



ClieNFarms
Climate Neutral Farms

ClieNFarms Practice Abstracts

Developing farm archetypes for upscaling climate action in the supply chain

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Sourcing districts or supply chain farms situated in the same region differ in the on-farm management practices, production system, and production intensity. Each of these differences influence the GHG emissions and carbon footprint of the produce. Therefore, developing a common roadmap for all the farms in the supply chain will not be appropriate and prove ineffective to develop GHG mitigation roadmap. If a supply chain consists of 1000 supplying farms, it is impossible to prepare individual roadmaps for each farm.

Archetypes allow us to cluster many farms into few groups of similar farms with reasonable effort and then to develop detailed roadmaps for each archetype. Given the heterogeneous contexts among the farms in the same supply chain, it is crucial to identify recurrent patterns across a set of heterogeneous empirical cases called farm archetypes. Archotyping helps researchers and organisations to understand and compare patterns of (un)sustainability in heterogeneous cases, which helps to avoid overgeneralisation.

As a first step, it is crucial to identify recurrent patterns across all the farms in scope. For example, all the dairy farms supplying fresh milk to a milk processing factory in a region. These recurrent patterns can be size, production type, production intensity, key technologies, soil type, etc., based on local knowledge and situation.

See below, in Figure 16, examples of possible farm clustering approaches and their advantages or challenges (each individual blue shape to represent one farm).

For many supply chains, the most appropriate approach is to group farms into clusters of farms based on a set of common attributes identified – creating farm archetypes. This creates a practical level of details with a reasonable effort required to develop intervention plans.

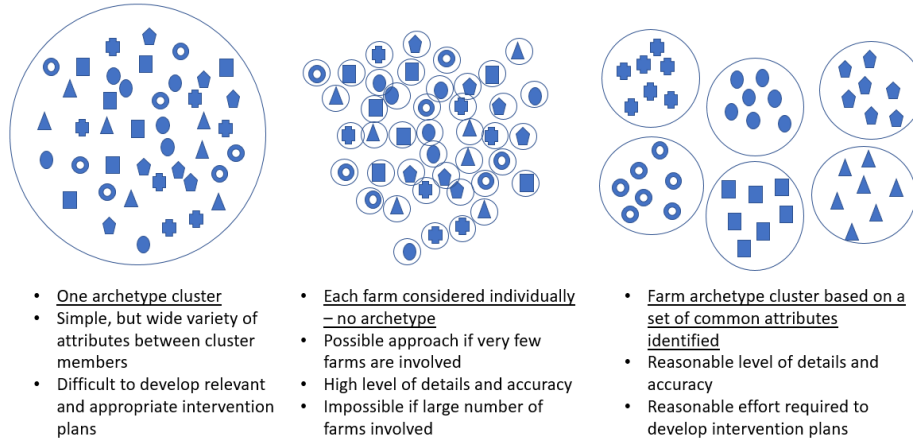


Figure 1 : Examples of possible farms clustering approaches and their advantages or challenges (each individual blue shape to represent on farms).



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