Industrialisation of agriculture led to several complex issues such as the pollution of our environment, the risks for transmission of infectious diseases, and ethical concerns of animal welfare. Despite numerous efforts to transform the agricultural sector into a more sustainable sector, change is proceeding slowly. Over the last decade, agricultural innovation projects were established as a way to endeavour new more sustainable agricultural activities. In innovation projects agricultural entrepreneurs work together with researchers, policy-makers and intermediaries to develop, implement and diffuse new products, processes and technologies that result in more sustainable agricultural production approaches. Since little prior experience exists with the practice of innovation projects, they can be regarded as exploratory spaces in which participants attempt to achieve far-reaching innovations. This thesis opens-up the 'black box' of agricultural innovation projects and shows us that actors frequently reconfigure new technologies to suit local contexts, how various stakeholder groups influence implementation of prototypes, and the way in which innovators fine-tune new technologies through experimentation.