

RESEARCH WORK.

The Committee received a great deal of valuable information from officers of the Department of Agriculture, the Department of Scientific and Industrial Research, and from the Directors of Canterbury Agricultural College and Cawthron Institute, and wishes to place on record appreciation of the efforts being made to investigate some of the problems bearing on the value of agricultural lime to certain crops and to pastures.

The Committee recommends that further research work be undertaken to elucidate many of the practical problems which confront farmers in deciding upon various questions concerning the use of lime. It is difficult to give detailed recommendations as to the scope which research work should cover, and it may be sufficient if an indication can be given of certain immediate problems of practical importance brought to the notice of the Committee. The Committee considers that work along the following lines should be undertaken at the earliest possible date:—

- (a) Research work bearing on the value of applications of lime to pasture as measured by weight increase of live-stock:
- (b) Investigations dealing with the relationship of the use of lime to the health of stock:
- (c) Further experimental work to enable accurate comparison between:—
 - (i) Hard and soft limestones;
 - (ii) Rock-lime and shell-lime;
 - (iii) Finely-ground lime and coarsely-ground lime;
 - (iv) Burnt lime and carbonate of lime:
- (d) Experimental work comparing the value of lime applied at different times of the year.
- (e) Fundamental research into the problems of phosphate fixation on particular soil types, covering the question also of the quantity of lime per acre which should be recommended on such soils and the best time of application.
- (f) Further investigation into the question of the use of lime in the control of weeds.

8. GOVERNMENT ASSISTANCE.

SCHEMES FOR SUBSIDIZING ALTERNATIVE TO THE FREE RAILAGE SUBSIDY AT PRESENT OPERATING.

The terms of the free railage subsidy have already been touched upon in several paragraphs of the report. Before discussing alternative schemes it may be as well to note representations made to the Committee that the present system does not appear to be equitable in that it benefits one section of the farming community only—namely, those to whom rail transport is available.

In order to be as brief as possible and to avoid repeating what already appears in other paragraphs of the report the Committee considers that any system of subsidy to be recommended should be one which is equitable, giving assistance to all members of the farming community, but which would preserve the natural ratio of landed cost on the farm between those farmers farming high-priced, favourably-situated land and those farming low-priced and unfavourably-situated land.

Several schemes have received the full consideration of the Committee, and these will be briefly reviewed hereunder:—

(1) *Present System of Free Railage Subsidy zoned*, with the addition of a subsidy on transport charges other than rail.

The drawbacks to zoning have already been amplified in discussing the question of overlapping of railage, and no further comment is necessary. However, even if zoning were practicable, it would still leave a scheme to be brought in to cover a subsidy on other transport charges. This would involve the administration of two separate aspects of the scheme which would prove extremely cumbersome.

(2) *A Scheme involving the Payment of a Flat Rate of Subsidy to the Producer*.—Under this scheme a flat rate of, say, 6s. per ton would be paid to the lime companies, who would reduce their price to the consumer by a corresponding amount. The consumer would thereafter pay all transport charges whatsoever.

The scheme has advantages in that—

- (a) It would be simple to operate and administer:
- (b) The extent of payments under the scheme could be easily and reliably estimated:
- (c) By eliminating free railage it would eliminate the present overlapping of subsidized railage.

Disadvantages would be—

- (a) It would be inequitable in that it would not proportionately relieve the farmer with the greater transport costs:
- (b) It would represent too revolutionary a change compared with existing conditions:
- (c) It would discourage the use of lime by farmers situated a long way from lime-works.

(3) *A Scheme for Centralized Marketing*.—This scheme would involve the setting-up of one or more Central Marketing Organizations whose main functions would be—

- (a) To receive all orders for lime and to allot these to the nearest works able to supply in proportion approximately to their present outputs:
- (b) To distribute or control any subsidy payable by the Government.