



TEMPERATURE-
CONTROLLED
LOGISTICS:
*Learning from
Experience*

Applying Experience from Previous Investments: Three Examples

Over the past 15 years, IFC has invested US\$ 63.6 million in support of pioneering Temperature-Controlled Logistics (TCL) companies in Asia. The experience gained from these investments makes IFC a leader in third-party logistics finance. This publication highlights lessons from three projects: Snowman Logistics in India, Shanghai Zhengming Modern Logistics Company in China, and Preferred Freezer Services (formerly Antara) in Vietnam. Together, the three investment projects demonstrate how IFC excels at collaborating with partners at different stages of industry development to develop and consolidate markets. In each of these transactions, IFC achieved its market creation objective.¹ As a committed long-term investor in these three companies, IFC learned valuable lessons about how to ride out ups and downs and develop new opportunities to ensure that early-stage project development efforts mature into successful long-term investments. Some of the most important lessons from these projects are:

¹ The development of the Preferred Freezer Services (formerly Antara) project was originally supported by [InfraCo](#) that at the time was **partially funded by IFC**.

- Investments in the TCL sector are often done in phases, supported with a sequence of smaller tranches. The commitment grows with the business and the absorption capacity of the company. For example, in the case of Snowman, IFC made several successive investments as capacity expansion was warranted.
- Regulatory barriers can be burdensome. Expansion plans are often delayed by long waits for construction permits. Often, approvals and permits are required from local municipal authorities who may not be familiar with TCL building practices. This lack of familiarity with the industry can cause considerable delay.
- Finding the right market niche with the required service level and infrastructure is a challenge. Careful niche selection is critical, as it impacts project revenue streams. Expensive new facilities dedicated to a single product category, such as frozen seafood, face stiff competition from low-tech facilities with lower capital costs. Competition from the unorganized sector is especially steep in small and remote markets. Risk can be mitigated by investments in multi-user, multi-product facilities which can be targeted at a diverse customer base.
- Employing the latest technology does not guarantee success. Customers are not always willing to pay a premium for high-tech services. It is critical to review customer preferences to avoid over-investing in high-cost, automated facilities. Projects should mitigate risks by incorporating versatility in market plans. An additional mitigation measure is projecting realizations conservatively, especially in markets where the project faces competition from the unorganized sector. This is a particular concern in product segments with low sophistication due to much lower capital costs, as well as in remote markets.
- The demand for organized, modern third-party TCL services in emerging markets evolves over time. A patient, long-term approach is required for development impact and sound financial outcomes.

The specific highlights, challenges and opportunities of IFC's investments in the sector are summarized below. These case studies from India, China, and Vietnam demonstrate that each project is unique in both its challenges and rewards. Each one illustrates the power of strategic TCL investments to impact development and change lives.

Snowman Logistics Limited, India

In the late 1990s and early 2000s, India made rapid improvements in pre-harvest technologies such as irrigation and pest control. Yet, as much as one-third of India's fresh produce was lost to wastage. This enormous loss can be largely attributed to both the lack of quality infrastructure and the absence of integrated service providers. The financial value of India's lost produce was about US\$ 13 billion. In 2007, IFC began talks with Snowman Logistics Limited, a Bangalore-based TCL service provider. Snowman had ambitious expansion plans for which they were seeking funding. As part of this investment program, IFC made an equity investment of US\$ 5.4 million, becoming Snowman's first private financial investor and showing confidence in a company that was small and operating in a nascent but rapidly growing market.

At the time of IFC's initial involvement, Snowman had a total capacity of just over 9,000 pallets and 100 reefer trucks. The company planned to significantly expand this capacity. IFC, together with other shareholders, worked with Snowman to refine its business plan and expand capacity to about 34,000 pallets by 2012. The initial expansion paid off, giving the company a strong platform for future growth. Following strong demand, Snowman accelerated its expansion plans,

leading to two more loans by IFC: a corporate loan of US\$ 5.7 million in 2012 and another corporate loan in the amount of US\$ 2.8 million in 2013. With IFC's financial support, they were able to increase their capacity to nearly 65,000 pallets by 2014.

Today, Snowman has a capacity of over 107,000 pallets and nearly 300 trucks; the company employs about 1,500 people. With high-quality infrastructure and services, Snowman facilitates the movement of food products from suppliers to cold distribution centers, and to retailers and processors in an integrated fashion. Food wastage is dramatically reduced, thanks to improved handling efficiency and infrastructure which includes temperature-controlled facilities.

Shanghai Zhengming Modern Logistics Co., Ltd., China

Shanghai Zhengming Modern Logistics Co., Ltd. is a leading Chinese third-party TCL service provider which has been in operation since 1994. By the time IFC considered investing in Zhengming, the Chinese TCL sector was in the infancy of its development, with low service capacity and non-existent large-scale and systematic cold chain logistics systems. Only approximately 0.3% of freight vehicles in China were refrigerated, compared to about 1% of such vehicles in the US and 2-3% in Germany. The industry was fragmented and characterized

by small- and medium-sized players that operated with old, obsolete equipment and did not provide integrated services.

China was and still is one of the world's largest consumers of food. Yet, the Food and Agricultural Organization of the UN estimates that up to 6% of all food produced in China is wasted while the country aims to increase food production and food security. One reason for this wastage is the country's inadequate TCL infrastructure. In China, roughly 19% of agricultural and food products are transported using TCL, whereas comparable figures for Europe, Japan, and the United States are about 85%. Going forward, cold chain logistics will continue to have a high growth potential in China.

Initially founded as a logistics provider for auto parts, Zhengming has developed into one of the top TCL service providers in South and East China. The company is recognized for its strong last-mile distribution network. It has an extensive network of temperature-controlled storage capacity across China, and hundreds of trucks within its network.

In fiscal year 2015, IFC committed debt and equity investments adding up to US\$ 30 million in Zhengming. IFC's engagement was timely and impactful given the growing focus of the Chinese government and consumers on greater food safety.

Preferred Freezer Services, Vietnam

Between 2009 and 2010, IFC made an equity investment of US\$ 1.2 million, provided an A Loan of US\$ 7 million, and mobilized a B Loan for another US\$ 7 million. These funds were used by Preferred Freezer Services (then known as Antara) to construct the most modern cold storage warehouse facility in Vietnam, with about 23,700 robotically-controlled pallet positions. The facility was designed to serve the needs of domestic and international seafood processors and distributors. The seafood industry is Vietnam's fifth-largest export market, providing a livelihood for around 4.5 million people.

However, right from the start this investment faced challenges and did not proceed as expected. While the Antara facility was state of the art, by the time it was completed, cold storage supply capacity in Ho Chi Minh City had expanded four times more than anticipated. In 2010, a shrimp disease outbreak began, devastating Vietnam's seafood exports. Demand for cold storage facilities plummeted.

Despite the difficult situation, IFC remained committed to the project, increasing its equity position, becoming sole lender, collaborating with other shareholders, and helping to turn around the situation. In the meantime, the facility provided a critical service to the local fishing industry until the shrimp sector recovered.

By 2016, industry conditions improved, and revenue increased significantly. Today, despite intense competition, Preferred Freezer Services remains a market leader for high-quality storage services in Vietnam. The company's robotic cold storage facility has

become a flagship facility in Asia and supports the seafood export industry in Vietnam, which accounts for about 7% of the country's GDP. In 2019, Preferred Freezer Services repaid IFC's loan in full, and IFC successfully sold its equity stake in Preferred Freezer Services.

A series of notes on new investment opportunities in Temperature-Controlled Logistics

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