Market Intelligence and Demand Workshop organized for stakeholders to establish a vaccine procurement architecture for the continent
- Many implementation lead organisations for FFA bold programs identified
- FFA has been endorsed by AU member states at the Heads of State Assembly
PAVM developed a continental strategy that outlines diseases, technology platforms and manufacturing value chain steps that Africa needs to prioritise.

**Potential disease prioritization**

**Prioritized 22 diseases…**

<table>
<thead>
<tr>
<th>Legacy</th>
<th>Expanding</th>
<th>Outbreak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphtheria</td>
<td>HPV</td>
<td>Ebola</td>
</tr>
<tr>
<td>Whooping Cough</td>
<td>Pneumococcal</td>
<td>Chikungunya</td>
</tr>
<tr>
<td>Tetanus</td>
<td>HIV</td>
<td>Malaria</td>
</tr>
<tr>
<td></td>
<td>Meningococcal</td>
<td>Rift valley fever</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lassa fever</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disease X</td>
</tr>
</tbody>
</table>

**Technology focus**

… requiring a breadth of technology platforms…

- **Traditional**
  - Live attenuated
  - Inactivated virus
  - Subunit
  - Virus-like particle
  - Viral vector

- **Innovative**
  - RNA/DNA

**Potential value chain focus**

Along the different steps of the value chain

- **Fill & Finish (F&F)**
  - Fill & finish for all priority vaccines, enabling achievement of local production targets.

- **Drug Substance (DS)**
  - Expand drug substance mostly in established platforms

- **R&D**
  - Expand R&D activities to develop new vaccines for Africa, support more efficient manufacturing and improve vaccine characteristics
Partnerships will be key to implementing these bold programs and PAVM welcomes all stakeholders to play a role.

<table>
<thead>
<tr>
<th>Focus of this presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Central</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agenda-setting and coordination</td>
<td>Market design and demand intelligence</td>
<td>Access to Finance</td>
<td>Technology transfer and IP</td>
<td>Regulatory strengthening</td>
<td>R&amp;D and talent development</td>
</tr>
<tr>
<td>Continental strategy delivery and oversight</td>
<td>African Vaccines Procurement Pooling Mechanism</td>
<td>Vaccine manufacturing deal preparation and financing facility</td>
<td>Vaccine Technology Transfer &amp; IP Enablement Unit</td>
<td>Embedding Vaccines regulatory excellence in NRAs and RCOREs through AMA and AMRH</td>
<td>Vaccine R&amp;D Centres and R&amp;D coordinating unit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential Lead</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PAVM</td>
<td>AVATT</td>
<td>Afrexim/AfDB</td>
<td>AVMI</td>
<td>AMA &amp; AMRH</td>
<td>TBD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regional</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional R&amp;D Centres</td>
<td>Capability and Capacity Network</td>
<td>Partners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research Institutions</td>
<td>Manufacturers</td>
<td>RCOREs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pilot plants</td>
<td>Academic institutions</td>
<td>RECs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biotechs</td>
<td>R&amp;D Centres</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

National

Frontrunner countries will implement country-specific vaccine manufacturing initiatives, but remain coordinated through the continental strategy.
PAVM is creating a Capability and Capacity Network model that comprises of educational industrial and regulatory institutions to build talent and capabilities.
THANK YOU

LEARN MORE AT

africacdc.org/covid-19

Safeguarding Africa’s Health