Export led growth for agriculture

A. Amarender Reddy

With mounting food supplies, India has long been a food surplus country and due to low pricing, farmers regularly discard tomatoes and other fruits. Despite having a food surplus economy, India has failed to export the surpluses and improve farmer incomes, resulting in farmer misery across the country. India must strive to capitalize on this squandered opportunity to not only boost export-led agricultural development but also double farmer incomes. In the medium term, India must aim to export at least 30% of its agricultural output, which is now only 7.5%.

Until now, India's agricultural policy has prioritized food security and price stability over export-led growth. In the previous crop year 2020–21, India's food grain output set a new record of 305.43 million tonnes. The Indian government is spending a lot of money on procuring and maintaining food inventories that are in excess of strategic requirements, yet there are no buyers, resulting in overcrowded warehouses. If the emphasis is shifted to increasing export potential, India may find itself in the position of China, which is the fourth largest agricultural exporter after the EU, the United States and Brazil, despite having less acreage than India.

Although agricultural and allied product exports increased by 17.34% to US$ 41.25 billion in 2020–21, the growth is not consistent. They were about US$ 38 billion in 2017–18 and 2018–19, before falling to US$ 35.16 billion in 2019–20. Even to meet the US$ 60 billion target for 2022, exports must increase by 45% this year.

On the positive side, there is a significant structural shift in favour of developing countries during the last decade. Because of their cheap labour and the catching up phenomena, most developing countries are expanding their share of agricultural exports by replacing developed nations. For the first time in 2019, India replaced New Zealand among the top ten exporting countries. India's share of global agricultural exports grew from 0.8% in 1990 to 1% in 1995, and it currently stands at 3.1%. Other emerging countries, such as Brazil (7.8% of global exports), China (5.4%) and Mexico (3.4%), were also on the rise in 2019. However, the European Union (16.1%) and the United States (13.8%) continue to dominate global agricultural exports.

India has surpassed Thailand as the world's leading rice exporter, accounting for 33% of global rice exports. It became the world's third largest cotton exporter (with a 7.6% share), and in meat, India ranks eighth with a 4% share of global exports. India is also a major exporter of spices, seafood, fruits and vegetables. India's export shares are minuscule in comparison to its second-place ranking in terms of global arable land area, only behind the US.

With shifting geopolitical factors such as the trade war between China and the US, and expanding trade opportunities with Central and East Asian nations, the potential is much greater. Despite its stringent food safety requirements, Europe is now looking for stronger trade ties with India.

Target countries and commodities

The largest markets for India's agricultural products are the US, China, Bangladesh, the UAE, Vietnam, Saudi Arabia, Indonesia, Nepal, Iran and Malaysia. Traditionally, India has been a significant exporter of rice, seafood, sugar and spices. Due to its vast bovine population and low domestic demand for cultural reasons, India is also the world's top exporter of bovine meat.

Processed foods such as ready-to-eat snacks, cooked meats, smoked fish, sweets, sandwiches, cheese and millet preparations are in high demand. These labour-intensive export segments may provide an opportunity for the food processing industry to flourish in a labour-surplus India. Production of high-value segments such as horticulture, dairy, poultry and fisheries has increased since the 1990s, although their export potential has yet to be fulfilled. Massive investment is required in these sectors to meet export standards.

Rising global food prices open up opportunities for India's export growth given its cheap labour costs. The Food and Agriculture Organization's food price index, which tracks a basket of grains, vegetable oils, meat, dairy and sugar, rose to its highest level in a decade now. This trend is likely to stay for 2–3 years on the back of pent-up demand after the subsiding COVID pandemic. India can target a few commodities where it had comparative advantage to mark its footprints in export markets.

One-district one-product

With the government initiative of One District-One Product (ODOP) scheme, each district can specialize in one export-oriented produce based on local agro-ecologies. For example, mangoes from Varanasi, black rice from Chandauli, Uttar Pradesh are in high demand in international markets. Again, niche markets can be identified and an ecosystem needs to be developed around these products for exports. The existing export markets include jackfruits and jamun fruits to London, Banganapalle and Suvarnarekha mangoes to South Korea, red rice and flavoured jaggery powder to the US and millets to Denmark.

Food safety standards

To become an export leader in agriculture and food products, India has to follow international food safety standards. India faced many such problems from countries like EU, Japan and USA. Last year stringent norms imposed on residues of agrochemicals such as Tricyclazole and Buprofezin hindered the exports of basmati rice. Although Punjab state which contributes more than 90% of basmati exports, banned the sale of these chemicals, there was some delay in dissemination of information among basmati-growing farmers and also communicating the decision to the importing countries, which dented basmati exports.

