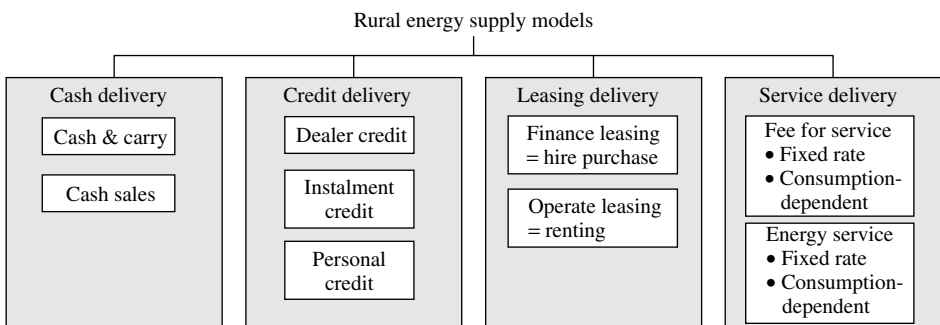


components will be produced locally. The proximity to the markets, that is, close matching with the users' needs and desires, the lower price of the components due to the lower expenses for manpower and the better commercial situation (no import barriers), the ability to repair and replace faulty components very quickly and the promotion by local governments show clearly that there is a large potential for local production.

Today, many local manufacturers work in joint ventures with industrialised countries, which may bring benefits for both sides, quick establishment of a production line of high-quality products for the local partner and increased market shares for the foreign partner. If local producers make wise use of international and national quality rules and quality control bodies, they will increase their market competitiveness considerably [21].

PV-systems have a high investment price, while the running costs are normally lower than those of the conventional alternatives. To overcome the barrier of high price for low-income customers, commercial and to-be-developed financing schemes have to be used. In the following list, the characteristics of the different delivery models applied in rural electrification are given (Figure 17.20).

- **Cash and carry:**  
typical: the dealers are based in main cities; customer comes there and pays system cash; ownership is transferred with payment; user is responsible for installation; operation and maintenance is done by the users.
- **Cash sales:**  
typical: the dealers are based in main cities and operate a salesmen network; customer pays system cash; system provider installs the system; ownership is transferred with payment; user is responsible for operation and maintenance.
- **Dealer credit:**  
typical: dealers with local offices; customer pays system on credit directly offered by system provider (down-payment plus instalments); system provider installs system; ownership is transferred with contract conclusion; user is responsible for operation and maintenance supported by system provider.
- **Instalment credit:**  
typical: dealers with micro-finance institutions; customer pays system on credit channelled from financial institution through system provider to customer (instalment =



**Figure 17.20** Categorisation of different delivery models in off-grid rural electrification