

Dimensions and scope of a study

Exercise

INSTRUCTIONS

LEARNING OBJECTIVE:

- Define the dimensions of a study topic
- Identify the scope - geographic, social, and historical - of the study by taking into account the dimensions to study

PROCEDURE STEP-BY-STEP:

Context of the assignment: **Management of forage resources in Dolekaha** (in northern Ivory Coast) drawn from a PhD thesis (Bernard, 1999).

Description of the context:

Dolékha is a village situated in northern Ivory Coast covering 347 hectares; its population of 210 people is composed of Senoufos and Peuls. It is bordered on the north and south by two permanent water courses and is traversed by a temporary water course (lowlands) separating two small hills. It is part of a sub-Sudanese phytogeographic sector characterized by dense, dry forest as the climax vegetation. At present, the savannah-like vegetation and extensive human activity have created agroforestry landscapes where only ligneous species protected by people can survive.

Due to the economic crisis, the emigration begun in the 1980s in the direction of towns and coffee and cocoa plantations in the south of the country has ceased and the population is once again growing rapidly. Faced with the high population density in the region, Senoufo farmers have intensified production in their fields by sowing several types of crops together:

- *126 hectares are cultivated, 31 hectares of which with permanent food crops.*
- *8 hectares in the lowlands are cultivated with rain-fed rice.*
- *the remainder is cultivated in rotation: crops (cotton or cereals + legumes) are followed by a 1 to 15 year fallow period in the two areas located the furthest away from the dwellings (see map).*

The cotton crop is now the main commercial crop. Its introduction in the 1960s, accompanied by the use of animal-drawn cultivation, increased the average surface areas cropped by each farmer in the area. Today, the agricultural land base is not very large and the soil is less and less fertile.

Village lands that have become unsuitable for farming through over-exploitation or the barring of the lateritic crust are reserved for grazing. The rangelands are constituted by plots of land that have been set aside for over 15 years and corridors between crop fields.

Conflicts between the neighbouring villages and the Peul livestock herders are frequent because competition over areas that can be used for grazing is strong due to the lack of land and the growth of livestock. Among the Senoufo, a farmer, even if he owns an important number of cattle, does not care for the animals himself; they are put in the care of a shepherd or cow herder. For the farmer, this livestock is a form of capital savings.

Among the Senoufo, land is inherited through the mother's lineage. Only one person inherits. This is why the territory of Dolekaha is divided between five land chief owners who belong to five different lineages.

In this context of competition over land for grazing and annual crops, a study was requested to examine the management of forage resources and means to improve it.

Please answer the following questions:

- What dimensions are involved in this study topic?
 - o Formulate one or two specific research questions for each dimension.
- What scopes (geographic, social, and historical) should be retained in the study for each dimension to be studied without overlooking a space, social group, stakeholder, or period in time?

To answer these questions, you have interactive maps at your disposal that may be opened with your Internet navigator (Firefox, Internet Explorer, ...): "Animated map of Dolekaha" (format .swf). These maps present, one after another: the distribution of plots per **owner** / per length of **fallow period**. It is possible to display the itineraries followed by the cattle.

You also have at your disposal complementary information:

- The uncultivated spaces mainly are permanent rangelands (and not land lying fallow to restore fertility)
- The space used (cultivated or not) by the villagers covers a principal area and two enclaves
- The inhabitants of a neighbouring village have built houses on Dolekaha land.
- All of the land chiefs are Senoufos
- One of the land chiefs, originally from Dolekaha, where his entire family still lives, is the head of the neighbouring village, and lives there: he has handed over his land to a steward in Dolekaha
- Part of the Dolekaha territory is managed by land chiefs who live and are from the neighbouring village

- The herds that use the uncultivated areas of Dolekaha can come from other villages
- Dolekaha herds also graze in other villages
- The herds are owned by Senoufo farmers and have been confided to land chiefs who have a cattle park
- Peul herdsmen care for the herds
- One cattle park is managed by a livestock research institute that has its own animals but uses the village rangelands

► **Bibliography cited:**

Bernard, C. 1999. Structure, dynamique et fonctionnement des parcs agroforestiers traditionnels. Cas de Dolekaha-Nord Côte d'Ivoire et Holom - Nord Cameroun. Tome 1. PhD Dissertation. Université Pantheon-Sorbonne, Paris, France.

► **To go further:**

Boffa, J.-M. and Food and Agriculture Organization of the United Nations. 1999. *Agroforestry parklands in Sub-Saharan Africa*. Rome: Food and Agriculture Organization of the United Nations. <http://www.fao.org/docrep/005/x3940e/x3940e00.HTM>