

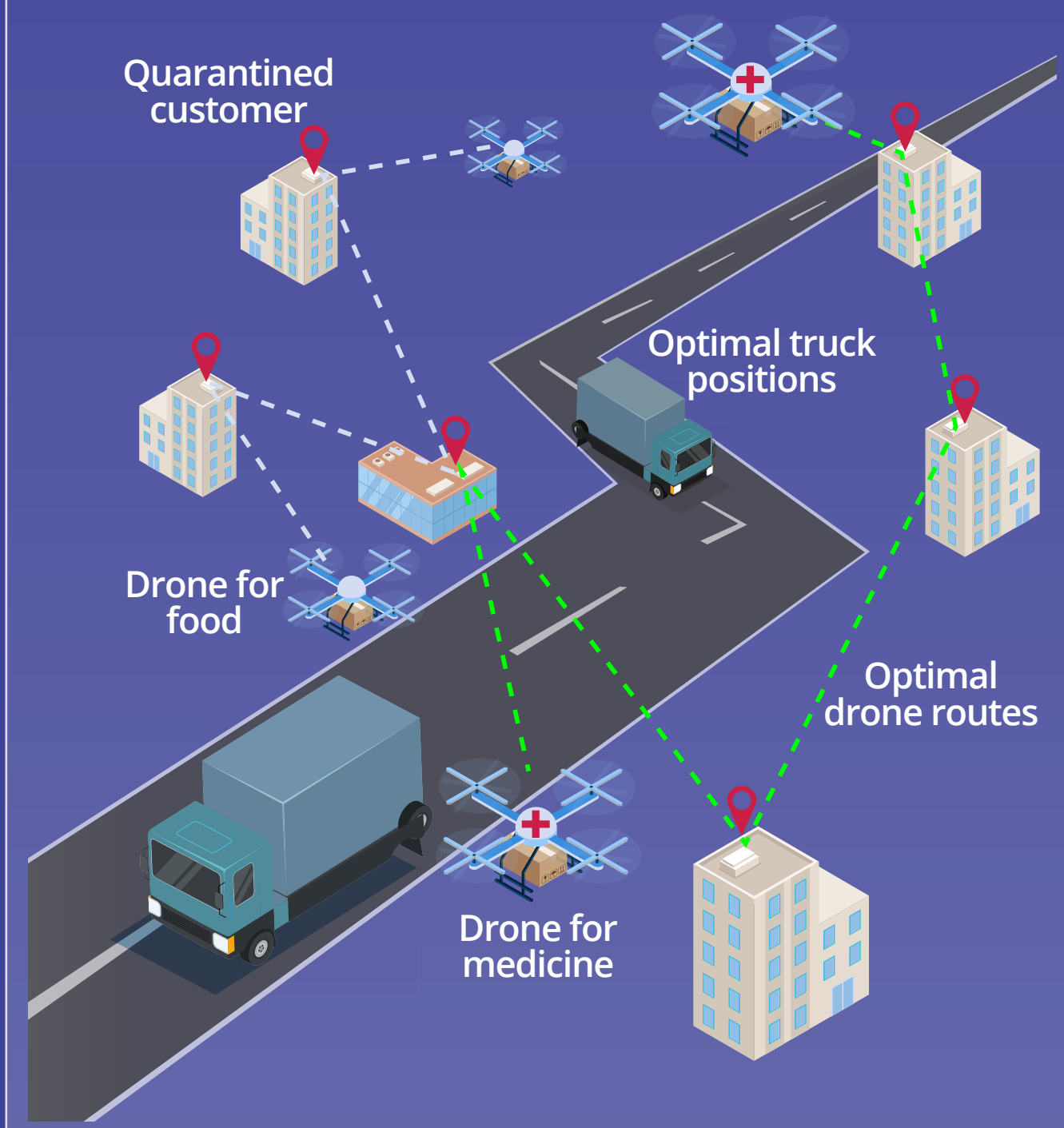
Exploring Disruption-Resilient Models of Supply Chains

