

# Distribution

- 1 [Introduction](#)
- 2 [Distribution Plan](#)
- 3 [Elements of Distribution & Cost Implications](#)
- 4 [Network Design](#)
  - 4.1 [Direct Delivery](#)
  - 4.2 [Distribution Centre Network](#)
  - 4.3 [Supplier Milk Run](#)
  - 4.4 [Choosing a Network Configuration](#)
- 5 [Quality Control Monitoring](#)
  - 5.1 [Supply tracking](#)
  - 5.2 [Performance measurement](#)
  - 5.3 [End user monitoring](#)
- 6 [Reference](#)

## Introduction

The distribution chain or channel represents the movement of a product or service from the point of purchase to the time it is handed over to the final user /consumer. This may entail a chain of intermediaries passing the product down the chain within the organisation before it finally reaches the consumer or end-user. Or it could be direct from the point of purchase to the end user. Each of the elements in these chains will have its own specific needs, which the producer must take into account, along with those of the all-important end user. Reliability of the distribution chain is critical.

In the humanitarian context, distribution is viewed from three perspectives:

1. movement of goods from the point of purchase or transfer of ownership (vendor to humanitarian organisation) to the point of final use. This is common in sudden on-set emergencies where goods are often taken straight to end user. The internal distribution occurs at the point the commodity or goods are being handed over to the beneficiary;
2. movement of goods from one location within the organisation to another location within the same organisation. For example, from hub to hub, or hub to end user point; this is common when resources are being mobilised to strategic locations for onward movement to point of use as in the case of preparedness for an anticipated emergency; or,
3. the point at which the goods are handed over by the organisation to beneficiaries or partner organisation. For example, WFP food distribution direct to beneficiaries or partner agency conducting the distribution exercise.

Some of the distribution activities embrace, materials handling, storage and warehousing, packaging, transportation etc. Distribution is sometimes referred to as the "final mile" and is a critical part of the supply chain. This is where the risk of loss and insecurity tends to be high, where communication is the most sporadic, where monitoring is most difficult, where costs require close monitoring, and where the organisation sometimes has less direct control but can integrate with the programme the more closely. This topic is intended to help develop an understanding of distribution and provides information that embraces all three perspectives above.

## Distribution Plan

The distribution plan is normally part of general supply planning, but in this case the assumption is that the organisation that you represent will be responsible for major portions of the distribution network. It should be emphasized that coordination, both internally and externally, is critical to a successful distribution plan. Generally speaking, partners (NGOs etc.) should follow the distribution plan the donors/main supplier (WFP, UNICEF, etc.) are using. Distribution planning should be adapted to the situation in the field and prepared accordingly taking into account the main drivers of distribution costs-security and access. With all these variables in mind, care needs to be exercised in coordinating and formulating the distribution plan for your organization within the broader situation and overall response.

The final over-all distribution plan should be easy to read and focused around a distribution table or spreadsheet representing the needs.

There are three levels of a distribution plan.

1. The country plan will show the total for the country. The country may be divided into product destinations (whether provincial, regional or your organisation's office responsible areas).
2. The secondary level may take into consideration one province and split it into various EDP's. Extended-delivery point (EDP) refers to the point at which your organisation actually physically hands over supplies to a counterpart (an NGO, an individual, or even the beneficiaries themselves).
3. At the tertiary level the plan is drawn up by the counterpart, the entity on the ground facilitating distribution. This lists the names of the beneficiaries, or schools, or health posts that the items are destined for. This list reconciles the planned quantities with real beneficiaries, so that for each province, there is a plan one level down.

## Elements of Distribution & Cost Implications

Each step adds to the cost, and all add to total overhead.

