

Press release

Brussels, Belgium, 6th July 2023

New Study Highlights Promising Pathway to Sustainable Vaccines and Biologics Manufacturing in Africa, using a Contract Manufacturing Model for Fill & Finish Operations

Unizima, the technical advisory arm of Univercells Group, announces the findings of a new costing simulation tool which shows that local vaccine manufacturing can be sustainable in Africa under certain conditions.

The study was commissioned by BACKUP Health, a global programme of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, commissioned by the German Federal Ministry for Economic Cooperation and Development. It is aligned with the Partnerships for African Vaccine Manufacturing' (PAVM) vision to manufacture 60% of Africa vaccine demand by 2040.

A global team of vaccines manufacturing and vaccines market experts built the financial model and report, exploring the establishment of a network of Fill & Finish (F/F) factories strategically positioned across Africa functioning on a contract manufacturing model (CMO) to fulfil the required vaccines demand for routine immunisation. The tool is now publicly available to companies, investors and governments looking at the profitability of specific investments in biologics manufacturing on the African continent.

The key takeaways of the study are:

- Cost efficiency and sustainability

Fill & Finish costs are currently higher in Africa than in India, which supplies the bulk of vaccines. But savings can be achieved by shipping concentrated drug substance bulks instead of finished products. This approach can compensate for the higher local production costs and make the investment in African vaccine manufacturing financially viable and sustainable in the long run.

- Factory utilisation and profitability

Maximizing capacity utilisation is the single most important factor for profitability. This is why it is so important to secure the utilisation of facilities that already exist (such as in Egypt, South Africa, or Morocco) and on projects that have already started building such as in Senegal to demonstrate early success and increase the confidence of private and public investors. To this end, the Unizima expert group recommended a multi-product approach where vaccines production can be coupled with local fill & finish of other sterile injectable biologics with a fast-growing unmet need in Africa, such as insulin and monoclonal antibodies for cancer and auto-immune diseases.

- Technology innovation for healthcare access

The study emphasizes the potential benefits of utilizing Blow-Fill-Seal (BFS) technology and alternative container solutions. It recommends investing to develop a multidose Blow-Fill-Seal container with a cost-effective administration system, which would secure substantial savings compared with multidose glass vials. By embracing innovative technologies, Africa can optimize its manufacturing processes and ensure cost-effective production of life-saving vaccines.

The report also highlights the factors that need to be addressed pro-actively to ensure success of investing in fill & finish factors: for instance, strong regulatory frameworks that support timely product authorisation including access to export markets; access to a trained workforce, and decisive offtake and procurement decisions by governments and global health purchasers to ensure adequate demand early on for products that are manufactured locally.

On a growth path

As Africa's population is projected to double by 2050 to 2.4 billion people¹, meaning 1 in 4 people will be African by the middle of the century, the continent is focused on building a pharmaceutical sector of its own to respond to the needs of its population and secure high skilled jobs and economic growth on the continent.

Looking at the African public vaccines market, it is projected to grow from USD 1.3 billion annually to between USD 2.4 and 5.4 billion by 2030, meaning a fourfold increase in less than 10 years². This includes vaccines alone, not considering the need for other sterile injectable medicines such as for diabetes care (insulin) or cancer treatment (monoclonal antibodies).

The study commissioned by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH from Unizima [[Link](#)] was presented at the global event on "Enhancing the sustainability of investment for vaccine manufacturing in Africa" in Addis Ababa. The *Africa Centres for Disease Control and Prevention (Africa CDC)*, *UNCTAD* and the *African Vaccine Manufacturers Initiative (AVMI)* hosted key industry and public sector players for this event, supported by the German Federal Ministry for Economic Cooperation and Development.

The findings published in this new study provide a clear pathway for Africa to achieve self-reliance in vaccine manufacturing, mitigate supply chain vulnerabilities, and foster a sustainable healthcare ecosystem on the continent.

Hala Audi, Unizima CEO, commented: "Africa's population will double by 2050, meaning 1 in 4 people will be born in Africa in 25 years. African companies and governments are rightly responding to this growth by investing in manufacturing facilities for vaccines. By innovating and sometimes leapfrogging to next-generation manufacturing processes such as those developed by Univercells, there is an opportunity to respond to the growing population needs, improve preparedness for future pandemics and make sure the economic benefits of pharma manufacturing arise and stay in Africa. We are seeing this happen on the ground with our partners in Senegal and South Africa and are excited to help set up more efforts across the continent, to produce a range of biologics beyond vaccines, focused for instance on diabetes and cancer care."

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¹ <https://www.afdb.org/en/knowledge/publications/tracking-africa%E2%80%99s-progress-in-figures/human-development>

² <https://www.mckinsey.com/industries/life-sciences/our-insights/africa-needs-vaccines-what-would-it-take-to-make-them-here>

Contacts

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About Unizima

Unizima is a biomanufacturing services and technology provider, delivering the expertise and technology needed to enable geographically diversified manufacturing of biologics. We provide a full suite of solutions that includes strategy, product licensing, design and build of facilities and workforce development. Since our inception in 2020, we have served as a trusted partner for biopharma manufacturers, governments, and global health agencies.

Unizima is part of Univercells, a global life science leader with the mission of making biologics accessible to all.

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