Centre for Agricultural Strategy

University of Reading

Grassland Research Institute

Grassland in the British economy

Edited by J L Jollans

Published as
CAS Paper 10 January 1981

Jollans, J L (Ed) (1981) *Grassland in the British Economy.*
CAS Paper 10. Reading: Centre for Agricultural Strategy.

Appendix IV
Fertiliser usage on grassland in England and Wales

K M Down & A Lazenby

Fertiliser use on grassland now accounts for well over half the total N and about a third of the total P & K used in England and Wales. The increasing use of N on grassland represents the major change in total fertiliser usage and the possibilities for increasing efficient grassland production with fertilisers are greater than for any tillage crop.

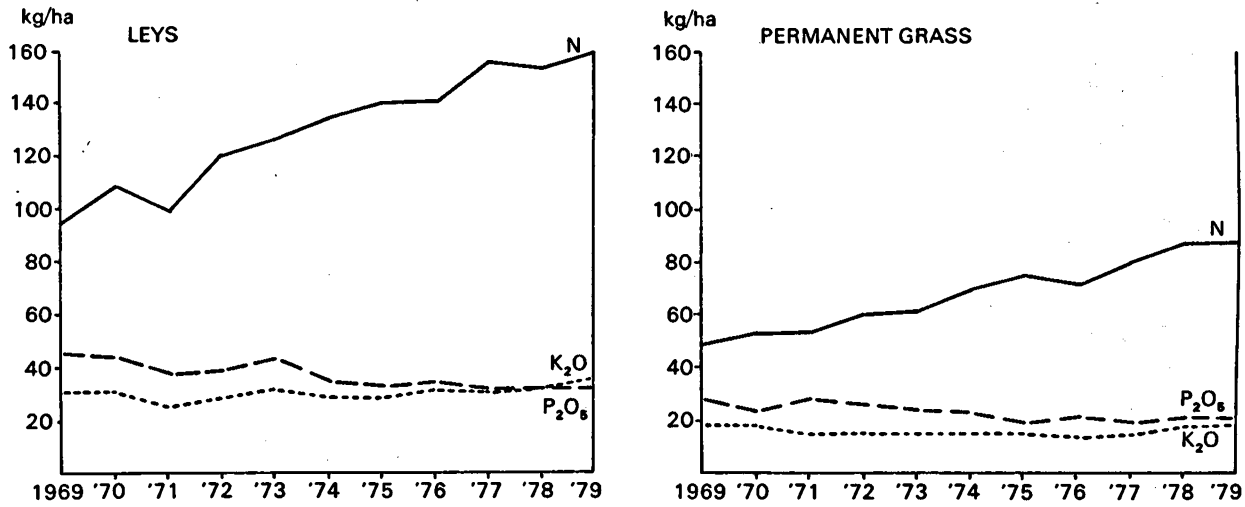
Between 1969 and 1976, N use on grassland increased by nearly 50% (an average rate of 7.5% per year) and by 1976 50% of leys and 25% of permanent grass received more than 100 kg N per ha. On the other hand, the use of P declined by 30% during the same period and that of K very slightly (Figure 1).

The nutrient ratios (N:P:K) for inorganic fertilisers used on grassland showed marked changes between 1969 and 1976 from 1:0.48:0.34 to 1:0.25:0.23 on leys and from 1:0.58:0.36 to 1:0.31:0.19 on permanent grass. Thus the amount of P used per kg N in 1976 was about half that in 1969.

The most useful indicator of the level of productivity is total N use. Between 1969 and 1976 the areas of leys receiving no N declined from 18% to 9% and those of permanent grass from 43% to 34%. More importantly, the proportions receiving more than 100 kg per ha increased from 36% to 52% of leys and from 14% to 25% of permanent grass.

More P & K was used on mown swards than on grazed-only swards in 1976, mainly because more of the mown area was dressed, K dressings being heavier on areas cut for silage. In 1969 there was little difference between proportions of mown and grazed swards receiving P and much of the reduction in P since then has been on grazed grassland.

Figure 1
Fertiliser use on grassland in England and Wales, 1969–1979



Source: Church & Hills (1980).

REFERENCES

Church, B M & Lewis, D A (1977) Fertiliser use on farm crops in England and Wales: information from the Survey of Fertiliser Practice, 1942–1976. *Outlook on Agriculture,* **9,** 186–193.

Church, B M & Hills, M G (1980) *Fertiliser use on farm crops in England and Wales, 1979.* London: Ministry of Agriculture, Fisheries and Food.