



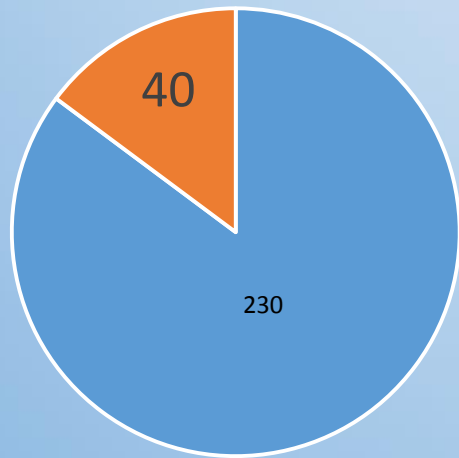
NRB Pharma Zambia Ltd.

An Ideal Partner for Zambia and Africa

Opportunity

- About Zambia
 - Geo-politically sound.
 - Democratically elected Government.
 - Land-linked to 8 neighbouring countries with a total population of 259.69 mn (as on Jan 2018).

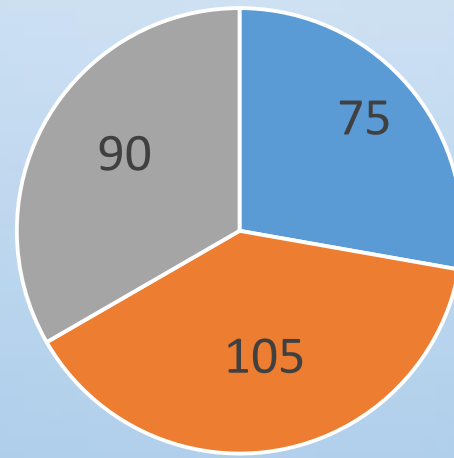
Zambia Market Size I (USD million)



■ Imported ■ Locally manufactured

source: Pharmexcil

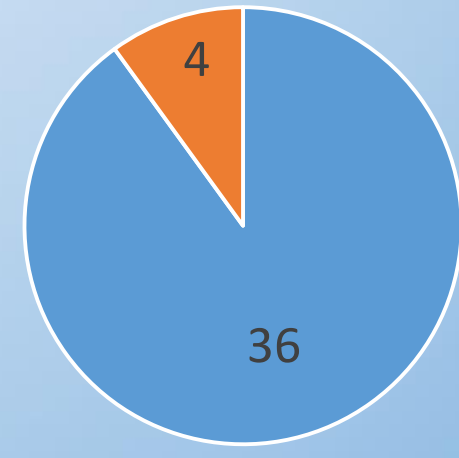
Zambia Market Size II (USD million)



■ Donor (Public) ■ Non-donor (Public) ■ Private

source: MoH & Distributors

ARV Market (USD million)



■ Donor ■ Non-donor

source: Ministry of Health

About the regional opportunity

- ZAZIBONA Collaborative Medicines Registration Process
 - Collaborative procedure for 15 SADC countries in which national regulatory authorities (NMRAs) jointly assess medicines for registration purposes.
 - Currently there are 5 participating countries - Zambia, Zimbabwe, Botswana, Namibia and South Africa. (combined population of 92 million).
 - In the long term all SADC countries are expected to actively participate depending on their capacity.
 - When a product has been approved by ZAZIBONA, it means that the product has attained marketing authorisation in all the participating countries.
 - Applicants who wish to participate in ZAZIBONA should have applied for registration of a medicine in at least two of the participating countries and they should submit an expression of interest to any of the countries to which the application has been made.
- The objectives of the ZAZIBONA process are:
 - Reduce workload and timelines to registrations.
 - Develop mutual trust and confidence in regulatory collaboration.
 - Platform for training and collaboration in other regulatory fields.

About the regional opportunity

The SADC Protocol on Trade envisages the establishment of a Free Trade Area in the SADC Region and its objections are:

- To further liberalise intra-regional trade in goods and services.
- Ensure efficient production.
- Contribute towards the improvement of the climate for domestic, cross-border and foreign investment.
- Enhance economic development, diversification and industrialisation of the region.

