**Innovation gap**

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ASK your friends about trends in innovation and they are likely to mention AI, machine learning, and blocl(chain not surprising given the impact tech companies like Apple, Amazon, Google, Facebook, and Microsoft have had in transforming our world. This has led us to engage in what Scott Galloway, a professor at New York University, refers to as the idolatry of innovators. A narrow understanding of innovation, however, is hurting the innovation agenda in countries like Pakistan, where a more boring and less costly type of innovation is needed to improve lives.

Over the last few years, electrifying vehlcle fleets has become the talk of town across the world. Tesla has shown what is possible with an all-electric drivetrain and battery technology. The outcome has been that countries everywhere are making a beeline for building an electric-vehicle infrastructure. Pakistan, given that it is an importer of energy, has rightly started to focus on these innovations, with Minister Fawad Chaudhryleadingthe charge.

But there is an opportunity to tweak the approach and focus more on electrifying rickshaws. While electric buses are shiny, require major government procurement deals, and offer ribbon-cutting opportunities, they are unlikely to do much when it comes to developing a cost-effective, atscale EV infrastructure. However, rickshaws are ubiquitous across Pakistan and offer mobility solutions for millions. They are also a public nuisance, adding to noise and air pollution. Additionally, while they generate decent livelihoods for tens of thousands of people, the rickshaw fleet is largely informal, leading to no social security coverage for drivers.

A mission to upgrade this fleet of rickshaws to an all-electric fleet with a digital device providing tracking and digital payments options would be revolutionary. Even a pilot project, say with 10,000 rickshaws in a smaller city like Multan or Sukkur, could lead to significant gains in terms of formalisation of labour, cleaner and quieter streets, and bottom-up innovation and investments in charging infrastructure across the city.

At scale, an all-electric rickshaw fleet can beusedtoinnovate andupgrade anexisting system without requiring major capital investments in new infrastructure, leading to improved mobility and better consumer outcomes.

Another sector that needs rapid innovation is Pakistan`s food supply chain.

Pakistan has a non-existent cold-storage chain, leading to signiñcant volatility in food prices and increasing the ability of monopolistic actors to corner the market and extract consumer value what main-stream media refers to as corruption by mafias. But every neighbourhood in Pakistan`s cities and towns has several outlets storing food and offering last-mile connectivity to the consumer. This includes fruit and vegetable carts that go around neighbourhoods and the corner shop selling basic necessities.

These businesses are not digitally connected and do not have access to energyefficient refrigeration solutions. A missionmode effort to digitise and upgrade these last-mile vendors can formalise millions of businesses while upgrading Pakistan`s food supply chain. These innovations can over time offer a real-time window into demand and supply data over time, allowing policymal(ers to craft agriculture and food-security policies based on real evidence, not outdated demand and supply metrics.

These sectors are unlikely to attract venture capital flows from within and outside Pakistan, primarily because the business proposition is unclear. This is why it is the government that must lead the charge and catalyse innovation in these sectors. An effective way for the government to play atransformational role is by launching a programme that will provide funding to innovative ideas thatsolve challenges. Start-ups preferably those founded by students at colleges and universities can pitch their solutions and win an award to kick-start their business.

This can create opportunities for aspiring entrepreneurs to solve pressing challenges, leading to a celebration of innovation that could have a transformational impact.

Those that show the most promise can be given additional funding, with the government taking a minority stake in return. This can help the most innovative start-ups develop a minimum viable product and demonstrate success, following which they can tap into the private market for access to additional pools of capital.

Pakistan has a signiñcantinnovation gap and the need is the greatest in informal sectors that are ignored by private investors.

This is where the government should operate and seek to play a transformational role.

The success ofeven one business outofdozens through this approach could improve millions of lives and make a substantial impact on Pakistan`s economic potential. The writer is a senior fellow at The Atlantic Council and host of the podcast Pakistonomy Twitter:@uzairyounus