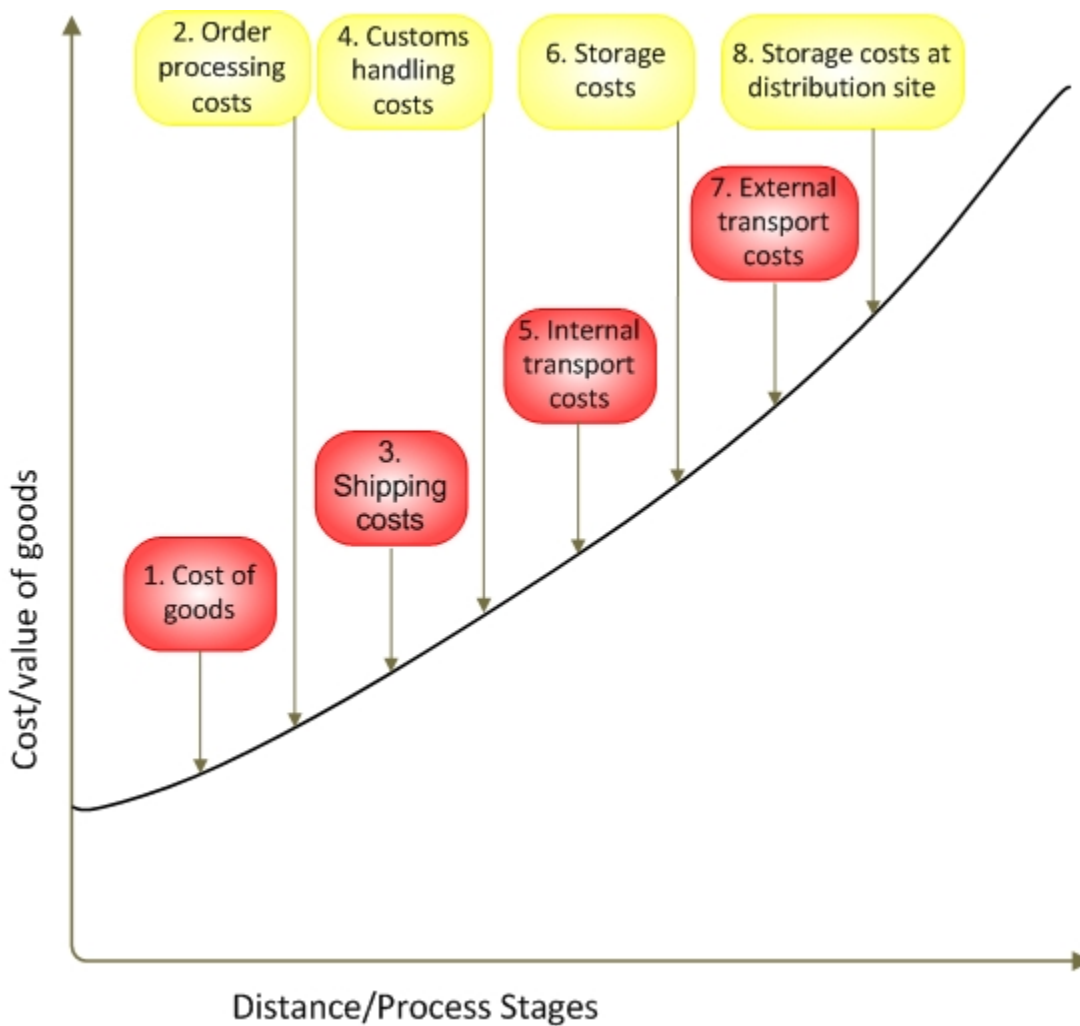


Diagram 1: Distribution and Cost Implications, adapted from UNICEF In-Country Logistics Guide 2006

Distribution, in addition to representing the highest value of the goods, also represents the most vulnerable point. This vulnerability may be due to lack of security, a difficult environment and/or lack of adequate monitoring. It is the most likely area for supplies to be diverted from the end user, and the most distant area from your organisation's oversight. It is worth noting that there are significant human resources costs at every stage of the distribution process. Investing in staff can help to mitigate some of the vulnerabilities of the distribution process and it is better to initially overstaff at the beginning of a response to mitigate vulnerabilities as the response develops.