(a parallel can be drawn to the EU:
http://europa.eu/european-union/about-eu/eu-in-brief_en)



Member States: 15

Total Population: 277 million

GDP Annual Growth Rate (2011): 5.7%

About the regional opportunity

- Democratic Republic of Congo
- Very good access to Katanga Province Southern DRC region with a population of approximately 6 million.
- Katanga is cut-off from capital Kinshasa and ports.
- Easier to get medicines from Zambia.
- Approximate size of Private Pharma market in Katanga alone is USD 30 million (source: local distributors).
- Lubumbashi, the mining capital of the DRC, is a hub for many of the country's biggest mining companies. The DRC produces "more than 3 percent of the world's copper and half its cobalt, most of which comes from Katanga.



Why NRB Pharma Zambia Ltd.

- One of the only 5 local manufacturers in Zambia.
- One of the best manufacturing facilities in Zambia.
 - New facility opened in mid-2016.
 - Investment in AHU's, well-equipped laboratory, latest production and packing machinery.
- Inaugurated & recognized by His Excellency The President of Zambia in April 2017.
- Primary focus is Government tender business.
- In addition, expanding sales into other institutional & private markets through tie-ups with reliable distributors in Zambia and surrounding regions.



Why NRB Pharma Zambia Ltd.

Located in Multi-Facility Economic Zone with good infrastructure

- Fiscal Incentives:
 - Zero percent tax rate on dividends for 5 years from first year of commencement of operations.
 - Zero percent tax on profits for 5 years from the first year of operation.
 - Zero percent import duty rate on capital equipment and machinery for five year.
- Non-Fiscal Incentives:
 - Free facilitation for application of immigration permits, secondary licenses, land acquisition and utilities.
 - Good infrastructure like roads, uninterrupted power and water.
 - Well secured area.
- Already multinationals like British American Tobacco and Mylan Laboratories have invested in the MFEZ.

Why NRB Pharma Zambia Ltd.

- Price preference of 15% for Local Manufacturers (source: Ministry of Health, Zambia).
- Fast-track regulation for local manufacturers by ZAMRA within 3 months (source: ZAMRA).
- Large plot size of 30,000 square meter leaves plenty of scope for expansion projects.

Technology Partner of choice

- Primary focus on Quality.
- In good standing with local regulators ZAMRA; Ex-Zamra Director has been part of our team from beginning and is currently heading our plant.
- Headed by Pharmacists in all Key Departments: Production, Regulatory, Marketing & Product Development.
- QC, QA and Microbiology Depts. are managed by Graduates and Post Graduates in Chemistry / Microbiology.
- Experienced Expatriates from India managing all key activities.

Technology Partner of choice

- Passed the following audits and inspections:
 - cGMP Inspection – ZAMRA (ZAMBIA).
 - Mission Pharma, Denmark (Supplier of Medical Kits to Ministry of Health).
 - Ministry of Health – Democratic Republic of Congo.
- Already selling products to Mission Pharma for their kits.
- Annual capacity: 130 million tablets on single shift. Can work on 2nd and 3rd shifts as and when required.
- Current utilization: 60% (approx.)

Our Quality Policy

To manufacture products of the highest quality available to global customers according to their needs and to do so using the most appropriate and effective methods and technology available, with complete adherence to WHO, Government, requirements as well as to the needs of Employees, Suppliers, Environment and Society at large.



Strategic Partnership Outlook

- Currently we manufacture OSD, non beta-lactam.
- Possible business model
 - Full formulation and packing.
 - Import granules followed by compressing and packing at our plant.
 - Import of tablets in bulk followed by packing at our plant.
- Possible partnerships
 - Tech-transfer to manufacture identified products, locally and for the region.
 - Partnership investment with revenue split towards the identified products.
 - Contract manufacturing.
 - Licensure agreement.
 - Co-investment.

Strategic Partnership Outlook

- Possible products
 - ARVs and supporting medicines for patients on ARV program.
 - Anti-TB range.
 - Anti-Malaria malaria.

THANK YOU

- Zikomo
- Dhanyavaad
- Asante
- Merci