

Myth or reality? Is there surplus food for distribution?

This feasibility study was carried out by The Institute in 2003 for the Nottinghamshire Hostels Liaison Group. The assumption was that there would be sufficient food for distribution to a social enterprise to be created for collecting, sorting and distributing food which would provide a service to hostels and work experience and/or employment for homeless people. It was found that this was no longer feasible due to changes in the major logistic changes in food manufacture and retailing. This is explored in more detail in the summary below.

Introduction

There is no denying that a lot of food currently ends up in landfill; it was reported in the Guardian in July 2003 that £386m worth of food is wasted annually. This is an estimated figure and includes food from a wide variety of sources including hotels, restaurants, hospitals etc, not just the food producers and retailers. How much of this waste is within its use by date or is fit for consumption is unclear as cooked food from catering establishments poses many problems and risks. Just because food is wasted does not mean to say it is edible and it would be illegal and unethical to try to flout guidelines on use by dates. It used to be the case in the past when surplus food was distributed, the distributors did not accept any liability for any negative consequences. Toxins are produced in food as soon as it starts to deteriorate even though it appears edible and although there are varying margins of safety on use by dates, best practice has to be observed. Any organisation knowingly using food past its use by date would be negligent.

Profits, competition and food surplus

What this feasibility study has shown is that from manufacturers/producers, distribution centres and retailers the supply of food within its use by date varies between feast and famine. There has been considerable change in the last five years which brought this about.

Grocery Aid was set up in 1992 and involved major producers, retailers and logistic companies. It ceased operating c2000 due to lack of food to distribute – mislabelled products were no longer available (i.e. being produced). It was able to organise donated food, but it seems that this made the operation more expensive and hostels were not willing to make a payment for the food (we have not been able to discover the reasons). Grocery Aid relied mainly on mis-packaging or labelling products, but with the introduction of computer controlled production this has almost been eliminated.

Competition among food retailers has been fierce with Tesco and Asda expanding their non food range to attract more customers. Both have aggressively cut prices; Asda can draw on the knowledge and buying power of its US parent company Walmart, the largest retailer in the world. Sainsbury's has lost market share and it is thought likely to struggle to maintain its position if Morrison's takes over Safeway. The smaller supermarkets chains (Somerfield, Iceland), networks such as Spar and independent producer/retailers such as the bakers Greggs are all trying to prosper in an extremely competitive market which includes the discounters such as Aldi and Netto. The discounters carry far fewer lines, 600 to 800, tend to concentrate on food which has a longer shelf life and their profit margins are very low compared with the norm in the UK. They may fill a niche in the food industry, but they do provide extra competition.

The consequences of this competitive market has not been for food retailers to lower their percentage profit margins in line with Europe or the US norms, but to concentrate on reducing costs and winning customers by the quality of their service. One retailer said, "We are not a food retailer, but a customer service organisation".

What food retailers are doing

There are a number of ways the retailers have been able to become more efficient and cost effective.

- ♣ loyalty cards
- ♣ working with producers
- ♣ Just in Time – JIT

- ♣ integrated functions
- ♣ information systems and logistics

Loyalty cards

Loyalty Cards have had a tremendous impact, giving retailers detailed data which can be translated into customer information for different aspects of their business. With the data bases established, the data analysis and hence the information becomes more dynamic and more valuable as customer preferences, choices and responses are known. Any problems with the technology has immediate impacts. Tesco's and Morrison's were able to capitalise on consumer demands during this hot dry summer, while it was widely reported that Sainsbury's admitted that their data bases were not operating as they should have done; consequently the company was unable to meet demand. This was a case of not being able to get enough products into stores, but obviously detailed data can help to ensure that retailers do not carry stock for which there are no customers.

Working with producers

Retailers squeeze producers' profit margins by negotiating the terms and conditions which include buying own branded products from two producers, thus creating competition. Retailers then apply further pressure on producers by finding cheaper sources of raw materials than are currently being used and ordering them to buy their raw materials from this new source.

Just in Time - JIT

Just in Time production means goods are produced as near as possible to the time when they are to be sold (one of the most notable examples in a non food context is ordering the exact make and model of car right down to the colour and it is 'made to order'). The principle of JIT is to minimise stock holdings which ties up capital and in the food industry will mean food in warehouses with its shelf life ebbing away. Once technology is used to control production this helps to eliminate errors such as mislabelling and helps to ensure quality control.

JIT is an integral part of inter-functional operations, with retailers ordering on a daily basis with completed orders reaching the stores thirty six hours later. JIT has an effect on other aspects of businesses.

