## CO-OPERATION BETWEEN PRIMARY PRODUCERS AND SCIENTISTS\* I. B. HART†

Though farmers be farmers and scientists be scientists it is not very often the twain shall meet before the earth and sky stand presently at God's great judgement seat (that is with apologies to Rudyard Kipling). Generally we find societies and associations are comprised of members belonging to identical professions or occupations. This situation tends to limit the wider horizons which could otherwise be attained. Members of such societies with similar interests and ideas, too often turn up with identical reasoning and become too complacent in their outlook. Conversely, we as members of this Tropical Grassland Society have a tremendous advantage in that our association is made up of people with such a wide range of qualifications and diversity of ideas. The common ground of all is a desire to improve the lot of the man on the land through better and more efficient tropical pastures.

Last year an excellent address was delivered by an agronomist—this year I would like to address you as a primary producer and give my ideas of changing the grazier into a beef farmer with the help of the men of science (and a little moisture from the sky on occasions). Next year our new President is welcome to contradict anything I say and the members will have twelve months to argue about it if they

be so inclined.

It is now about nine years since tropical pastures improvement began in Southern Queensland. The results from a great area of the Wallum country seem disappointing. Instead of producing large numbers of fat cattle ready for slaughter they seem to be only able to produce stores. Many properties are on the market indicating a lack of prosperity. The amount of new pasture in the grazing areas just east of the Divide (not Wallum country) is very small indeed. Why is this so? Is it the fault of the pastures, or are primary producers to blame? In certain older grazing areas the lack of improved pasture could be due to the difficulty of changing the graziers' ideas from that of his father's and grandfather's before him. The lack of production in Wallum areas could also be partly the fault of the primary producer. Some of these properties have been overstocked and may not be receiving adequate maintenance fertilizer.

Why has the primary producer made these mistakes? Some will not listen to advice given by the scientist, but then again has the scientist given the primary producer as much help as possible? Sometimes technical men become so engrossed in their research that they neglect to pass on knowledge in a practical manner to suit each farmer. Conversely the farmer often does not realize his own short-

comings because of infrequent contact with the technical man.

What better opportunity to correct this inadequacy have we, the members of this Society? Through our coming together at field days and meetings with a common interest, an interchange of knowledge and problems takes place. This is to the advantage of all directly concerned and indirectly to our great country, Australia.

Having benefited greatly from an interchange of knowledge, we have next to look at the markets for our products. Naturally, before investing money in a new business or expanding our existing one, it is of first importance to investigate the future market prospects of the product produced. The beef farmers' role is to grow the best pasture and crops according to his type of country, and to convert it into good saleable beef. The Australian Meat Board seems fairly cheerful about the future of the export meat market partly because American land is fast becoming too expensive to produce economical beef. There is a possibility that Japan will become

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† Oakwood, Kandanga, Queensland, 4570.

a bigger consumer of beef and there is a beef shortage developing in Europe, which will mean an increase in our export market. On the more gloomy side, a New South Wales economist Mr. P. J. O'Meaghor, predicted a 70 per cent increase in beef production on 1970/71 record beef year and exports would have to double in the next four years if prices are to remain constant. The certainty of increased export markets is essential to the beef farmer. Our most important market is our local market and not enough is being done to promote more consumption of beef in our own homes. Australians paid 430 million dollars for beef last year in comparison with 340 million exported and yet the meat consumed per head in Australia has dropped considerably in the last ten years. Promotion could be a big factor in raising the consumption and so give us a larger and more stable market.

The fear of synthetic meat is another worry to the beef producer. The best way to overcome this competition is to produce the best quality meat at as cheap a price as possible. If the customer is satisfied with the taste, quantity and price of his meat he is less likely to turn to synthetic meat. Therefore to meet the needs of these markets, our pastures must be of good quality and established as economically as possible.

The official weighing trials carried out at Oakwood at stocking rates of 1 beast to 11 acres and 1 beast to 2 acres (1 beast to 0.60 ha and 1 beast to 0.80 ha) have been perhaps a bit disappointing. At no time did cattle gain 2 lb (0.90 kg) a day. The average weight gain of stock at the two stocking rates were 0.39 and 0.45 kg/ha respectively over a 379 day period. At the end of these trials steers were not finished off ready for sale. In unofficial trials stocking 1 beast to 3 acres (1.20 ha) we have had a finished marketable steer of little over 1000 lb (454 kg) live weight at 2 years. Assuming a 500 lb (227 kg) weaner at 8 months has grown to 1000 lb (454 kg) at 2 years. At market price of, say \$30 a hundred pounds (45 kg) dressed carcass weight, steers would have increased in value by approximately \$90. At a stocking rate of a beast to three acres (1.20 ha) this would be \$30 per acre (0.40 ha) for 16 months i.e. \$22 per year gross. From this figure it is necessary to deduct all expenses such as fertilizer \$3, dipping \$1.60, rates, overheads and interest on capital invested. It can be seen that if we are to produce beef at an economical price, we must not price ourselves out of production by too expensive land values and keep our costs of development down as much as possible. Seeing our return per acre is so much lower with beef than with dairying it is obvious why beef farmers on small areas are finding it uneconomical and these areas will probably eventually return to dairying or be combined into larger units.

Eventually to apply the knowledge we gain from the scientist and our experience and to produce the best and most economical pastures and then to turn off the end product fit for the market, is dependent on our correct management. The farmer these days must be a business executive and a good one. No longer the days when the farmer made a guess at his profits and losses, everything must be carefully budgeted and accounted for. Records of stock and correct handling, especially with regard to their rotation on pastures, is essential. The choice of breed of cattle used to convert our pasture into economic saleable beef is of no great consequence. Provided high producing cattle of any particular breed are chosen the end product is directly related to the quality of the feed available.

More thought and effort needs to be put into growing pastures which are suited to a particular area and advantage should be taken of the scientific minds in our midst who are willing to help us achieve this goal.