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## Mapping crops and agricultural habitats of smallholders in Côte d'Ivoire (MSc)

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### Context

In central Côte d'Ivoire, the Health & Demographic Surveillance System (HDSS) monitors the health status of 8,000 households. Whilst the HDSS yields reliable and informative data on the health of the population, not much is known about their economic and nutritional situation. Most households rely – at least partly – on a combination of subsistence farming and cash crops (coffee, cocoa). We are looking for efficient and pragmatic ways to collect indicators on agricultural production and productivity to complement the HDSS information.



### Objectives

Test and compare different approaches to the mapping of agricultural fields and agricultural habitats:

- 1) Establish a typology of crop fields, plantations and semi-natural habitats, which links to international standards for habitat mapping in rural landscapes;
- 2) Test different mapping techniques combining aerial photography, GPS technology, the utilization of mobile phones, classical fieldwork to map the fields;
- 3) Investigate methods to evaluate the yield of agricultural crops (food crops, commercial crops);
- 4) Derive indicators which can be linked to the HDSS survey.

### Approach

The thesis will consist of a literature survey and an experimental part in Côte d'Ivoire. Ideally it will be conducted in a team with a paralleled Ivorian student MSc. The students will be based at the Centre Suisse de Recherches Scientifiques (CSRS) in Abidjan.

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