Reverse Logistics

Introduction

Reverse logistics was traditionally defined as the process of moving a product from its point of consumption to the point of origin to recapture value or ensure proper disposal. It is one of the fastest developing fields of business logistics, with the result that it is continuously changing in scope and significance. Reverse logistics includes activities to avoid returns, to reduce materials in the forward system so that fewer items flow back, and to ensure the possible reuse and recycling of materials and packaging.

It is important to ensure that aid projects are handled in a responsible manner and that they do not end up causing long term damage to the very people and nations that they are intended to assist.

Thinking in advance about long term consequences of the assistance that a humanitarian organisation is providing can save money and time, reduce operational challenges, and minimize any possible environmental impacts.

Definition

“The process of planning, implementing, and controlling the efficient, cost effective flow of raw materials, in-process inventory, finished goods (in the humanitarian context) and related information from the point of customer receipt to the point of origin to recapture value or appropriate disposal.” - Wikipedia

“Reverse logistics is the management of all the activities involved in the flow of goods, demand information and money in the opposite direction of the primary logistics flow, including reduction in the generation of waste, and management of the collection, transport, disposal, and recycling of hazardous, as well as non-hazardous waste, in a way that maximises the long term profitability of the business.” - Link

Types of Reverse Logistics

Reverse logistics covers a broad range of items and activities and can include:

- Movement of capital items and equipment to the next emergency response;
- Removal of containers and packaging from response area;
- Destruction of spoiled food commodities and out of date pharmaceuticals;
- Return of rejected goods to the suppliers;
- Movement of excess or over-supplied goods to other programmes or organisations.

Aspects of Reverse Logistics

Packaging

Where possible, packaging materials could serve dual purposes as in the case of large bladders, wooden pallets, cooking drums, fuel drums, etc. Some examples are listed below.

Pillows/bladders

As goods are mobilised through various modes of transport in response to emergencies, the bracing in ship and rail containers can be done with “pillows” which are basically large bladders filled with air.

- The bracings can then be further used at distribution sites for water storage (or fuel storage if they are correctly lined).
- These “pillows” filled with air also weigh less than traditional wood bracing and thus lower the weight of the shipment and the cost.
- The lower weight means less fuel is consumed to move the goods, with a positive impact on the environment.

Wooden pallets vs. plastic pallets

- Wooden pallets, though less expensive, may contain pests which can devastate indigenous agricultural industries.
- Many countries have now restricted the clearance for wooden pallets from many areas to combat the pest issue.
- Wooden pallets have to be treated with chemicals limiting the burning of these for firewood as toxic and not environmentally friendly.
- Plastic pallets can ensure a multiple reuse by the local population.

Cooking oil drums and fuel drums

- These can usually be converted into barbecues or water storage containers on site.
- Local population will benefit from possible reuse and agencies will ensure a more efficient approach.
Plan to Back Ship

- Most of the goods in the humanitarian world are consumable and thus are on a one-way trip.
- Packaging may be able to be disposed, recycled or reused in the bigger cities where specific facilities exist, while it may not be possible in remote field locations.
- Return shipping is not considered expensive, as trucks and aircraft usually have to return empty after the distribution. In order to capitalise on such opportunities the programme requires appropriate planning in advance.

Reverse Logistics in the Humanitarian Sector

Reverse logistics occurs when there is:

- downscaling of activities:
  - goods have to be moved to different programmes or disposed,
  - evacuation due to insecurity - may result in the suspension of activities when goods have already been purchased and have to be returned to the supplier or used in other programmes;
- closure of programmes or handover of emergency response phase;
- product recalls (goods re-called by the manufacturer);
- rejected goods returned to the vendor:
  - wrong orders,
  - wrong deliveries,
  - deliveries delayed and goods no longer useful to the programme,
  - damaged goods,
  - goods on warranty or going for repair;
- back-trucking of packaging materials for re-use or disposal.

In all instances listed above, there are cost implications that should be taken into consideration during the budgeting and planning period.

References

World Vision International – Logistics Training – Packaging, containers & reverse Logistics