



Productive dynamics and agroecological potential of the territory of Guadeloupe: a geographer analysis

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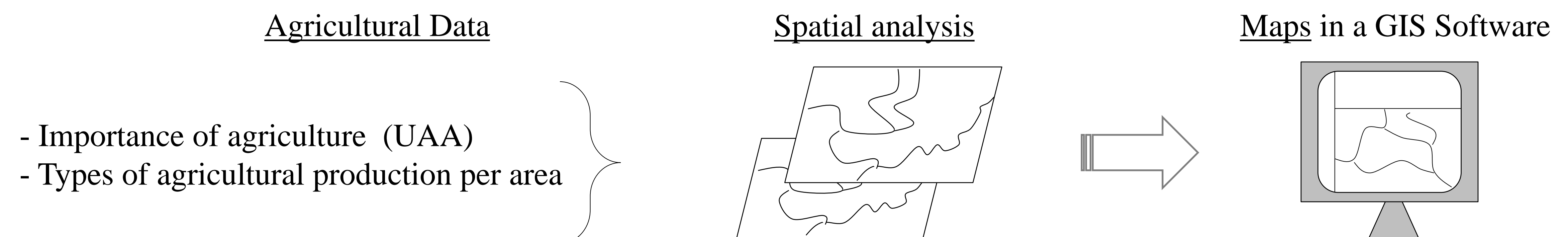
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Introduction

We built an Agro-Ecological Zoning (AEZ) for Guadeloupe, to address gaps in existing zoning, according to the method recommended by FAO (1997). We confronted with agricultural data to characterize the productive capacity of agro-ecological zones defined.

Method

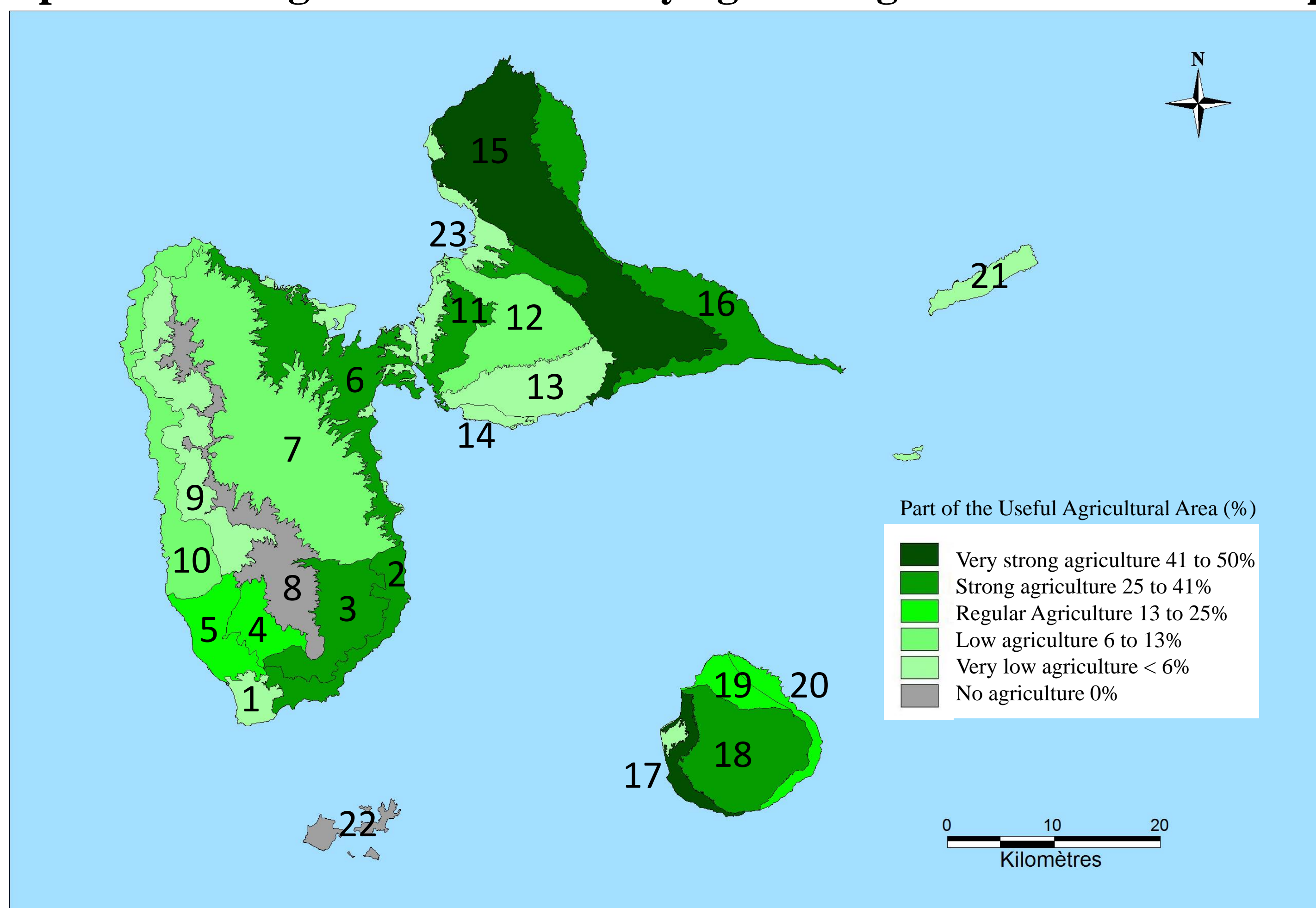
From cutting in agro-ecological zones, we conducted spatial analyzes to know the importance of agriculture and the diversity of production in each zone.



