**Figure 4.1** The agricultural regions of England and Wales (Stamp and Beaver, 1933)

1 The Lake District or Cumbria.
2 The Pennines.
3 Wales and the Welsh Borders.
4 The Southwestern Peninsula.
5 Northumbria.
6 The Eastern Slopes of the Pennines.
7 The Plain of Lancastria.
8 The Vale of York.
9 The Midlands of England.
10 Northeast and East Yorkshire.
11 Lincolnshire.
12 The Scarplands and Clay Vales.
13 The Fenlands.
14 The Plain of Somerset.
15 The Chalklands of the Southeast.
16 East Anglia.
17 The London Basin.
18 The Hampshire Basin.
19 The Weald.
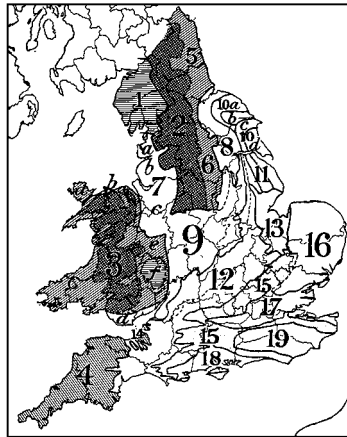
Figure 4.2 Geddes' diagram: Place–Work–Folk (Geddes, 1949)

ENVIRONMENT ACTS, THROUGH FUNCTION, UPON THE ORGANISM:
AND
THE ORGANISM ACTS, THROUGH FUNCTION, UPON THE ENVIRONMENT
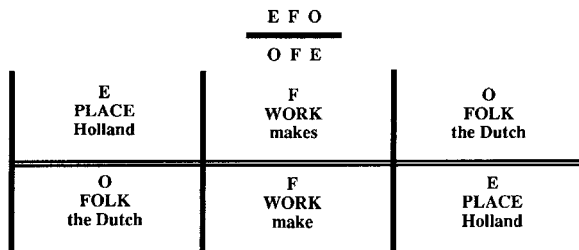
divides nature and man. This philosophy undervalues the natural environment and leads to its exploitation. The exploitation extends beyond the 'natural world' to include man; the poor and vulnerable occupying areas at risk from flooding and drought. It may be appropriate to give greater weight, in regional definition, to the physical environment and its ecology, and in particular to the role of the environment in sustaining the local population. Maintaining a more balanced relationship between a community and its local environment may be of great importance in this and succeeding centuries.

In contrast to the formal region which is defined in terms of homogeneity, the functional region is concerned with areas which display an interdependence or interrelationship of their parts. The functional region may consist of heterogeneous components such as cities, towns and villages but which are functionally related. The relationship of the parts is usually measured in the form of flows, such as journey-to-work, shopping patterns and bus services. The analysis of the functional region is mainly concerned with the movement of people, goods and messages. As such the concept of the functional region is important for any discussion of sustainable development, including transport planning, waste control, pollution and urban support systems such as food supply. One of the founding fathers of planning in Britain, Patrick Geddes, was aware of the importance of the interdependence of components within the region. His diagram 'Place–Work–Folk' (Figure 4.2) and his phrase 'City Region' illustrate perfectly this understanding (Geddes, 1949). In Europe, Christaller (1966) developed a central place theory based upon a hierarchical relationship between

centres in southern Germany. This theory of Christaller is a seminal work in the development of ideas about the definition of the region (Figure 4.3).
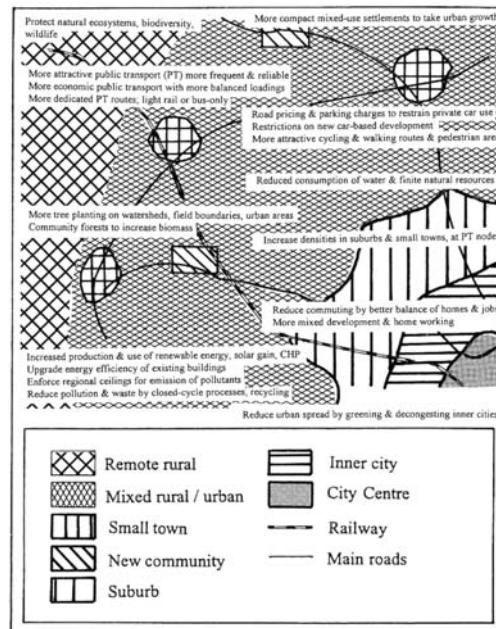
THE CITY REGION

Two tiers of regional administration, adopting features from both systems of geographical classification may prove necessary for a political structure which will give legitimacy to programmes for local sustainable development. Since Geddes first coined the term, city region, the concept has become a part of the planner's language, used frequently by many authors. Howard's earlier idea of the Garden City was in effect a proposal for a city region. It comprised clusters of cities linked to each other and to a central city by a strategic transport network. The basic idea was the development of a functional arrangement of settlements with clearly defined physical identity but with social and economic interdependence (Howard, republished, 1964). It is ideas such as the city region which hold out a prospect for managing some aspects of a sustainable city, such as its transport network. This concept has been developed further by the Town and Country Planning Association. The term used by the Town and Country Planning Association is the Social City Region (Figure 4.4) (Breheny and Rookwood, 1993). If a country such as Britain is seeking sustainable development as a major goal, then the city region would be the chief unit of local government: it would be the main provider of local public services and it would be responsible for managing the environment including the immediate rural hinterland. Clearly the city region would be the polity responsible for the management
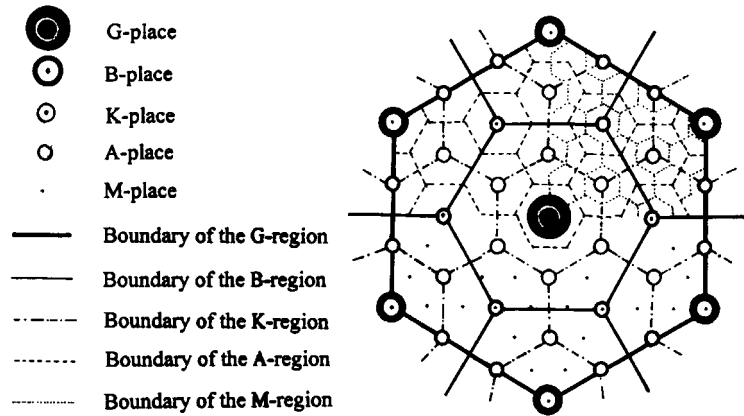
Figure 4.3 Christaller hierarchy of settlements (Christaller, 1966)

and development of the transport system. This would include achieving the balance between different modes of transport and the relationship between public and private provision. The management of

Figure 4.4 The Social City Region (Blowers, 1993)