

PROSUR Sustainable Investment in Vaccines Webinar

Prepare your
production
operations for the
relentless pursuit
of **excellence**



Most Relevant Aspects to Sustainable Market for Local Production

Sufficient Demand Volumes

- Minimal viable production capacity must be achieved – varies by production step (Pkg, Form/Fill, Bulk) and Technology (i.e. egg based, modular DS platforms, # valencies)
- At first focus is to keep facility “warm” but quickly changes to needing to achieve economy of scale
- Private market is usually quite small compared to public market, especially for mature vaccines

Competitive Pricing

- New market entrants will most likely have higher prices in the short term
- Many procurement regulations eschew significant price preferences (i.e. Serbia joining EU, WTO procurement rules impact on GAP projects)
- UNICEF/GAVI do have some flexibility on pricing in order to maintain healthy markets

Long-Term Perspective

- Tech Transfers and building new facilities take years with a long payback period
- Covid looks to be following the typical panic/neglect cycle (i.e. Aspen/SII/Mabxience Covid mfg)
- Sustained, coherent government policy is required (SA Penta Policy, GAP participants)

Public Vs Private Investment

- **Government**

- Main stakeholder in strengthening and maintaining enablers such as legal and financial systems and national regulator
- Can't change birth cohort, but are only actor able to impact market dynamics in other ways
 - Expand coverage (i.e. with adult vaccines such as Influenza or some childhood such as HPV)
 - Add new products to vaccination schedule
 - Enter into demand pooling or pooled procurement agreements
- Can also be an owner or source of incentivizes in R&D or production projects

- **Private Industry - Catalyst**

- Can be an important catalyzing force for creating sustainable local production
 - Government incentives and funding need a recipient to be effective
 - May have a higher risk tolerance than fully public funded programs
 - Often seen as a preferable partner to fully government owned organizations by vaccine originators
- Especially in countries without vaccine manufacturers currently, private actors in adjacent industries could pivot operations more easily than building a firm from scratch (i.e. pharma manufacturers, those serving private vxn market, etc)

Back Up Slides

WHO Global Action plan (gap) for influenza vaccines

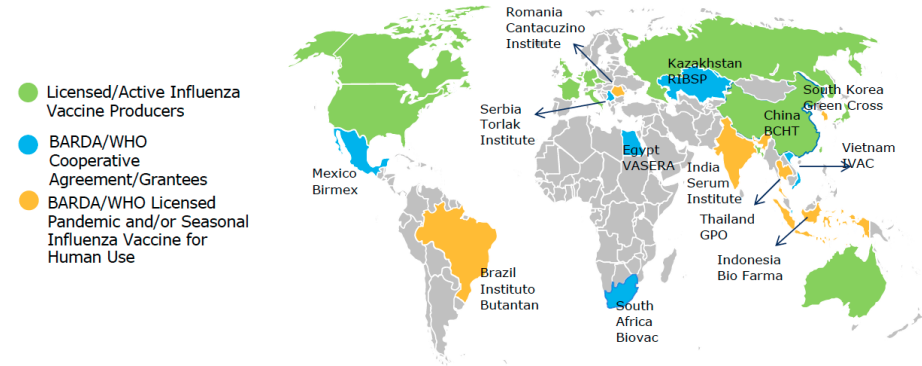
• Program Overview

- Chartered in 2006 during H5N1 Pandemic and ran until 2016
- ~\$100M in seed funding from BARDA; ~\$1B in total spend (includes local spend)
- Goal to expand influenza vaccine production at 14 manufacturers
 - 4 are not producing
 - 3 are still in progress
 - 3 have sustainability issues
 - 4 are sustainably producing

• Lessons Learned from GAP and other tech transfers

- Timelines measured in decades
- Policy coherence can quickly ruin a project
- Global competition exists and is fierce
- Long-term financial sustainability is a must
- R&D and production capacity building require two different sets of people

Geographical Distribution of Influenza Vaccine Production as of 2018



Questions???

AREAS OF SERVICE



**PRODUCTION
EFFICIENCY OF AN
EXISTING FACILITY**



**DESIGN AND
BUILD OF
NEW FACILITIES**



**FACILITY
ACQUISITIONS AND
MergERS**



**FORGING STRATEGIC
PHARMACEUTICAL PRODUCTION
PARTNERSHIPS**

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