Monitoring of Logistics Performance

Logistics includes a wide-reaching set of concepts that can encompass several aspects, from procurement to distribution, the entire supply chain or the fleet, energy or premises management can fall under the logistics responsibilities.

Each section of this guide contains information on how to monitor and ensure the quality of the service provided by each respective function of logistics. Each individual tool provides information on specific parts of the process, while a wider and holistic monitoring system should be adopted to form a complete picture of the logistics performance as a whole.

Monitoring and Evaluation Tools in this Guide:

Thematic Area	Specific Monitoring Information
<u>Vehicle and Fleet Management</u>	Fleet Performance Monitoring
Inventory Planning and Management	Inventory and Stock Level Monitoring
	Systematic Recording and Support Documentation
Warehousing and Physical Stock	Physical Documentation For Warehouse
<u>Management</u>	<u>Monitoring</u>
Electrical Power Generation	Generator and Solar Electric Monitoring
<u>Health Supply Chain</u>	Cold Chain Monitoring

What to Monitor

If efforts are made to stablish a monitoring system, it is better to ensure that the M&E process or activity is important to the continuity of the logistics activities and will have an impact on overall performance. A thorough analysis of the context, objectives, desired outcomes, and organization goals will help to properly define the specific aspects to monitor in depth. The following are some of the aspects that can be monitored in a logistics activity.

Delivery Lead Time

Lead time is the time between placing an order and receiving the goods or service. In disaster/emergency relief situations, timing of delivery can have a serious impact on the relief operation and on the beneficiaries.

- Delivery of items *too early* or too late may also incur unnecessary costs. Delivery too early can mean goods have to be stored until they are needed and will incur additional costs whilst being stored or managed.
- Delivery of items too late can mean the costs of setting up facilities, for example feeding stations and having people ready to distribute goods, is wasted due to the fact goods have not been delivered. Delayed delivery can also cause the organisation to incur additional transport costs, if specialty transport arrangements such as aircraft have to be used to move the goods more quickly along the supply chain.

Order Information

The internal performance of a logistics function is dependent on the efficiency and

effectiveness of each of the individual logistics components. For example, one performance indicator for procurement might be the ability to disseminate information on the number of orders issued. Knowledge of pending orders will allow the warehouse to plan for storage space, while unexpected deliveries can disrupt operations.

Efficiency

The measurement of efficiency is sometimes relative and dependant on what an entity defines as efficiency. In logistics management, efficiency is the satisfactory delivery of a logistics service that enables the end user to fulfil the intended purpose of the request. A good example is the request for medication to be pre-positioned before a malaria season. A late delivery would mean higher incidents of malaria and an increase in the request for malaria treatment rather than malaria prevention drug.

Total Costs

The concept of "total cost" focuses on reducing the total cost of logistics rather than the cost of each activity. An organisation should monitor cost reduction across the board and evaluate the impact on each of the logistics components. For example, purchasing in bulk may reduce the cost of the product but at the same time increase the stock holding costs.

Inventory Costs

Inventory carrying costs include:

- Inventory service costs insurance and taxes.
- Storage space costs leasing costs or land rates.
- Inventory risk costs costs related to pilferage, the risk of goods being kept so long that they become obsolete, the risk of damage.
- Carrying costs the cost of storing labour, asset/item depreciation, and other overheads.

Inventory Value

In recent years the concept of value has become accepted as the difference between the value a customer attributes to a product or service and the cost of acquiring the item. Excessive stock holding is not only a risk in emergencies - in the event of an evacuation stocks may be abandoned - but also not cost effective when money is tied up in dormant stocks that may not all be utilised within reasonable time, or used at due to rapidly changing needs. Monitoring and collaborating closely with programs on distribution rates helps in balancing the benefits. Storekeepers are encouraged to share monthly stock reports with stakeholders so they may know what they have in their possession.

Order Management Costs

Order management costs include those costs incurred for issuing and closing orders, the related handling costs, and the associated communications costs. In other words – the staff and infrastructure costs associated with placing orders, and not just the costs of the items themselves. How many cumulative staff hours does it take to complete a single order, multiplied by their hourly salary? What about the costs of maintaining communications systems and renting office space? It is advisable to benchmark these and keep them under close monitoring to ensure that service delivery is cost effective.

Cost of Waste

The cost of waste covers the cost of disposing of item packaging, disposing of spoiled, expired, recalled or damaged relief items, or of disposing of damaged, unserviceable equipment. Waste disposal costs have sharply increased due to environmental impacts and national regulations. An overview of environmental cost can be seen in the Sustainable Logistics section of this guide, while information on disposal and national regulation can be seen in the Warehousing Section.