

## Motivations for Swiss lowland farmers to conserve biodiversity: Can individual beliefs be influenced by on-farm advice?

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**Abstract:** Governments promote nature on farms by means of agri-environmental schemes, but biodiversity continues to be lost. Financial incentives alone seem to be insufficient to motivate pro-environmental behaviour of farmers. In this quantitative study, we examine the influence of beliefs and motivational factors on the environmental decision making of Swiss farmers: specifically the implementation of ecological compensation areas (ECA) on their farms. Furthermore, we investigate whether beliefs and motivations can be influenced by the provision of on-farm advice. The sample included 133 farmers, of whom 23 had received advice on farmland biodiversity conservation over a period of six years. The results identified significant relationships between beliefs, motivations and the proportion of implemented ECA on their farms. Key beliefs and motivations can be positively influenced by farmer advisory services. Farmers who had received advice agreed significantly more strongly in the compatibility of biodiversity conservation and production; that biodiversity is important; and that nature conservation on farms is appreciated by society. Furthermore, inter-item correlations suggest that financial motivations operate separately from intrinsic motivations. These results allow the conclusion that optimum outcomes will best be achieved by a combination of financial incentives and advice that concentrates on belief based motivations.

**Keywords:** Agriculture, Biodiversity conservation, Ecological compensation area, Motivations, Beliefs