# O.R. and Frontier Markets

### DIRISH K. NOONARAM, BASED IN MAURITIUS

For nearly 10 years now, I have been involved in financial and economics data analytics and modelling which have been used by my employers for strategic decisions across many countries. My background in mathematics and operational research has actually been of good use, with academic knowledge being put into real life situations to find feasible solutions. I originate from the Republic of Mauritius, a country which is classified as a 'Frontier Market' or 'Frontier Economy'. I believe that it is in this very concept of frontier market that O.R. could not only play an important role, but a pivotal one.

## WHAT ARE FRONTIER MARKETS?

Simply put, frontier markets are the new emerging markets, and are today the fastest growing economies. Generally speaking, frontier markets have the following characteristics:

- i. They are expected to grow faster than emerging and developed countries;
- ii. They have a large and growing young population;
- iii. Labour costs tend to be low;
- iv. Natural resources are abundant;
- v. They have strong economic fundamentals;
- vi. They offer interesting stock market opportunities (strong valuations, diversification, high dividend yields);
- vii. The private sector is under-owned by the investing and international community, and therefore provides first-mover advantages.

#### SUCCESS VS. FAILURE

Despite the opportunities, an alarming number of businesses and entrepreneurs today fail in frontier markets, and even major international enterprises exit, with them citing 'daunting obstacles' in such markets. Being myself involved in Mauritius, Nigeria and Botswana (note that out of 25 frontier economies as defined by the Financial Times Stock Exchange 'FTSE', 6 are today in Africa), I have sadly seen a number of such failures. In economies which are on an astonishing growth trajectory and under the radar of the international investing community, why are so many businesses hitting the wall and so few of them managing to find a path? One of the reasons for success is O.R. and data science, which provides data-driven decisions for businesses and entrepreneurs.

# ON-THE-GROUND EXPERIENCES

I am today the founder of a company providing market research and data science services since 2015, where we have accompanied a number of people in gathering and understanding data to better navigate through the complexities of frontier



markets. For instance, our multi-sector contributions have been in (1) collecting data and understanding consumer demand, (2) conducting feasibility studies for market entry/expansion, (3) devising benchmarks for the Government and NGOs to track evolution of key social metrics across all socio-economic groups, (4) developing demand-based real estate projects to house the low and middle class and (5) using predictive analytics to identify and anticipate market changes.

Today, the fact about frontier markets is that very few people understand and appreciate the value and contribution which O.R. and data science could bring. Certainly this is not to say that the latter guarantees success, but we can at least provide a scientific approach which improves the decision making process and, as a result, decreases the likelihood of failure.

#### **ADVOCACY**

In this context, as an advocate of O.R. and its contribution to society, I would like to emphasize the value creation that O.R. and data science could intrinsically bring to frontier economies and in widespread economic growth. That is why we need to create a wave of trans-continent awareness on the subject and its importance.