Integrated functions

Producers and retailers are now integrating their sales, marketing, production, stock management, purchasing and logistics functions, working together on promotions, new lines etc. The focus in organisations which have introduced JIT and integrated functions is customer satisfaction which implies a revision of how organisations 'think'. Logically they abandon functional, divisional or matrix perspectives and become reactive to the demands of the market place.

When companies integrate their functions and their focus to this extent, their relationships are necessarily long term. The companies which successfully implement these new working relationships gain value for the partners, based on a shared representation of the situation they are in, shared information and innovation.

While retailers may still 'squeeze' suppliers, particularly smaller ones, there is a mutual dependence brought about by working co-operatively and it is in the interest of all parties to try to ensure that each partner minimises costs and maximises returns. It is not in the interest of the partners to generate 'waste' food at any point in the chain.

Logistics

Consolidation among food producers means a limited number of suppliers providing branded and own brand goods to retailers. Previously, when undelivered goods were returned to distribution centres, the producers had to bear the costs, i.e. some retailers would not allow the goods to be returned to the producers to be re-introduced into the system. This is obviously a situation which producers want to avoid, particularly if they produced high volume products. This food at the distribution centres has been FareShare's main source of supplies,

but from discussions with the industry it seems that this surplus food problem has been solved.

Retailers are now using a more limited number of third party logistics companies which collect and deliver food in the 36 hour delivery cycle. Whereas previously a delivery to a retailer was booked for a specific time and if a truck missed that appointment it had to proceed to the next drop and return the undelivered food to the distribution centre where it became 'surplus'. It was either uneconomic to return it to the producer or as was frequently the case, the retailer would not allow food to be re-entered into the supply chain and would charge the producer for disposing of the food. This is where FareShare franchises have been able to source supplies.

With consolidation in the logistics industry, a distribution company may deliver 80% of a retailer's supplies. Consequently drivers no longer 'miss' their appointments at a retailer as their trucks have block bookings. The surplus food at distribution centres is incompatible with the co-operative model described in 2.6 above.

Consequently a number of factors have come together to reduce food waste, although not eliminate it entirely.

Famines - retailers

Famine (as in a shortage) is used to describe usable food from supermarkets which may come in variable quantities. FareShare franchises do not usually collect from supermarkets as they do not consider the quantities available make it worthwhile. Some retailers have a consistent customer base and hence surplus food from these is minimal. Other supermarkets' customer bases can fall by as much as 50% when students go home for vacations; these supermarkets are more likely to have larger quantities of surplus food, **relatively** speaking, but again the quantities are often quite small with a wide mix of food – nothing in any quantity. Again the issue is **not** of no food being available, but of it being past its use by date and is therefore waste.

Occasionally supermarkets do have feasts; they may have ordered food for barbecues and it subsequently rains for 4 days, or there is a sudden drop in temperature and customers don't buy lettuces, but these are not every day occurrences. (See 2.9 below)

The fewer the lines a retailer stocks the easier is to keep track of food nearing its sell/use by date. These retailers tend to cater for less affluent customers and reducing food to clear is quite a significant service to customers

Smaller supermarket chains, e.g. Spar, will pass any food with a short life to their network of retailers as quickly as possible at a reduced price; this only happens if a consignment has been stored out of sequence and this rarely occurs. Iceland notes that there are "only a few packs of products disposed from our stores each day However, there are occasions that we may be able to provide larger volumes of surplus foods. For example, cases of stock at depot level or products which we cannot retail for a labelling or slight quality issue."

What has been obvious is not that food producers and retailers do not want to be involved in food redistribution, but that the quantities of food are either very variable or occasional. There is inevitably surplus food from supermarkets, but realistically this does not **seem** to be in sufficient quantities to make re-distribution viable. 'Waste' will include food past use by date, damaged food and/or packaging rendering food inedible and particularly with fruit and vegetables produce which is starting to rot prematurely for a variety of reasons.

Feasts from producers

Examples of feasts from manufacturers are when weather or unpredictable customer purchasing has resulted in products being ordered by retailers, but the order is not delivered as those particular lines are not selling. Hence the order remains with the manufacturer and is available in bulk for redistribution.

For example, one manufacturer estimates there may be occasionally **up to** three thousand pizzas 'surplus'; these can be frozen and so represent a valuable windfall, but they would need

de-branding. A dairy occasionally has a large number of yogurts or quantities of milk with some five days to sell by date left.

One holding company which deals with some fifty producers of mainly frozen, but some chilled food told us the producers have policies and procedures which required the food to be destroyed if it does not go to retail and evidence of destruction has to be supplied. The holding company receives instructions to destroy the stored food and as no other options are considered there is no information available as to whether any of this food could be redistributed. All the producers would have to be contacted to give their agreement to edible food being re-distributed. Re-directing the food to a redistribution organisation would not benefit the holding company and the cost of doing so would have to be borne elsewhere.

