

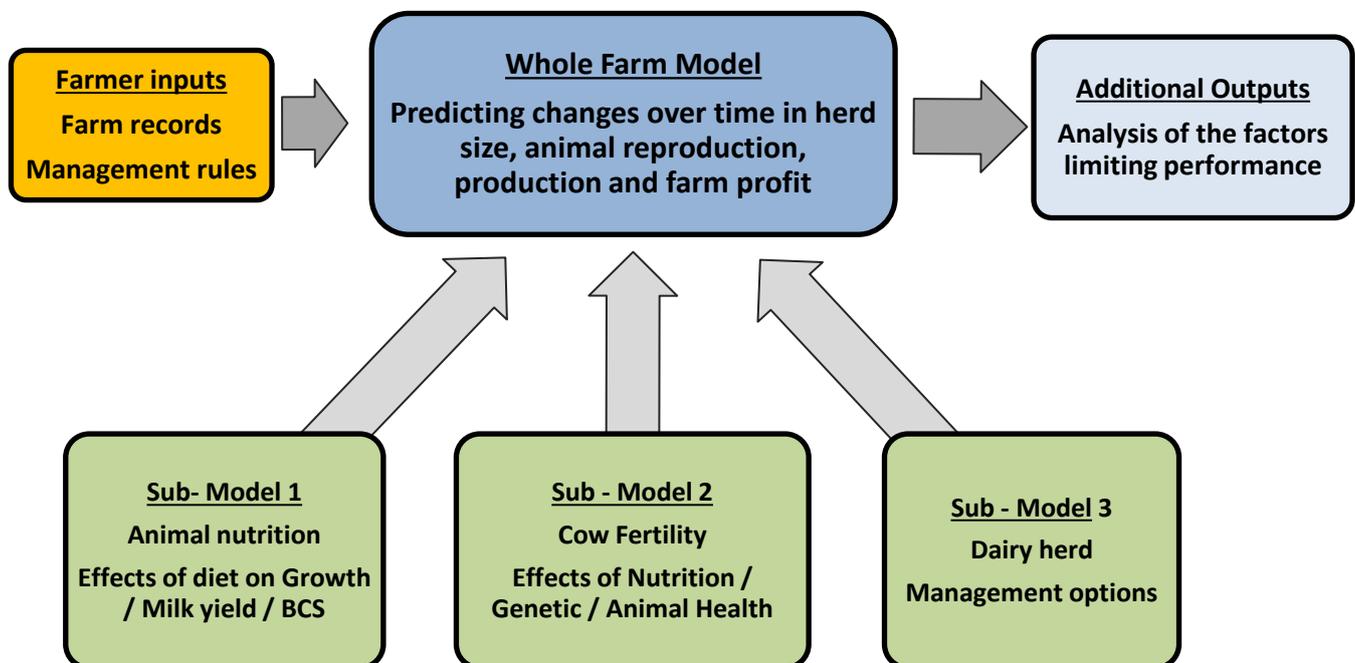
# Text for Website

## Dairy Research Trust Fund

**Improving dairy herd performance by developing innovative software tools for monitoring, investigating and supporting decisions relevant to herd fertility**

With the impending abolition of milk quotas and the challenge of achieving the increased national food production goals for food harvest 2020, dairy farmers are seeking to both expand herd size and increase the efficiency of production on farm. Herd fertility performance is the key to achieving these goals, allowing herd expansion and allowing farmers to maximise the use of pasture within their production system. However, expanding herd size creates challenges with keeping track of the herd performance, knowing how to effectively manage resources, planning investments and managing risk.

This project will develop a software model of a dairy farm capable of simulating the effect of changes in herd management, genetics and nutrition on fertility, animal health and profit. To help make the model most relevant to Irish farmers, the foundations of the simulation model will be based on the analysis of existing Irish data and published scientific research. The diagram below represents the overall project structure.



This software tool will allow farmers and their advisors to conduct analyses of herd production, fertility and health data gathered on farm that will give farmers both a better understanding of

the factors limiting their herd's performance, as well as predicting the impact of changes on future herd performance.

Project Members and collaborators:

- University College Dublin (School of Veterinary Medicine and School of Computer Science)
- Teagasc (Moorepark )
- Irish Cattle Breeders Federation
- Aarhus University (Denmark)
- Wageningen University (Netherlands)