Background and definitions

The decade of the 1980s has been described as a 'period of flux' for the world's economies. Energy shortages, inflation, food surpluses and imbalances, together with increasing transport costs, will plague authorities in the decade ahead. These same factors will also have a significant impact on the operation of the distribution systems used by many companies because they will affect both the cost and the level of service that they can provide for their customers. Lancioni and Grashof (1981) have listed the problems to be tackled as:

(i) The need for improved distribution management
(ii) The need for improved distribution planning
(iii) The growth of computerized order processing systems
(iv) A shortage of energy and critical fuels
(v) The need for improved financial planning
(vi) The decline in productivity
(vii) Changes in the transport regulatory structure.

Companies that have developed a well-organized system of distribution did not do this solely for cost-saving reasons. The main motive, apparently, has been to establish a systematic approach to the problem. Nowadays, when a firm becomes involved in international operations, the scope of the distribution manager's responsibilities often expands to include international distribution activities. Stock and Lambert (1982) found in a survey that the relative frequency of distribution executives with full international distribution responsibility had increased from 9.5% in 1974 to 30.5% in 1980. This trend will no doubt continue as more companies expand into global markets.

Because of its new and greater scope, the area concerned with distribution has lacked a suitable agreed name. Its substance is well identified as including transport and storage, but these functions extend both forwards and backwards. In both directions, reservoirs of goods (inventories), rates of flow, communication lags, price variations, location of facilities and market behaviour all affect optimization of customer service and distributors' profits. Several terms have been proposed to identify this area of study (Figure 8.1): materials administration, total materials systems, warehousing systems,
Figure 8.1 Logistics areas.