National and local contacts

At the start of the research the most efficient way of gaining the support of suppliers seemed to be approaching the head offices to ascertain their policy and practice on surplus food. This was supported by research on their Corporate Social Responsibility and Environmental policies. Letters were followed by numerous phone calls to get a response from some organisations even though a letter was initially sent to the managing directors, cc to the environmental, production or distribution and CSR directors. This was successful in almost all instances, however this did not ensure a consistent level of response at the local level. Whatever a company's policy is, it still seems as though getting anything done is often dependent on the commitment, good will and time of individuals. This does mean that when someone leaves there may be a break in continuity. Consequently a Good Practice Guide and a Service Level Agreement with suppliers should ensure that it becomes accepted custom and practice rather than being something which happens on an individual basis.

There is one instance where the national contact has been extremely enthusiastic, but the local branch does not seem to be very committed and in another where the national contact seems to have other priorities, but local contacts have been more successful.

FareShare's original practice of by-passing supermarkets does have advantages with respect to the somewhat ad hoc response we have received from some retailers.

Hostels

The basic requirements of a surplus food distribution system for the demand side organisations

It is essential that any system which distributes surplus food to demand side organisations such as day centres and hostels for homeless people provides them with a worthwhile service. It was never envisaged that the food available would replace the food which these organisations order on a regular basis, rather that it would be a supplement providing a wider variety and perhaps food which is not usually bought such as fruit.

The hostels (including day centres) usually plan their meals on a monthly basis and place orders to fulfil these needs. Fresh vegetables and bread are bought separately, usually from regular suppliers and purchases have sometimes been supplemented by donations. Many hostels receive donations at Harvest Festival, usually of dry goods (tinned, bottled or packs) with fairly long life and they are able to incorporate this food as appropriate in their planned menus. For instance, tins of haricot beans can be used in stews and baked beans can be served as part of a cooked breakfast. In fact having a store cupboard of staples enables chefs to stretch a meal when more people arrive for dinner than normal. Consequently hostels are eager to receive food and many chefs are prepared to be flexible and use what is available.

However, the following need to be considered:

- ♣ are there sufficient quantities of one type of food for it to be useful
- ♣ if there are limited quantities which hostels should receive it
- ♣ if the supply is erratic is it of any real benefit to hostels or does it become a nuisance
- ♣ is the amount of food available enough to justify setting up a distribution system
- ♣ is the food what the 'customers' will eat

Sufficient quantities

If the surplus food is made up of 20 crates of cabbages, 30 sacks of carrots, 10 boxes of oranges, 3 pallets of bread etc there is the potential for the chefs receiving the food to not order a vegetable from their wholesaler and to use the free cabbages and/or carrots instead. If however, there are 20 cabbages, 3 bunches of carrots, 10 oranges and three loaves of bread, there may be enough cabbages for **one** hostel to not buy cabbages for one day, and although the other food could be used by the same hostel, it is not likely to make a great deal of difference.

In fact, if you are serving seventy dinners and there are only 10 oranges you may have to give diners an orange on a first come first served basis or not give them out at all if it is likely to cause problems if everyone can't have one. A residential hostel in Wolverhampton which received surplus food on a regular basis from one retailer had great difficulty in using small quantities; it served some 40 meals a day and if six gammon steaks had been donated it couldn't use them as more than six diners would want gammon steaks and only serving six might result in a fight breaking out. The possible mix and quantities may be more varied than the scenario described above.

Which hostels should receive food

If there is a limited amount of surplus food available, decisions would have to be made about which hostels should receive it. Twenty cabbages to one hostel or four cabbages to five hostels? The quantities have to be sufficient to make it worth while for the hostels, and hostels could be identified on their need for assistance or because they were close to the redistribution depot thus minimising transport costs.

If the supply is erratic is it of any real benefit to hostels or does it become a nuisance

If there is a steady flow of a limited quantity of food, a small system could be established with regular deliveries. If however, there are wide variations and no one can expect regular supplies it raises the question about whether hostels would consider it worth their while. If you know you will receive a regular weekly delivery of a small quantity of food and you are notified in advance what is being delivered, it might make only a small contribution to operation, but it could be planned for and managed. If you receive a call on an irregular basis it cannot be planned for and the small benefit to the organisation may not be deemed to be worthwhile.

A viable distribution system

Any distribution service needs to provide a service to both the supply and demand sides and it needs to be cost effective in terms of the ratio of costs to the value of food distributed. Suppliers pay for their waste food to be land filled, Landfill Tax is set to rise steeply and legislation requires food waste to be composted, consequently suppliers are eager to solve their food waste problem.

