

Labour input and technology adoption on Irish dairy farms post-quota

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Discussion paper abstract

The continued sustainable growth of Irish agriculture is dependent on further productivity and efficiency gains. The adoption of output enhancing technologies is critical in this regard. Additional labour input will also be required, particularly in the dairy sector where milk output has increased on 80% of farms since 2014. The considerable structural change experienced in Irish dairy farming over the past decade is reflected in Teagasc National Farm Survey (NFS) data indicating that a growing percentage of farms now have a herd size of greater than 100 cows. Further expansion in the dairy sector will result in an increased demand for hired labour, particularly at peak times of the year e.g. calving. Innovations like contract rearing and collaborative farming as well as labour saving technologies such as automatic milking are also becoming more commonplace. Despite this, the role of owned family labour remains critical and the management component of this labour is of growing importance. In line with EU Farm Accounts Data Network (FADN) methodology, the Teagasc NFS currently captures the unpaid family component of farm labour through self-reported hours worked on an annual basis. Drawing on productivity studies undertaken elsewhere this scoping study aims to further investigate the contribution of labour in a more disaggregated fashion, an important exercise given seasonal differences in labour demand. One component of this proposed work is to undertake a "Time Use Study" across a sub-sample of TNFS farms. This will serve to both validate and improve upon data already collected within the survey and will prove useful for stakeholders in understanding the extent to which labour input (owned and hired) has the potential to represent a constraint on production growth. This would be the first time Teagasc NFS data would be utilised in conjunction with such data and would prove a useful benchmarking exercise. Insights into the extrinsic and intrinsic factors influencing farmer uptake of technologies (some of which may be labour saving) will also be investigated using econometric methods. From a sustainability perspective this study will provide a better understanding of Irish farm labour demand and the implications for current/future work-life balance of on-going sectoral growth. Existing farm-level sustainability indicators find a correlation between economic performance and technology adoption but questions remain as to the key drivers of innovation across systems. This study aims to explore this further building on previous work which confirmed the important role of extension and education in this regard.