The English translation of the company name of Chinese smartphone maker Xiaomi means little rice. That is ironic considering the company’s big ambitions to expand in India, which is the fastest growing smartphone market in Asia-Pacific, according to technology market research firm IDC. Beijing-based Xiaomi, which last year was the world’s fifth-largest smartphone manufacturer, began business in India in July 2014, shipping its relatively low-cost, feature-rich smartphones from China on specially-chartered planes.

To grow beyond the 50,000-100,000 units a week it currently sells in India, Xiaomi is ultimately planning to manufacture its phones locally. To do that, it will have to build a supply chain from the ground up. The company’s business model is partly based on “just-in-time” production in which phones are assembled only after customers order them, greatly reducing costs associated with inventory management. Development of Xiaomi’s future supply chain in India, where high quality infrastructure is limited, will be challenging.

Emerging market companies keen on international expansion such as Xiaomi may indeed have the deep pockets and long-term vision to invest in its supply chains in other emerging markets. It appears the company won’t be alone. In March 2015, the EIU surveyed 400 executives from companies in emerging markets. More than 80% said they expect to expand or strengthen their supply chains in other emerging markets in the next three years. The top reasons cited in the survey were to reduce costs, improve operating efficiency and get closer to customers.

More than 80% of companies in emerging markets say they expect to expand or strengthen their supply chains in other emerging markets over the next three years, according to an EIU survey.

These companies face a basic question: will the quality and availability of infrastructure help reduce my costs of doing business? Few emerging market multinational companies have the resources to supply their own infrastructure—most of them are low-cost producers—so they need it to be there already when deciding where to extend their supplier networks. At a minimum, a host country needs to provide a stable energy supply, decent transport modes to get goods to market, and efficient information and telecoms links.

Does size matter?

Should companies planning to expand their supply chains in other emerging markets stay focused on larger and more diversified economies? Not necessarily. Excellent port and logistics facilities in city-states such as Singapore, Hong Kong and Dubai have contributed to rapid development of their shipping and loading centres.

Eastern European emerging markets, in particular the Visegrad group of Poland, the Czech Republic, Slovakia and
Hungary have grown faster than Bulgaria, Romania, Albania and the former Yugoslavia, thanks to higher spending on transport infrastructure. This has enabled them to plug into manufacturing and service networks of their western neighbours and establish themselves as low-cost, high-value supply hubs.

Countries that don’t invest in infrastructure pay the price in the form of lower growth. The data bears this out: the chart below measures trade (as a proxy for economic activity) and logistics quality. Countries in the bottom left area have low quality infrastructure and low levels of economic activity. Countries in the top right have higher levels of economic activity, commensurate with their better infrastructure.

Even economies with macro-fundamental advantages such as large and young populations and strategically important natural resources can be challenged by infrastructure gaps, which prevent businesses from investing more.

The case of Brazil

In the example of Brazil, the country’s abundant natural resources—iron, oil, soy, beef, sugar and coffee are its six most important commodities—should be a source of tremendous growth. Yet the economic costs of not being able to bring these commodities to market have become notorious. In 2013, the Sunrise Group, China's largest soy trader, cancelled a 2m-tonne order because of delays, estimated at US$1.2bn in lost revenue—the equivalent of how much Brazil had invested in its ports from 1997 through 2007. Cargo ships waited an average of 39 days to dock, costing shipping companies US$30,000 per day.

The poor state of Brazil’s roads, rails, ports and waterways consistently puts it in the bottom third of the World Economic Forum’s competitiveness rankings. Persistent underinvestment in public infrastructure has caused bottlenecks that continue to plague the country. PwC estimates that poor infrastructure resulted in an economic drag on the Brazilian economy of 12% of GDP, or about US$269bn in 2013 figures.¹

Value chains

Xiaomi’s ambitions in India will require more than low-skill assembly; it will need a workforce that can produce more value-added parts, such as displays, chipsets, batteries and cameras. The challenge will be not only to overcome limitations of physical infrastructure, but also to develop a technically skilled supplier base, including scientists, engineers and managers.

¹ Carlos Biedermann and Hazem Galal, Crunch time for Brazilian infrastructure, PwC, January 2013.
This is where supply chains become global value chains, which refer to different stages of the production process being spread across different countries. Between 1995 and 2009, the OECD says income from trade flows resulting from being a part of global value chains rose six-fold for China, five-fold for India and three-fold for Brazil. Therefore infrastructure in emerging markets will need to support increasingly higher value functions and not only low-end manufacturing.

In addition to high-quality physical infrastructure, as companies plan their future supplier networks, they may need to consider how advanced manufacturing and services capabilities will require development of specialised research and testing facilities, a highly skilled workforce and experienced managers. Indeed, among the executives planning to expand their emerging-market supply chains in the next three years, 49% say they will focus on product development and 37% on R&D, according to the EIU survey. As companies compete to deliver more value to their customers, they will also expect more from their suppliers.

For more insights on emerging-market supply chains, visit growthcrossings.economist.com