The COVID-19 outbreak necessitated strict lockdowns to control infections

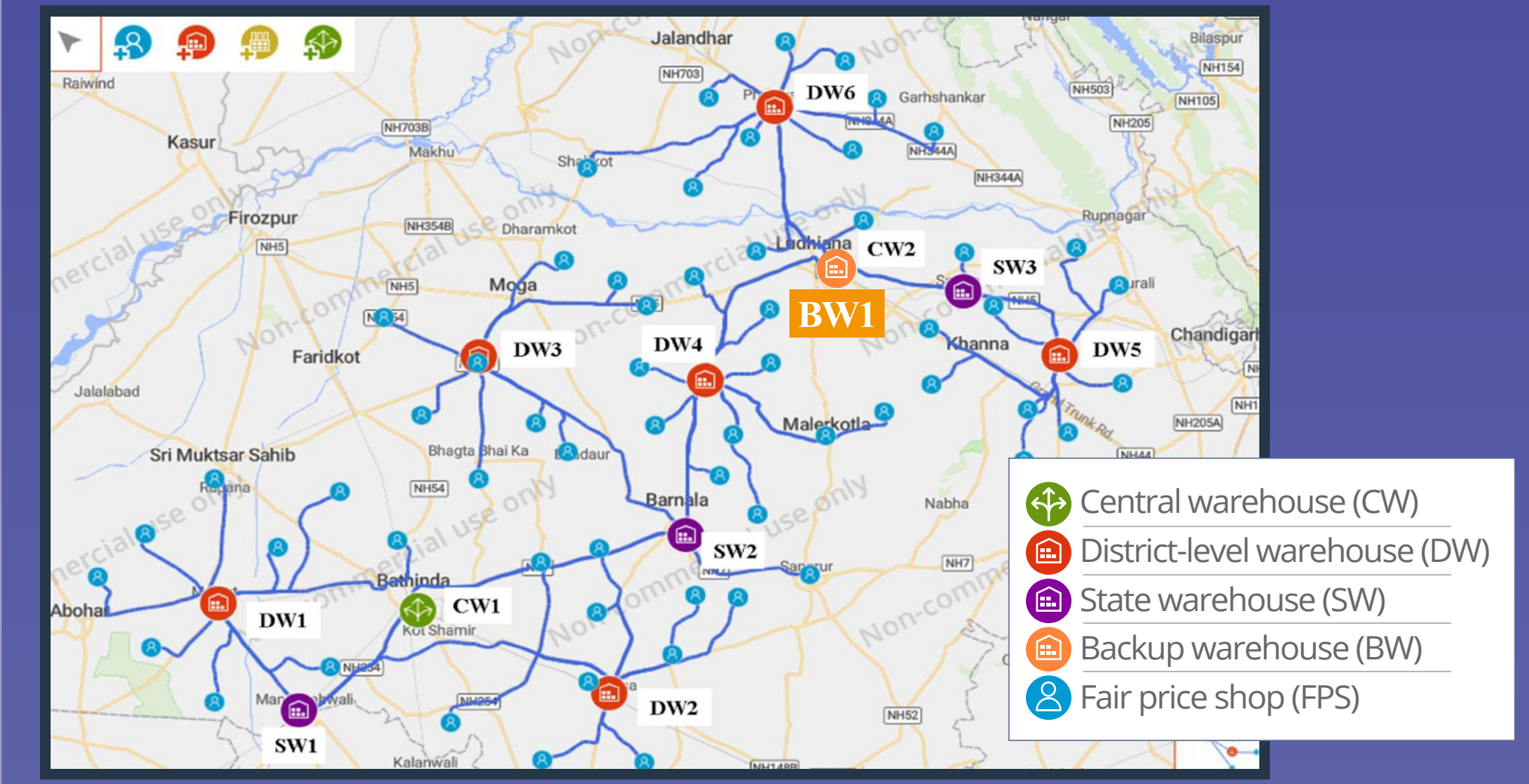
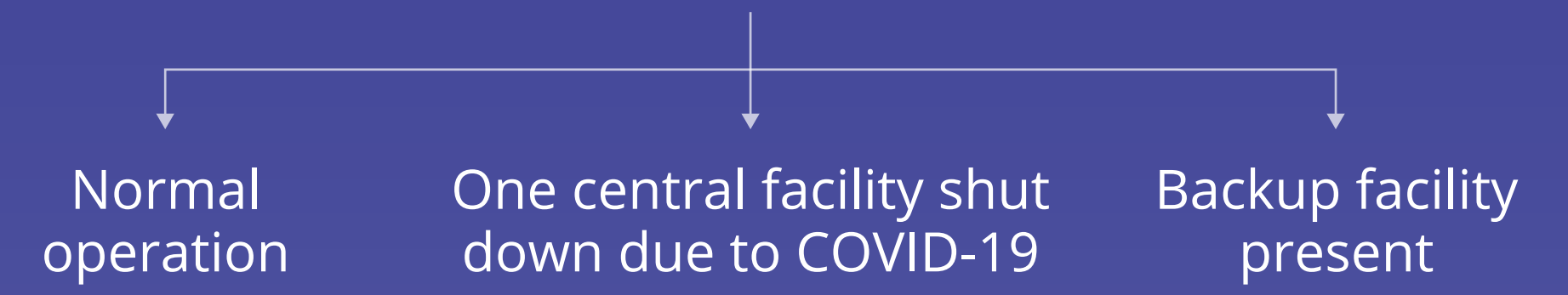


But the lockdowns, combined with a labour shortage due to rising infections, disrupted supply chains

Based on a comprehensive literature review, a **truck-drone synchronized delivery system** is recommended to quickly reach customers in infection hot zones while maintaining social distancing



New simulation model of food supply chain (Public Distribution System) operations was created for three scenarios for a six-month period:



Shows that a backup warehouse at strategic locations can help maintain required supply levels

These models of distribution and delivery can help devise robust action plans to tackle pandemic-related disruptions to supply chains for essential services

