



The cold chain: Importance of airfreight for the future of Hazrat Shahjalal International Airport

Despite the popular concept of airports as a place for people to travel across the globe, what happens behind the security glass and onto the runway may be the most intriguing and crucial aspects for the future of airports. In 2022 alone, the International Air Transport Association (IATA) forecasted that the expected cargo revenue will reach USD 191 billion (that is about 68 million tonnes of cargo transported globally).¹

The Hazrat Shahjalal International Airport (Dhaka Airport) can handle between 200,000 tons of cargo, with the new Terminal 3 increasing this capacity to 500,000 tonnes, conveying the importance and demand for more cargo handling capacity at the airport.² ³ 72,000 MT were exports of locally produced fruits and vegetables (32% of 200,000) worth USD 119 million in 2021.⁴ It is worth noting that cargo, known as air freight in aviation terminology, may require certain temperature conditions to maintain the quality and safety of the products. To do this, special facilities such as temperature-controlled warehousing are essential for the handling of perishable products (i.e., fruits and vegetables) and pharmaceuticals.





Due to the critical role of standard temperature-controlled facilities for ensuring food safety, the quality of the of existing facilities in and outside of the airport should be substantially improved. Until now, two entities have been fulfilling the temperature-controlled storage needs of perishable products coming in and going out of the Dhaka Airport: one is BIMAN and the other is the Bangladesh Agricultural Development Corporation (BADC). While they put their best efforts in maintaining the quality of the goods and providing logistics services, there is still room for addressing infrastructure constraints and technical knowledge gaps.

The lack of handling space and insufficient valueadded service provisions in or near the airport has contributed to the diminishing volumes and value of fruits and vegetables exports. Fruits and vegetables are often transported through airports because they require faster delivery limited shelf owing to their life. However. temperature-controlled conditions, can increase such shelf life. Many importing countries would also reject products that have not been maintained at the proper temperature and/or that have not been handled through certified storages. Furthermore, being exposed to the wrong temperature may cause products to lose their quality (i.e., weight loss, color degradation, etc.) causing a decrease in the price of the product.

https://www.tbsnews.net/economy/aviation/japan-asked-how-it-will-operate-share-revenue-dhaka-airport-3rd-terminal-529050

¹ STAT Times (2022). "IATA says global cargo revenue to be USD191 billion in 2022. <u>https://www.stattimes.com/air-cargo/iata-says-global-cargo-revenue-to-be-191bn-in-2022-1345726#:~:text=Cargo%20revenue%20is%20expected%20to,Air%20Transport%20Association%20(IATA).</u>

² Jebun Nesa Alo (2022). "Japan asked how it will operate, share revenue of Dhaka airport 3rd terminal' the Business Standard. November 10th, 2022.

³ BGMEA. <u>https://bgmea.com.bd/index.php/page/Dhaka_airport%E2%80%99s_3rd_terminal_to_boost_trade#:~:text=The%20import%20cargo%20complex%20will,handling%_20273%2C470%20tons%20per%20year.</u>

⁴ Export Promotion bearu (2020-2021). Monthly Statemetn 2020-21 July-June. <u>http://epb.gov.bd/sites/default/files/files/epb.portal.gov.bd/epb_export_data/ca2c5d49_36f2</u> <u>49af_b677_8e0c3e6ee4f8/2021-07-18-08-36-e22982e8196925191bcf2b44e6fed0e1.doc</u>

It is not only those involved in the trade of fruits and vegetables, but the poultry industry in Bangladesh has also been suffering from this situation. The lack of cold chain at the airport posed significant risk and negatively affected animal vaccines that were imported. Maintaining proper quality in this industry, which produces 1.26 million MT of meat (broiler, sonali and cock) and directly contributes to 1.5 to 1.6% of the national GDP,⁵ is essential to maintain and grow revenues generated by the private sector and for the safety of the consumers.



There is a greater global demand than ever for solutions that support the perishable products industry, especially those involving improved logistics and specialized services such as TCL. Covid-19 has challenged the resilience of supply chain operations and necessitated drastic improvements and development of projects across the world to upgrade the logistics facilities at key trading points like airports. Examples of these developments can be seen in Jomo Jenyatta International Airport in Kenya, where the TCL facility is being doubled by adding 1500 square meters,⁶ and the Ethiopian Addis Ababa International Airport developing a 17,000 square meter facility,⁷ making it one of the largest in the world. Following such examples Bangladesh can secure a position within international aerial trading routes, by building air logistics portfolio at Hazrat Shahjalal International airport.

In addition to developing TCL capacity inside the airport, modernizing and revamping nearby locations can also support the temperature-controlled logistics requirement for trading and lessen the burden of doing all the activities inside airport premises. As mentioned earlier, BADC manages a strategic space in front of the airport. By rebuilding the facility and increasing the capacity of the operators with proper training, this location could be greatly utilized for temperature-controlled facilities.

⁷ Airport Suppliers (2019). "ACUNIS completes Africa's largest air cargo terminal," <u>https://www.airport-suppliers.com/supplier-press-release/acunis-complete-africas-largest-air-cargo-terminal/</u>

⁵ Bangladesh Poultry Industries Central Council. http://www.bpicc-poultry.com/pages.php?pageID=basic-info&mID=2#:~:text=Contribution%20in%C2%A0GDP%C2% A0%20%C2%

⁶ STAT Times (2018). "Panalpina expands Nairobi cold chain facility at Jomo Kenyatta Airport.

https://www.stattimes.com/news/panalpina-expands-nairobi-cold-chain-facility-at-jomo-kenyatta-airport-supply-chain/



In summary, the development of specialized infrastructure like cold chain logistics at and near the Hajrat Shahjalal International airport can bring the following socioeconomic impacts:



The Bangladesh Trade Facilitation project aims to expand cross-border trade in agricultural goods and food products. The objective is to address systemic constraints at Bangladeshi ports; simplify and automate import and export processes; improve the capacity of Government regulatory agencies, laboratories, and warehouses; and to foster investment in cold storage facilities and temperature-controlled logistics.

Implementing Organizations







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