WP1 will identify and design innovative mixed farming systems satisfying environmental concerns for different European pedo-climatic zones using a participatory modelling approach together with farmers and supply-chain stakeholders. The mixed farming systems will be designed as a function of the i) pedo-climatic environment and main environmental issues, ii) livestock and crop diversification, iii) renewable energy production iv) conventional and organic systems, and v) socio-economic demands. Agro-ecological, biotechnological and organisational innovations will be identified and designed using the expertise of recognised stakeholders.

WP1 will gain advice and feedback from the stakeholders to assist in the determination of stakeholder requirements, co-design and evaluation of innovative sustainable mixed farming systems and, in connection with WP6, will enable the transfer of the information from the project to the intended end users in an effective manner.

Based on the portfolio farm-level case studies, WP2 will evaluate and validate innovative combinations of agronomic and livestock practices. It will verify the feasibility of these combinations and provide useful data for in-depth assessments performed in WP4 and WP5. The fluxes and
balances of nutrients will be specified, with a particular attention to nitrogen, phosphorus and carbon and to natural resources such as water, soil quality and non-renewable energy sources.

At the landscape and district levels, WP3 will test and validate new mixed farming systems and provide a focal point for the testing of innovative mixed agronomic and livestock practices on the portfolio of district and landscape level case studies. The fluxes of feed, nutrients and carbon fluxes at the district level will be specified.

WP2 and WP3 will provide appropriate parameters for models used in WP4 and WP5.

WP4 will assess the environmental sustainability of the innovative mixed-farming systems under a range of agronomic, soil and climate zones and will compare output of the analyses to a corresponding assessment of current strategies. Using existing models and LCA analysis, WP4 will allow an overall evaluation of environmental impacts and provide robust data for the socio-economic assessment in WP5.

WP5 will assess the profitability, gain and socio-economic viability of mixed farming methods developed in different systems (organic, low external input, integrated, etc.) across Europe. It will identify the acceptability of mixed-farming solutions amongst producers and supply-chain actors. WP5 also will analyse the existing policies supporting mixed farming and evaluate implications of the widespread adoption of mixed-farming systems to provide policy-scenario recommendations to the EU.

An integrated assessment of mixed-farming systems will be performed based on environmental and economic outcomes to ensure optimisation for both farmers and the larger society. This overall assessment will feed back to WP1 to improve the previous innovations.

WP6 will disseminate CANTOGETHER achievements and knowledge to the socio-economic stakeholders, especially farmers, farm advisors and rural extension services, other rural actors and policy-makers and to the scientific and learning community to promote innovations in agriculture.

WP7 will provide a strong management component that will allow CANTOGETHER to reach its ambitions.