However, the value of the food distributed to hostels needs to be greater or at least equal to the cost of distribution (as well as being food which hostels can use as discussed above). Although the re-distribution organisation could charge the suppliers to take the surplus food away rather than a waste contractor doing so, this would mean that all the food would need to be transported as though it were edible and then sorted at a depot. This would be costly, the re-distribution organisation would need to have a waste licence and would have to process the waste on a different site.

Collecting from distribution centres limits the cost of collection whereas picking up from individual supermarkets is not cost effective in terms of distance travelled, time taken and the quantities collected. Added to this is the costs of re-distribution as well as fixed costs (utilities, staff, insurance etc), vehicle renewal, training etc.

Consequently it is easy for the value of the food to be distributed to be far exceeded by the cost of re-distribution. As these costs are unlikely to be recovered from the suppliers, the costs would have to be covered by grants and donations and in kind support. As a

redistribution organisation would employ very few staff and would have no real training opportunities, it could not be supported by training grants.

A professional service to hostels and suppliers

Neither the hostels or the suppliers could cope with an ad hoc or amateurish food distribution system; it must be run as a food distribution business to satisfy both sides. There should be a Service Level Agreement (SLA) between the suppliers, the distribution organisation and the hostels in order to establish procedures, contacts and trust. The SLA should include issues such as:

- ♣ who is responsible for the surplus food at the suppliers with an additional contact to cover absences
- ♣ an agreed time when the supplier will be able to notify the distributor of what is available
- ♣ where it will be collected from or delivered to
- ♣ the procedure for collection including times
- ♣ the *surplus food* will be food not waste
- ♣ the hostels will only receive food they can use
- ♣ they must have agreed to receive that food
- ♣ they will be notified of delivery times
- ♣ the hostels will have agreed procedures for receiving the food

National organisations distributing surplus food

Two visits to a national surplus food distribution organisation's warehouse in June and October 2003 were interesting and lent support to the theory that "things aren't what they used to be". Tonnages found on the national website indicated a lot of food was being re-distributed, but this did not seem to be borne out by our visits.

The warehouse seemed to be underutilised on both occasions. On our first visit the freezer room was empty and apparently switched off for cleaning; in October it was empty and apparently switched off waiting for repair. There was little food in evidence on our first visit; some fresh fruit and vegetables and individual packets of microwave rice. There was less food on the second visit although a delivery from Marks and Spencer's was awaited. We were unable to get an answer to how full the vans were when they left to deliver and the information given on the quantities delivered did not seem to be supported by the evidence. In June we had been told about the pallet loads of surplus food which had been received, but in October we were told that in fact some of this had been donated, rather than being surplus.

American Food Banks

The US has a number of very successful food distribution/food banks, detailed information can be found at:

<http://www.secondharvest.org>

<http://www.fbd.org>

<http://www.endhunger.org>

<http://www.usc.edu>

The emphasis on these web sites is on ending hunger, not on reducing food waste. Second Harvest, one of the largest, includes four pages of financial donors in its 2002 Annual Report. One third of their food donations comes through *Food Drives* when individuals and/or companies collect and donate food. Companies donate a wide range of products and while Grocery Aid in the UK ceased operations because the supply of groceries dried up, these US food distribution organisations still mention 'distressed' and damaged goods. It seems very unlikely that the UK producers are more high tech than US companies, so it does raise an issue of "why the difference". US companies also transport goods to the food banks.

In the absence of *food waste*, the emphasis is on companies donating and alleviating hunger. Grocery Aid (UK) was able to arrange donations of food to replace the 'distressed', mislabelled and damaged products it had relied on, but hostels would not pay to support the system. Perhaps the US food banks raise enough financial support to enable them to distribute donated

food, particularly as they stress the food is for families and older people rather than mainly for hostels as in this country.

The food banks are staffed by volunteers and are run by charitable organisations including churches. The volunteers seem to be community minded citizens who will be involved longer term, rather than people doing voluntary work as a way into employment or to add to their CV as in the UK. Universities also run food redistribution.

Conclusion

ISDB was unable to recommend that a distribution system would ever be viable or could provide hostels with a sustainable or economic service.

Update 2004

In 2004 Morrison's Supermarkets finally purchased the Safeway Group. Morrison's had told the feasibility study team that they had their waste under control, aiming to provide a service to customers by selling food near its sell by date at reduced prices. It was subsequently reported that Morrison's had found Safeway's still had a large amount of waste and that the waste bill had been reduced by £1million per week. (Guardian 3 July 2004). This is indicative of how food companies are managing operations to minimise wasted food.

On the other hand it was reported that up to 50% of organic crops 'are rejected (by retailers) for aesthetic reasons'. (Guardian 19 January 2004). The research team were unable to gather information from all but a few growers in the time available, but those contacted were not forthcoming with information.

We welcome comments, criticism and additional information