

# Agrarian system

This concept identifies any form of agriculture as a "system" of interactions between the establishment and management of a cultivated ecosystem, the agrarian structures (land ownership patterns and landscapes) and the production system (combinations of arable and/or livestock production and the production means implemented in terms of techniques and practices).

-From agrarian structure to farming system

The older of these two concepts is that of the agrarian structure, used in the period between the two world wars and up to the 1960s. The restricted acceptation refers to the social and land-ownership parameters (ownership, working of the land, tenancy) of agricultural life in a given rural space. Some authors (A. Demangeon, P.Gourou, A.Meynier, R.Lebeau) put greater emphasis on the concrete manifestations of this organisation. Thus for A.Fel (1962) agrarian structures "are the visible arrangement (district (finage) and habitat) and the rules that are an integral part of that arrangement (cropping and livestock rules, organisation of labour)". They are manifested "in the form of a landscape that is organised in a particular way". This however leads to a definition that is too broad, synonymous with an "all agrarian" ordered composition (M. Derruau), an "agrarian civilisation" or an "agrarian regime" (M. Bloch). In 1946 A. Colley already considered that agrarian structures were a "combination" of interacting physical, biological, human and economic elements. This author also integrated legal, technico-economic and geographical relationships, and set agrarian landscapes against socio-economic analyses, opening the way towards a systemic approach.

However, after 1960, agrarian issues which were fairly static or even stagnating; were largely put to one side by researchers, who concentrated more on the study of changes in farming and the countryside. P.George (1956, La Campagne) had nevertheless proposed to widen the study of agrarian structures to economic issues, that is to say to "all the data relating to the morphological aspect of "terroirs", and to the qualitative combinations on which the farming system is based". In addition to the various types of animal husbandry, this farming system involved "types of land use and the way in which that usage is ensured". It is still in this form that geographers today approach farming systems, setting "resources" (land capital, labour and working capital) against the farm production that serves to meet objectives and needs fixed by the farmers. These systems put emphasis on organisational convergence or divergence, qualities, efficacy (intensity and productivity), modes of functioning, and their effect on sustainable use and valorisation of resources.

-The agrarian system: viewpoints of geographers and agronomists

It was in an attempt to compare land ownership structures with farming systems that at the start of the 1960s M.Derruau defined the "agrarian system" as "the spatial arrangement (plot layout, fences and boundaries) and the temporal organisation (crop rotations, permanent crops) and their relationship with techniques and social factors (community practices, land ownership patterns). For C. Moindrot (1995), the concept therefore includes the study of agrarian "landscapes", farming systems, and land ownership. However these definitions raise the problem of scale: is a farming system that is defined at farm level commensurate with a typical agrarian system in a given geographical space? Is there not a risk of amalgamating the two? Does this mean that a farming system should be taken to be a set of farming enterprises sharing a particular technical and economic model, and a comparable place in a more or less specialised "production basin", piloted by agro-industrial firms? Several geographers have thus proposed typologies for the different farming systems (J. Bonnamour; R. Chapuis) "regularities", or spatialised "farming models" (J-P.Charvet, M.Sivignon). But it was a group of researchers around the agronomist Marcel Mazoyer who reappraised the concept of the agrarian system in the 1970s and 1980s. What is now considered is the combination of the mode of exploitation of an ecosystem; i.e. seen as an "agro-system" -, the technical system, and the socio-economic logic governing the whole. Conceiving and analysing farming as it is practised at a given moment in a given place as an agro-system "consists in breaking the system down into its main sub-systems [...] and studying the organisation and functioning of each, and their inter-relations" (Mazoyer, 1997). This definition therefore allocates all the elements that are specific to the organisation of production in a small agricultural region to one and the same system, given that farms have feature in common (comparable access to resources, similar socio-economic conditions etc) and entertain relationships one with the other and with their environment (from the cultivated ecosystem to the regulatory environment). By centring on farming practice; concrete modes of doing things; in an analytical approach, as the expression of the coherence of the system, and on modes of organisation and regulation of production, it is possible to de-aggregate the agrarian system into its