A good distribution plan is therefore not simply a document that indicates what has to go where and when, but a key document that allocates supplies, outlines the responsibility points for supplies, informs staffing requirements, and serves as the main justification for related expenditure, e.g. transport, warehousing. One of the main functions of distribution is to ensure goods reach the end point at the right price.

See the [Logistics Preparedness and Response Check](#) list in Annexes.

## Network Design

### Direct Delivery

When goods are delivered to a secondary point from a central point it is referred to as direct drop. Very often, goods need to be dropped by the same truck in different or multiple locations. The multiple locations are lumped together in clusters. This can be illustrated thus:

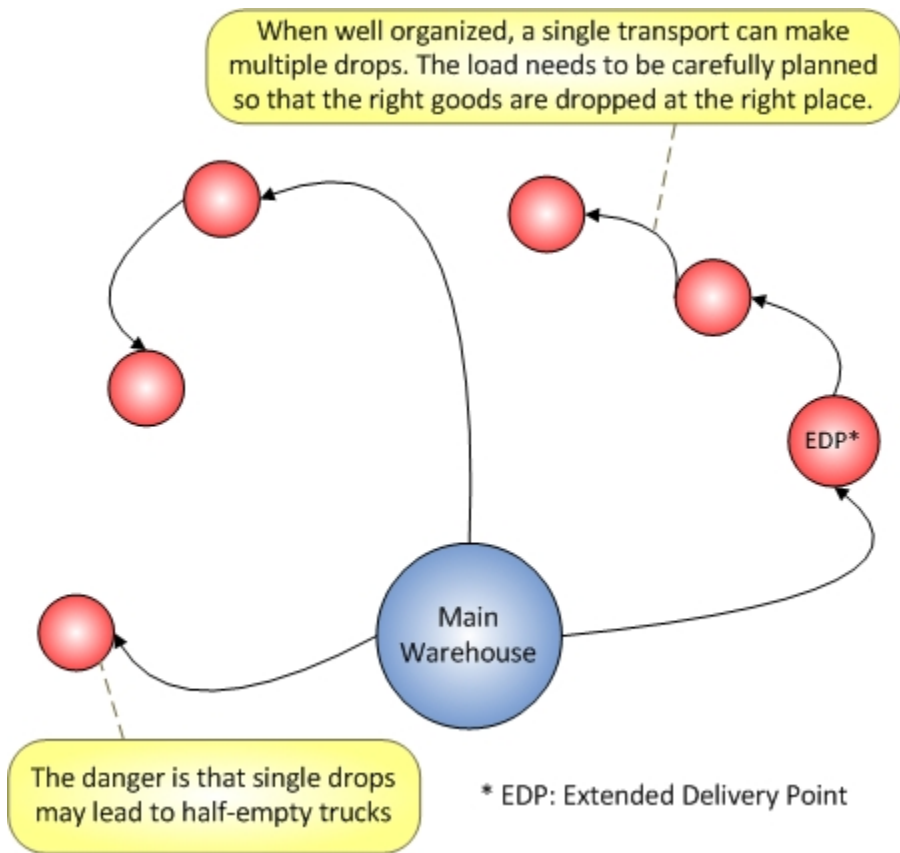


Diagram 2 - Direct Delivery, adapted from UNICEF In-Country Logistics Guide 2006

The Characteristics of supplier distribution model

- [Key Elements of Distribution](#)
- [At what point should handover occur?](#)
- [Final design of distribution plan](#)
- End user distribution
- What happens and how does a humanitarian organisation need to intervene in order to assist?
- [Kitting & packaging](#)

#### Characteristics of direct deliveries from a single point

- Reduces number of storage facilities.
- All deliveries to individual EDP's are managed from a single point. But can be overwhelming if there are too many EDPs.
- Only one transport contract needed from the main warehousing point.
- High risk of less than a full truck loads going, especially when delivering to isolated areas.
- Higher risk of errors when loading/ unloading, e.g. items ending up in the wrong place.
- Bulk goods need to be broken down into distribution-ready packages at the main warehouse. Breaking bulk earlier means that overall transport costs will increase exponentially with the number of EDP's directly served. This might be offset by the saving in warehouse structure.

