WP2 deliverables

2.1: Spatio-temporal dynamics of farming systems

- Regional typology of the major farming systems and changes over time.
- Modelling a representation of the physical environment and its agricultural use.
- Dynamic mapping of the major types of current cropping systems and areas occupied.
- Evaluation of crop production from different systems and identification of uses.
- Comparison between regions.

2.2: Evolution of smallholders' strategies and activities

- Trajectory and type of households and production systems;
- Trajectory on the long term and typology of cropping systems;
- Model and economic and social performance of production systems over time.

2.3: Modelling and prospecting at farms and landscape levels

- Development of different scenarios to identify most relevant actions and policies

WP3 deliverables

3.1: Productive and environmental interactions between AFS and food crops

- CAFTree toolbox development;
- Synthesis of farmers' knowledge about use and physical attributes of tree species in each study zone.
- Farmers' knowledge and tree species used in their AFS and other food cropping systems.
- Typology of the various farm managements in terms of associations;
- Typology of the various AFS, based on generic structural characteristics and landscape mapping;
- Agro-economic performances of AFS and food cropping systems in relation to food security;
- Assessment of the tree diversity preserved in AFS and food crops combination;
- Multi-criteria assessment of trade-offs between productions and services in AFS.

3.2: Pathways to improve synergies

- Database of indicators on plot structure of various agroforestry systems
- Relations between shade, tree-diversity, arrangement and management and influence on trade-offs;
- Quantified assessment of pest and disease impacts on food and cash-crop production in AFS;
- Effects of trees on soil fertility conservation in AFS containing food crops;
- Ranking and comparison of the drivers of AFS and food-crops, trade-offs between production and services

WP4 deliverables

4.1: Characterization of the quality of AFS products

- Determination of the biochemical compounds and sensorial quality of main cash-crop products in relation with shade, Tree diversity, soil, cultivation.
- Determination of the quality characteristics of clove and oil compounds.

4.2: Identification of main drivers of the quality

- Influence of the associated crops on the cash-crop quality;
- Impact of cropping system (monoculture, mixed ...) on clove and oil quality;
- Best processing (e.g. time of fermentation) to obtain cocoa with specific sensorial quality;
- Mapping of oil quality in relation with the production system (quality of local distillers);
- Best condition to obtain oil with high eugenol content;
- Influence of the farmer’s distiller structure on the oil extraction.

WP5 deliverables

- Minimum 12 publications in journals and conference reports
- Documentation for producers
- Manuals
- Technical syntheses
- Minimum 6 technical leaflets on AFS
- Website