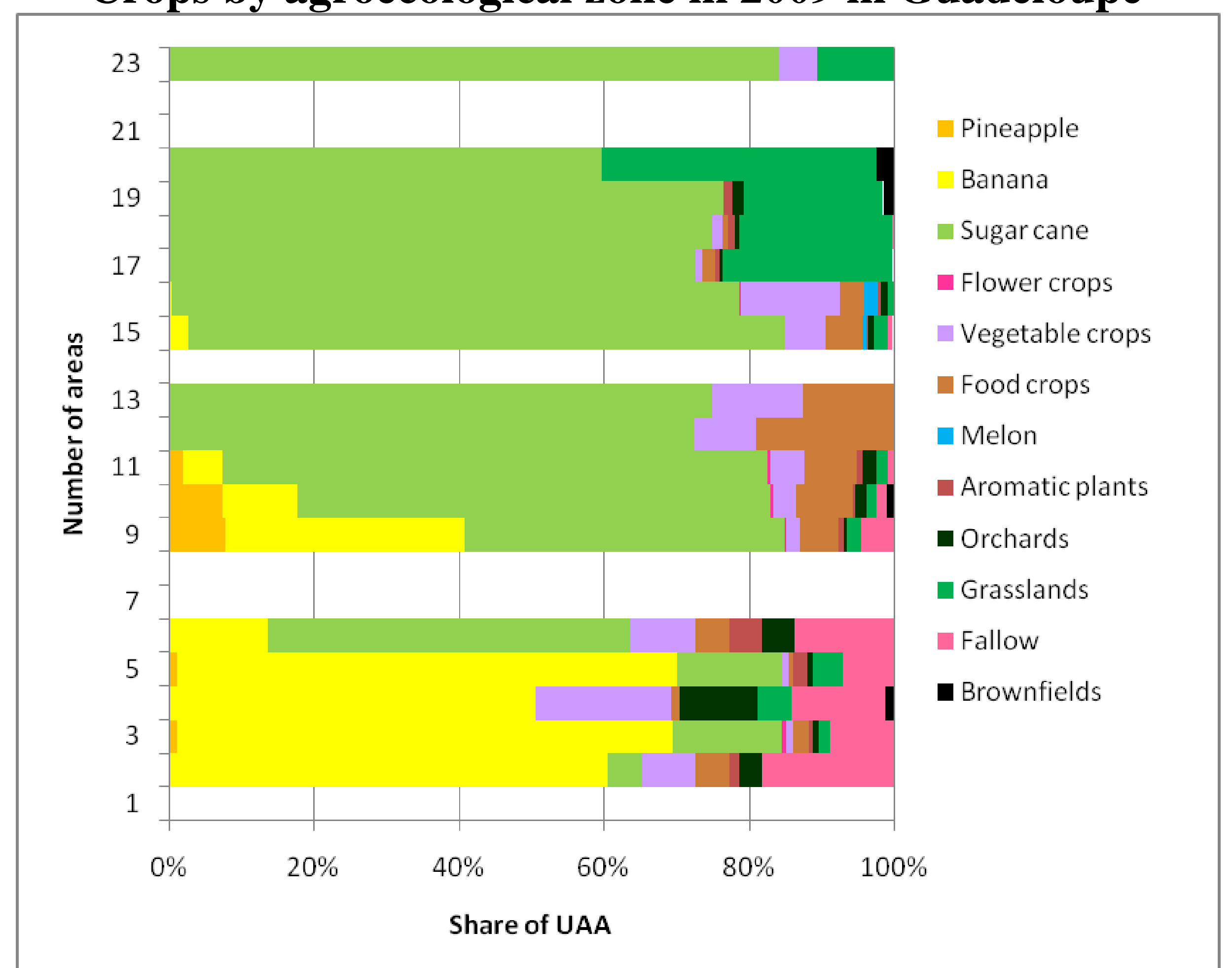
The AEZ is built from a cross geographic information and data: construction criteria and context criteria. Some correspond to the soil and climate data and vegetation and form the basis of an AEZ, others are natural peculiarities of the French Antilles with landscape diversity (landscape units) and three special climatic effects (the continentality effect; the orographic effect; the Foehn effect). It is essential to include them among the elements of the AEZ as they influence the various environments of the islands and participate in large part, to the different breaks singular landscape of these territories. Data aggregated construction criteria used to obtain a first zoning. After overlay data layers corresponding to the context of criteria, we get the AEZ. The borders are either physical elements recognizable in the landscape or to map elements. Given our question on the evolution of agriculture in the French Antilles, spatial data on speculation produced (type, volume, distribution) were introduced in the AEZ. This data helps assess the agricultural area (UAA) of each AEZ and productive diversity in 2009.

Results and discussion

Importance of agriculture in 2009 by agroecological zone in Guadeloupe



Crops by agroecological zone in 2009 in Guadeloupe



Agriculture is present everywhere in Guadeloupe excluding the mountainous ridges of the National Park. Anthropogenic constraints do not inhibit the natural potential of the environment but they are real brakes, more or less important for the improvement of agricultural activities. In that sense, sugar cane and banana maintain their dominance in Guadeloupe agricultural landscape. The adaptability of sugar cane to the diversity of Guadeloupe climate and soil conditions and the favorable hydraulic conditions around the mountain for banana's improvement helps these historical crops of Guadeloupe commercial relation with France to resist to the new opportunities that are raising on the internal market for farmers in Guadeloupe.

Conclusions

The AEZ of Guadeloupe was set up following the methodology of FAO and was adapted to the natural environment of the territory. It has a number of gains over usual zoning of the territory. It is a tool to define agricultural potentialities and a decision support one for productive orientation. The analysis of the distribution of crops area allows us to distinguish where Guadeloupe remains as a land of high agricultural production. The ecological potential of the zones was not a main criteria for the productive orientations that predominate in 2009.

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