This model is recommended for smaller distribution operations, where the number of EDP's is easy to handle, and where the geographical area is not large.

## Distribution Centre Network

This is sometimes referred to as the 'Hub-and-Spoke' model. The warehouses are in hubs, transport from the warehouses is represented by the spokes. At the end of each spoke is the EDP. This can be illustrated as follows:

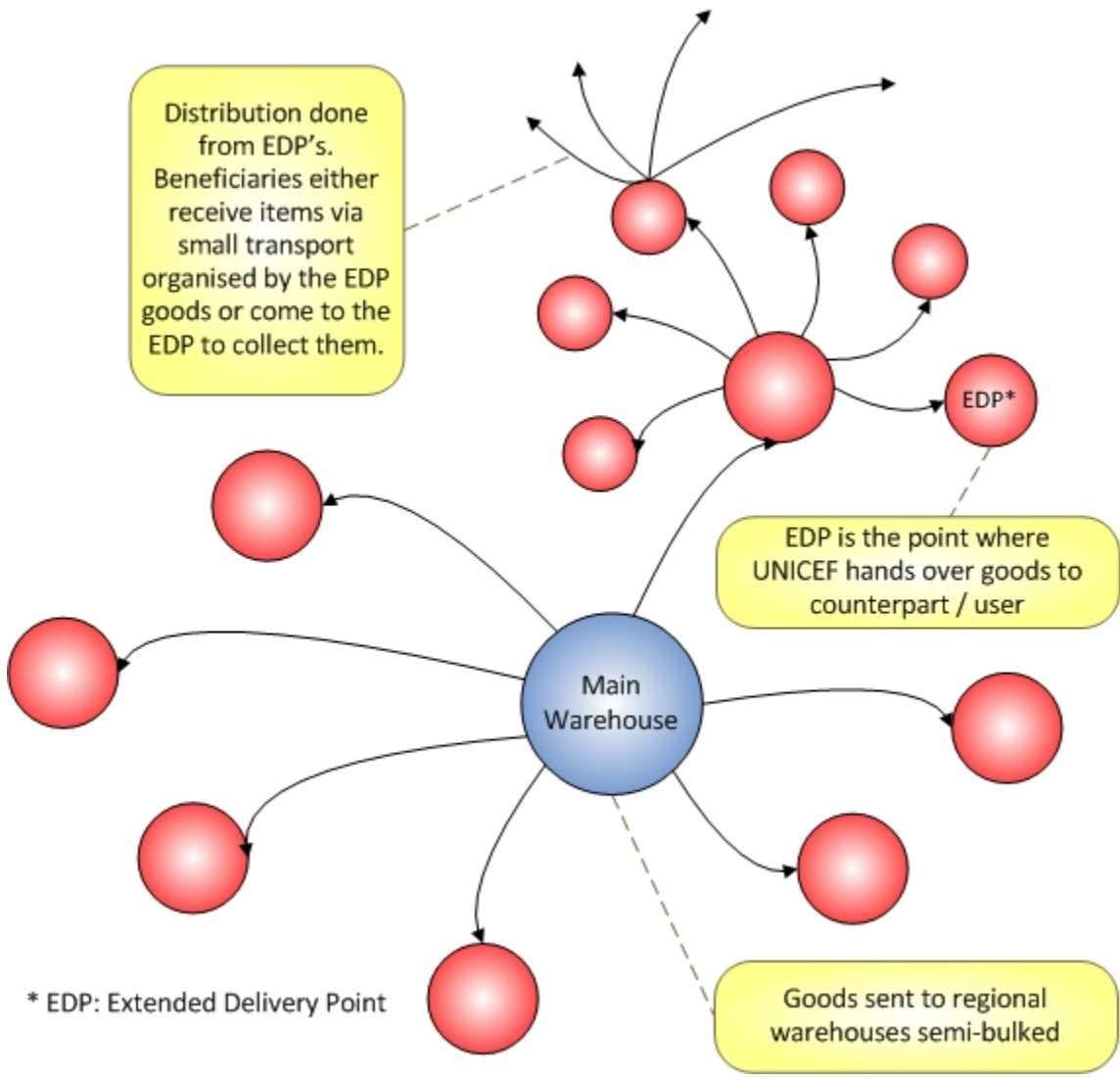


