



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

“SOME NOTES ON ‘DYNAMIC’ LINEAR PROGRAMMING”:**FURTHER COMMENT**

E. J. WARING

There was no deliberate intention to emphasize the “two major points” categorized by C. D. Throsby in his reply to comment on this article.¹ It is generally true that the result of any programming solution is only as valid as the assumptions on which it is based, but perhaps not invariably.² Experience suggests that the specification of stocking rates is an exacting task, but probably no more difficult than specification of crop activities.

The comment concerning coalition of activities made in the last paragraph refers to a problem on which less has been written, but was unfortunately ignored by Throsby. This point is based on experience with a number of analyses of this type, not solely on reading of this paper.

Paragraph (d) of page 138 of the paper has no relevance to the recommendation to pre-empt £2,500 per year for household expenditure via *negative* entries in the “b” column. Although a “first infeasible plan” is used as a starting point if this be done, the computing routine used by Throsby will take care of this if the problem be solvable.

The explanation of the sheep purchase vectors is interesting. Although quite neat, and probably “near enough” for purposes of illustration, it seems to require that ewes lamb at 18 months, necessitating two lamb crops per year. A formal budget of the sheep breeding activity would add value to the paper. Is any account taken of lambs’ wool or any difference in yield of hoggets and older sheep, and how can the breeding of ewe replacements be justified at the relative prices stated?

It is a refreshing change to be accused of pessimism concerning any form of programming, I normally suffer the opposite criticism.

A FURTHER REPLY

C. D. THROSBY

It should be obvious that my original “Reply” contains sufficient to obviate answering most of Waring’s further comments. However, it is necessary to make three brief points:—

- (a) the problem of coalition of activities was discussed in the original paper (page 123);
- (b) my analysis does *not* “require that ewes lamb at 18 months, necessitating two lamb crops per year”;
- (c) Waring’s method for extracting household capital is valid; whilst apologizing for my misinterpretation of his point, I would suggest that his exposition in the relevant paragraph on page 229 is hardly notable for its clarity.

¹ This *Review*, Vol. 30, No. 2, (June, 1962), p. 119, and Vol. 30, No. 4 (December, 1962), pp. 228-232, 230.

² Hanson, M. A. “Errors and Stochastic Variations in Linear Programming”. *Australian Journal of Statistics*, II (August, 1960), p. 41.

I might also take this opportunity of commenting on a spurious point made in Waring's original contribution which escaped attention in my previous "Reply". He complained of the existence in the final programme of a small number of "slack" sheep in years two and three. The answer is obvious: there is no feed in the programme for them, but neither do they contribute to production. In other words they are in "cold storage" for twelve months. Within the bounds of our programme it does not pay the farmer to graze them on his pasture ; but with the stated wool prices and productivity data, other farmers without the same resource limitations would queue up for the opportunity of looking after these sheep for a year. Whilst of course the latter could hardly be considered a practical answer to a problem which can be more elegantly circumvented in other ways (see my original "Reply"), the above remarks do suggest at least that this aspect of my solution *is* based on valid assumptions, and hence that Waring's comment is plainly misdirected.

The final paragraph of the "Further Comment" bears an apt moral. Since Waring has now suffered at both ends of the critical scale, it seems that in this field the middle way is the most apposite.