# Kitting and packing

**Packing for distribution**

Often overlooked, but the packing element is critical for ease of distribution. The specifications for procurement must be created with this in mind. For example, if a survey has indicated that the average numbers of children in a school is 50, then it is logical for you to order your items in sub-packs of 50. This makes it much easier to organize distribution, either as single packs or as part of a kit. The specification can be read to say perhaps, boxes of 500, with 10 packs of 50 to a box. This allows logistics staff to move items in larger boxes for ease of handling. These boxes can also be split open into the packs of 50 once the consignment is near the final distribution point. When thinking of final packing unit some of the questions to be asked are:

- What is the final product mix going to the beneficiaries?
- Can the goods be packed into one box as a kit? The more boxes of product for one set of beneficiaries, the more chance there is for confusion and boxes going missing or being mixed up. Would you prefer distributing one kit of one box for a school, or 17 different boxes to a school?
- What would be the final weight of the single unit? How will people carry it if they need to carry it? If the weight of one kit for 50 students is too heavy, change the kit into one box for 25 students.
- What are the weather conditions like at distribution point. Heavy rainfall may require a rethink of packing material.
- Packing material must survive frequent manual handling. Three-wall cartons, triple, six or nine-ply cardboard should be considered.
- Set your packing requirements to your distribution model. If you have a primary transport on good roads with mechanical handling devices at the end, pack in pallets. Let's say each pallet has 12 large boxes, each box holds 10 packs of 50. That is 6,000 units of item to a pallet. For secondary distribution the pallets are broken and the 12 large boxes scattered further down the chain, let's say one per school. At school level the packs are opened (10 to a big box) and each classroom receives a pack for 50 kids.

One of the major supplier faults seen in the field has come through inadequate or sub-standard packing. It is worth insisting on high quality and strong packing, even if this means a subsequent price rise. Most countries where your organisation will operate in-country logistics provision will use manual labour for handling, and will use multiple handling points. Loss of goods through spillage and pilferage occurs through poor packing, when boxes rip open or collapse. Good packing uses as much of the box as possible. It saves overall volume and maximizes space. If there is a large gap of unused space at the top of the box, the boxes can collapse when stacked one on top of the other. All products should be packed with this in mind.

**Kitting and set-packing**

This can be outsourced to a supplier or done by the logistics unit. Supplier kitting can save time and money, but not always. However, it can be an easier way of organizing what can develop into quite a complicated logistics process. (The need to procure packing material, straps, tape, etc., can add to the burden.) Outsourcing kitting requires good quality oversight of the supplier. This is particularly true if the kitting supplier is buying the components and is tempted to go for the lowest cost/lowest quality possible. Kitting managed by your organisation brings control and quality assurance, but can be labour intensive, and requires plenty of space in which to establish a kitting facility.