Diagram 3 - Distribution Centre Network, adapted from UNICEF In-Country Logistics Guide 2006.

### Supplier Milk Run

The Supplier Milk Run sometimes referred to as the direct delivery from supplier's model. In this process the EDP's receive supplies directly from suppliers.

This is pictures below:

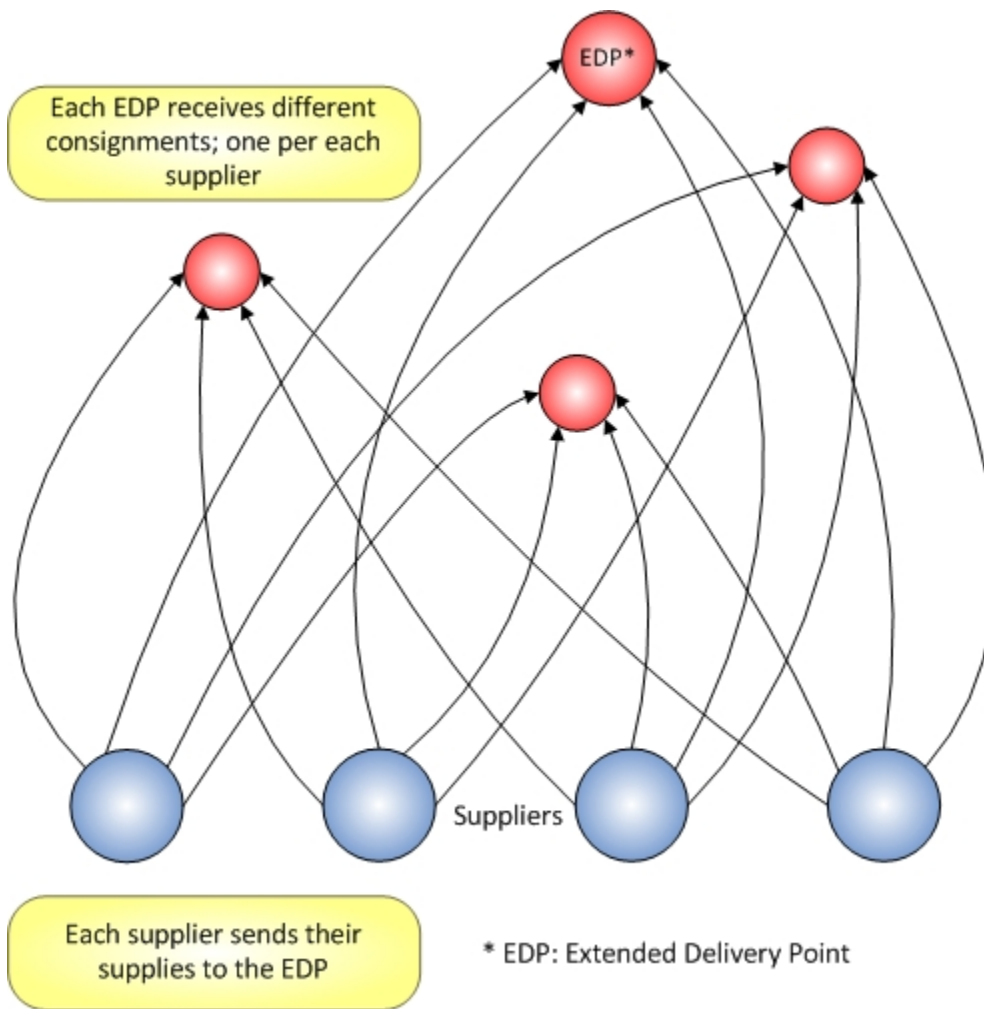


Diagram 4: The Supplier Milk Run, adapted from UNICEF In-Country Logistics Guide 2006.