component subsystems. On the one hand there is the agrarian or land-ownership system (land status, who farms it, land markets, social relationships etc), and on the other hand the production system, which is itself broken down into livestock or crop systems (technico-economic component - farming skills, know-how or practices, the dynamics of the sector, exchanges on different scales, pricing systems, and distribution of the added value, etc). This is constantly changing in time and space, and farming methods produce visible features in the landscape (J-P.Deffontaines). The agrarian system has thus become "the theoretical expression of a type of agriculture that has developed through history and is geographically located; it is made up of a characterised cultivated ecosystem, and a defined social system of production that enables the fertility of the ecosystem to be exploited in sustainable manner" (M.Mazoyer).

-The territorialised agrarian system

In a territorial perspective, we need to move on from the agronomic approach for two reasons. Firstly the concept of the agrarian system means that we need to resort to notions that are situated on several scales of analysis: that of the production unit for the concept of the production system; that of the group of cultivated plots or the herd for the concept of the crop or livestock system. Combining the different scales of analysis requires them to be considered as so many interdependent levels.

Secondly, the approach of the agronomists, focusing on the exploitation of an ecosystem and ignoring an intermediate scale between the farm and the "local region", only partially accounts for socio-cultural phenomena (styles of residence, new mobility patterns, power and conflict, appropriation and exclusion, collective imagination etc). Nor does it adequately integrate the opening-up of the agrarian system to other activities, with new players, for instance the place of agriculture in the new forms of rurality. This raises the issue of how to envisage the ties that agrarian systems entertain with place, and the cultural values and references of our increasingly urbanised societies. To reflect this articulation between geographical space organised by and around farming activities and the players in the "territory" as a whole, recent studies have attempted to find a place for the agrarian system in a territorial meta-system. This is generated by the interaction of numerous players, according to the representations that they have of the space that they perceive and experience. Thus farmers are players like many others, and the use of rural space for agricultural production is one usage among others. There can be several phases in the relationships between these different players and the space in question: processes whereby farming societies settle and take root, leading to a territorialisation of the agrarian systems; or conversely the diffusion of productivist, globalised farming systems, which have considerably weakened the ties with territory in settings where the rural players are increasingly diverse. Today a process of multi-dimensional "re-territorialisation" is underway in agriculture, aiming to reintroduce feelings of belonging, appropriation and collective identity, backed up by "cultural and social values, and collective and symbolic memory" (Di Méo). This social compromise involves "relocation", and the development of the traceability of productions, via valorisation of quality and of the specific origin of produce &#8211; the "produits du terroir" that visitors to France will have seen advertised along the way &#8211; focusing on heritage aspects of the countryside and landscapes; it also involves more sustainable management of the environment, and "project policies" for recomposed institutional territories. The concept of the "territorialised agrarian system" proves operational for the analysis of the multi-functionality of agriculture, and its integration into the agro-food system (standards and values of the farmers, logics of long and short production chains) making it possible to take account of styles of occupation, or the identity-driven, symbolic appropriation of agrarian places and landscapes.

Laurent Rieutort

## Bibliographie

- CHARBONNEAU M., 2009, Gestion des ressources et peuplement des espaces pastoraux au défi de la modernité, le cas des pasteurs de la puna péruvienne, Doctorat de géographie, Université de Pau, 629 p.
- MAZOYER M., ROUDART L., 1997. Histoire des agricultures du monde. Du néolithique à la crise contemporaine, Seuil, 705 p.
- MOINDROT Cl., 1995, « Les systèmes agraires », in Encyclopédie de géographie (sous la dir. d'A. Bailly, R. Ferras et D. Pumain), Economica, 1995, pp. 445-470.
- SCOTT J.C., BHATT. N. (dir.), 2001. Agrarian studies: Synthetic work at the cutting edge. Yale University Press, Newhaven and

London, 320 p.

-TAFANI C., 2010, Agriculture, territoire et développement durable. Analyse systémique d'une agriculture littorale sous pression touristique. L'exemple de la Balagne en Corse, Doctorat de géographie, Université de Corse, 527 p.

HYPERGEEO