Upsides and Downsides of Logistics Clusters

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As Yossi Sheffi pointed out at the SCL Europe conference last week, logisics clusters have positive AND negative consequences as well. One of the biggest negatives is the environmental impact, including poor air, congestion, and health issues. In Chicago, the cluster results in very long trains – some as long as 2 miles – which can close all intersections in a whole county! In response to environmental issues, ports such as Los Angeles have changed all regulations, so that trucks have to be new, and are moving to hybrid requirements. Project CREATE in Chicago has created over 100 bypasses around railway intersections, but in LA, with a corridor that is 30 km long, 3 train lines are compressed from the port and bypasses LA.

Sectors with few training barriers often have the most to gain from clusters – which includes sectors that offer employment with higher pay to those with fewer training requirements. Some of these include manufacturing, logistics, wholesale trade, and construction.

Examples of clusters at work provide a clear picture of the benefits. SC Johnson has a warehouse in Georgia they use every week – and it ships 20,000 pounds of product to CVS Pharmacy's DC in Vero Beach Florida, about 500 miles away. Right next to them is a warehouse for Energizer that also ships to CVS – sending about 9000 pounds to CVS. A full truckload holds 40,000 pounds. Get the picture? In combination, the two organization worked with CVS to change the process, and combine shipments. A truck first stops at SC Johnson, then goes to Energizer, and proceeds to the CVS warehouse. Although it sounds simple, it required a lot of coordination. But this now requires only one appointment at CVS's DC, the cost of the truck shipment of the truck is half for both parties.

Another example shared by Sheffi is between two unlikely candidates: Zara and Caladero (a fish processing company). Interestingly, Spaniards are the second highest consumers of fish in the world after Japan! Zara has a very large DC in Zaratoga. Caladero has boats all over the world – and one is off the coast of South Africa where a lot of fishing takes place. It takes 2.5 days from the time a fish is caught to delivery to the supermarket shelf, and so Caldero has to ensure that supply and demand points are aligned. The fish get caught and go to Johannesburg on a 747, and are packed in ice – and thes go to Zaratoga and to a processing center, and then into stock. In addition, Zara has a DC next to Paladero – and now a 747 goes back with Zara clothing to Johannesburg on the shelf. The fish packed in ice are very heavy which adds to the weight limit – and so Zara has been putting wood on top of the fish to get both to the volume weight of the 747 – which presents additional challenges.

There is not doubt environmental impacts of clusters are high, but job creation is also high. In addition, the transportation savings and carbon emissions can be reduced singificantly, making them more sustainable. People with no prior training or education that can be moved into the middle class.

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