## Choosing a Network Configuration

### Site Selection

The number and location of distribution sites must be a compromise between the limitations and costs of the transport system and minimizing the distance which beneficiaries need to travel. Distributions can be carried out in established community centres (at local markets or meeting places), so that people who either live close by, or are in the habit of travelling to that place go. However there are additional security issues and impediments to logistics movements with these sites so care should be taken in the planning phase. Consider the distance that people will have to travel to distribution points, and the routes they need to take. It is a good idea to think about the "path of the beneficiaries" and think about every step they will take from entrance of the site until the exit.

When choosing specific locations, consider the following factors:

- provision of shade, water and latrines for beneficiaries while queuing;
- local transport and road system – whether access for vehicles carrying goods is likely to be blocked by beneficiaries travelling to the distribution point;
- secure location for the beneficiaries;
- evacuation route for staff, in case of security problems;
- proximity to military or security establishments, or other sensitive areas;
- logistics and program personnel should prepare the site together; and
- organizing the distribution site from a logisticians perspective:
  - coordinate with providers of the goods to be distributed. Delays in the initial delivery can create security issues later in the process
  - ensure that the quantity of goods available on the day is enough to supply the needs of all those eligible. A perceived shortage could cause tension or a disturbance. Work with programs according to quantities in their distribution plans;
  - the distribution must be carried out in an efficient and organized manner. Try to minimize the amount of time which beneficiaries will need to spend queuing – consider what the cost of that time will be to the beneficiaries;
  - a distribution site should be divided into a registration area, where beneficiaries report and are checked against names on a list. This is for ease of accounting for supplies issued out;
  - the actual distribution zone should be adjacent to the registration site but with controlled access, so that only registered people line up for distribution. This may well require a substantial crowd control element as well as barriers (make use of ropes, trucks, available walls, insides of buildings);

- where possible, have the labour force that unloaded the trucks to double as security, to prevent unauthorized access and possible swarming and looting of the goods. An incentive may need to be given for this work;
- spend time at the beginning organizing your site; and
- spend time days in advance to streamline and verify your beneficiary list. Ensure that enquiries are directed at registration staff, not at distributors. Tension will occur when there are people not on the list, or if the list is done poorly, or when there is a delay in the smooth flow of people through the distribution site.

Advance work minimizes this tension and is the cornerstone of successful distribution. It is amateur distribution that results in the TV images of people rushing the open backs of trucks and being thrown goods.

Information on direct distribution adapted from Oxfam guidelines.

### **Distribution Staff**

The relationship between beneficiaries and distribution staff is a potential source of tension, corruption and abuse. Staff should be selected objectively and should be clear about the standards expected of them. Distribution staff must be subject to stringent monitoring. They should sign for receipt of the goods to be distributed, and should be held accountable for any losses. If tokens are being used, then the quantity of tokens received by staff should be monitored to check that it corresponds to the amount of food distributed. The token system is a distribution method where beneficiaries in a list are registered, the name crossed off, and a token issued. The goods are exchanged for this token.

Staff may find themselves in a position which could give them the potential for sexual exploitation of beneficiaries. Any sexual relationship between a member staff and a member of the beneficiary population is considered by the UN to be an abuse of power.

Make sure that all staff understands clearly that sexual coercion or exploitation will result in immediate dismissal.

## Quality Control Monitoring

There are three major elements of monitoring, in terms of distribution and providing added value in terms of programme success.

### Supply tracking

There are a number of supply tracking programmes in use across the humanitarian community, along with the paper-based system included in this guide. They are an essential element for:

- donor reporting;
- programme management, enabling programme staff to check progress of supplies;
- logistics management, enabling logistics staff to manage the supply chain and coordinate activities more effectively; and
- accountability, a system for leaving an audit trail.