Export infrastructure

Agriculture exports, if properly supported by infrastructure, institutional back up, packaging, freight transport and connected to the internal production system can boost agricultural growth as well as farmers' incomes. Some export impediments, such as market access, non-tariff barriers, sanitary and phytosanitary issues, must be addressed proactively by the government. Although

soft power can help to overcome these issues, it also necessitates significant investment from both the public and private sectors. Emerging institutions, such as farmer producer organizations, should also play a larger part in this massive undertaking.

Strengthening APMC markets

The existing 7320 Primary Agricultural Market Committee (APMCs) market yards are the backbone for all marketing activities including exports. The simplification of procedures and strengthening infrastructure of APMCs and electronic-National Agricultural Markets is a starting point for increasing export capabilities at local level. On a war footing, infrastructure development in marketing yards, regulations for allocation of properties in marketing yards, agricultural market information system and contract farming laws must be streamlined[1].

Overall, India has a vast agricultural export potential if it prioritizes high value exports. For a long time, India has been at the bottom of the global agricultural export value chain, with the majority of its exports being low-value, raw or semi-processed, and bulk-marketed. In India, the percentage of high-value and value-added agricultural output in the agricultural export basket is less than 15%, compared to 49% in China. This can only be accomplished with significant investment and a consistent export promotion policy.

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COMMENTARY

Robust clinical trials in Ayush systems: compelling necessity

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The COVID-19 pandemic caused by the virus SARS-CoV-2 is one of the biggest challenges confronting the world in this century. It has posed a challenge to the global healthcare system. Policymakers, doctors and scientists are working round the clock to tackle this grave emergency and find solutions to minimize the adverse effects and threats to life caused by this pandemic. The emerging scourge of non-communicable diseases, including diabetes, hypertension, cancer and mental illness needs to be addressed proactively and national paradigms must be developed to meet this challenge.

We also need to be prepared for emerging and re-emerging viral diseases like dengue, chikungunya, nipah and now the ongoing COVID-19 pandemic. It is paramount to use the information generated by research activities to improve the performance of health systems at the national level. To achieve this, the output of research must balance its eventual utility. For this, the output of research must balance its eventual utility. There is ardent need for a drug regulatory framework to facilitate research and its translation into health policy from the inception stage itself, with research being a programmatic imperative and driven by operational needs.

There are collective efforts underway to limit the progression of this deadly virus. Numerous clinical trials have been taken up across the globe for breakthrough medicine, including vaccines[1]. Similarly, 203 clinical trials exploring the interventions for COVID-19 are registered in India's Clinical Trial Registry (CTRI). Interestingly, 61% was based on various AYUSH interventions and sponsored by the Government of India (GoI)[2,3].

The first incidence of COVID-19 was reported in Wuhan, China, December 2019 and the virus infiltrated India on 30 January 2020. There was a surge in COVID cases in the mid of April 2020 (ref. 4). The GoI has taken various measures like travel restrictions, community surveillance, institutional quarantine, identification of hotspots or containment zones, etc. along with strict lockdowns to flatten India's case-growth trajectory curve. The National Clinical Management Protocol for COVID-19 was released on 3 March 2020. Subsequently, the Ministry of AYUSH, GoI, also issued guidelines and advocacies based on AYUSH fundamentals. Ayurveda and Yoga interventions were integrated in the National Clinical Management protocol for COVID-19 on 2 October 2020 (ref. 5). Many controversies arise by media and health workers as well as other health associations for clinical efficacy and product registration.

In the current paradigm of clinical research and evidence-based medicine, clinical trials are essential to establish the safety and efficacy of drug interventions in any setting[6]. Unfortunately, the paucity of robust clinical trials in the AYUSH sector has led to the widespread use of unlicensed or off-label medication, as well as misunderstanding about the safety and efficacy of AYUSH products. On the other hand, meticulously conducted clinical trials adhering to international norms in terms of scientific rigour and ethical robustness, and state-of-the-art statistical analysis is perhaps the only way to counter the allegations regarding safety, effectiveness and scientific rationale for AYUSH interventions levied time and again by the so-called fly by night researchers.

India is endowed with pluralistic healthcare, i.e. modern and AYUSH systems of medicine are practised in the country[7]. Interestingly, the modern system of medicine and Ayush systems are governed by the Ministry of Health and Family Welfare and the Ministry of AYUSH, GoI respectively. Central Acts recognize these systems. Different Acts regulate education and practice, but the manufacturing, import, distribution and sale of drugs and cosmetics of these systems are regulated by the single Act, viz. Drug and Cosmetics Act, 1940 (D&C) and rules thereunder[8].

In the context of the drugs of modern medicine, Rule 2(j) in the New Drugs and Clinical Trials Rules, 2019 defines 'clinical trial' in relation to a new drug or investigational new drug means any systematic study of such new drug or investigational