### Performance measurement

Both in terms of logistics performance against logistics targets, and as a measure of logistics contribution to programme success, the basic performance measures for logistics are:

- speed or timeliness measures
- cost measures
- compliance measures
- quality measures

Measures require clear information, which should not be too difficult to acquire. Clear responsibilities for obtaining and holding data must be assigned and the logistics system must be designed in such a way as to enable data to be created. Measures should reflect the strategy of the logistics organization, and the goals of the programme. Some examples of measures are given below.

- reliability of delivery (items delivered against items committed to be delivered);
- inventory accuracy (number of errors in records as a percentage of total);
- vehicle utilization (number of full loads as a percentage of total loads);
- logistics cost (as a percentage of total value of program materials (PGMs) handled by logistics); and
- quality of delivery (loads with loss/damage as a percentage of total loads delivered).

Different measures target activities that have been assigned the most importance by both logistics and programme sections. If cost is the overriding factor due to budget cuts, focus on cost. If quality of delivery has become the biggest issue, focus on quality measures. Be prepared to review your measure annually, and to readjust them to focus on the changing strategic priorities of the programme.

### End user monitoring

Aiming to improve programme/supply planning for the next distribution cycle by providing feedback on quality, efficiency and impact of supply component of programmes. This is done by doing the following:

- assess quality, effectiveness and appropriateness of supplies;
- assess timeliness of delivery;
- assess whether and how supplies are being used;
- assess durability and suitability of the supplies;
- determine the impact of a product on their users;
- determine whether an input should continue, be amended or stopped; and


- check logistics chain (breaks, lead time).

Most of these activities are programme follow-up responsibilities. However, logistics staff can assist in providing up-to-date distribution information, and submitting relevant performance measures (such as reporting supplies easily damaged during transit). Carefully ascertaining product suitability and the impact on the product users requires choosing a number of strategic products and then making investigations within the beneficiary community, while ensuring that a wide sample coverage is used. It is a good idea to focus on products that have a high value, are appearing in markets on a regular basis, or are new products (or new suppliers providing a similar product). These evaluations should be designed and executed with programme sections, but can be initiated and driven by supply/logistics staff.

## Reference

[UNICEF Supplies and Logistics](#)

[OXFAM Non Food Item Distribution](#)

File 	Modified
PDF File LOG-2-9-DISTRIBUTION-At what point does handover occur-Unicef.pdf	Jul 16, 2015 by Business admin access
PDF File LOG-2-9-DISTRIBUTION-Characteristics of direct deliveries from a single point.pdf	Jul 16, 2015 by Business admin access
PDF File LOG-2-9-DISTRIBUTION-Characteristics of hub and spoke operations.pdf	Jul 16, 2015 by Business admin access
JPEG File LOG-2-9-Distribution-diagram 1.jpg	Jul 16, 2015 by Business admin access
JPEG File LOG-2-9-Distribution-diagram 2.jpg	Jul 16, 2015 by Business admin access
JPEG File LOG-2-9-Distribution-diagram 3.jpg	Jul 16, 2015 by Business admin access
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PDF File LOG-2-9-DISTRIBUTION-Final design of the distribution plan.pdf	Jul 16, 2015 by Business admin access
PDF File LOG-2-9-DISTRIBUTION-Kitting and packing.pdf	Jul 16, 2015 by Business admin access
Microsoft Word 97 Document LOG-2-9-DISTRIBUTION-Logs Preparedness and Response Check list-Distribution.doc	Jul 16, 2015 by Business admin access
Microsoft Excel Sheet LOG-2-9-DISTRIBUTION-SAMPLE-Distribution Plan.xls	Jul 16, 2015 by Business admin access
PDF File LOG-2-9-DISTRIBUTION-The characteristics of supplier delivery distribution model.pdf	Jul 16, 2015 by Business admin access
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