

RESEARCH COUNCIL ACTIVITIES

Not to be Limited

MINISTER EXPLAINS

Canberra, May 20.

Replying to criticisms that the Government had unwisely curtailed the funds of the Council for Scientific and Industrial Research in its economy campaign, the Assistant Minister for Industry (Mr. Holloway), who is in charge of the Council, said tonight that the Government had been most careful not to limit the activities of the Council in any way.

Mr. Holloway added that such economies as were being effected would be found to concern mainly contributions to overseas scientific institutions. The value of subscriptions to such organisations was fully realised and would not be questioned in normal times, but it was considered preferable that the economies should affect this sort of spending rather than the important activities of the Council in Australia.

The whole question would be finalised, he said, at a conference he would have in Melbourne on Monday with the Director of the Council (Dr. A. C. D. Rivett).

RESEARCH VOTE

Cut Not of Vital
Importance

COUNCIL SUGGESTED IT

SYDNEY, Today.

It is understood that the cut in the research vote will not interfere with vital work.

Sir George Julius (chairman of the Commonwealth Council for Scientific and Industrial Research) preferred not to comment today on the question of a cut in the research vote, because estimates dealing with the council's activities are at present the subject of discussion between that body and the Minister.

It is understood, however, that so far no work of outstanding importance has been interfered with. Although Sir George Julius declines to discuss the position, it is stated that the cut does not represent £90,000, or anything like that sum, and that it was at the suggestion of the council, in consultation with the Government, that certain research work of relatively minor importance has been deferred until the financial position improves.

The cut, it is explained, is merely the difference between the estimate put forward two years ago and the actual expenditure last year. It does not take cognisance of the fact that the estimates are always much higher than the year's expenditure.

WHAT RESEARCH CUT WOULD MEAN

"Blow to Primary Production"

BIG RESULTS ALREADY

"If it is correct that the Federal Government has decided to reduce the expenditure of the Council for Scientific and Industrial Research by £90,000 this year, it will be the greatest blow ever dealt to the primary industries of Australia," said Mr. G. F. Jenkins, vice-president of the Stock-owners' Association, yesterday.

The fund for the maintenance of the Council was created in 1926 by an appropriation of £250,000 from revenue, and in 1928 a like amount was appropriated, which, together with sundry receipts and contributions from other bodies amounting to £63,320, made the total available £563,320.

Of this amount, £354,327 had been spent to June 30, 1930, leaving a balance of £208,992. Allowing that the rate of expenditure for 1930-31 was on the basis of the previous year, the amount available from the original grant of £500,000 for 1931-32 should be a little more than £100,000. As required by law, the estimated expenditure from the Trust Fund is included in some detail in the annual Appropriation Act passed by Parliament, and it will be seen, therefore, that if Parliament approves of the proposal of the Government, and allows the reduction of £90,000, in the expenditure for the coming year, the amount at the disposal of the Council, apart from some grants from other bodies, will be almost negligible.

Mr. Jenkins said:

"At times such as the present, when it is necessary for the welfare of the nation that the output of our primary products should be increased and the cost of production decreased, the finance necessary to maintain the Council for research is the last that should be cut. If the expenditure of the Council is to be cut by £90,000 next year it will be false economy.

It will mean the elimination of scientific research in Australia, which already has done splendid work in the eradication of pests and control of stock diseases. Further, experiments now being made show that there are great possibilities in research on animal nutrition, increased production of wool, and fecundity in sheep.

"It must be remembered, too, that the results of research work cannot be achieved in a day, a month, or a year. Plans have to be mapped out and laid down years ahead, and the interruption of this work, which must follow any cut in the grant, will practically mean its abandonment, and the benefits that have been attained will be lost."

Losses to Pastoral Industry

The Council, said Mr. Jenkins, was engaged wholly upon scientific research in primary industries, and one objective of its scientific workers was to seek to control those diseases in livestock and crops which seriously reduce the annual output from the pastoral and agricultural industries.

It did not need much imagination, he said, to realise that preventable diseases were taking from the pastoral industry sums which, if saved and distributed between producer and consumer, would put both the producing and manufacturing sections of the wool industry on a much more satisfactory basis, economically, than they are today.

"In comparison with many other countries," said Mr. Jenkins, "Australia is remarkably healthy for stock, and it is safe to say that the economics of wool production would be vastly improved if the losses resulting from blowfly, caseous lymphadenitis, and internal parasitic diseases could be eliminated or reduced, and satisfactory ways of carrying sheep over drought periods could be evolved.

"In Northern and Western Australia the cattle industry is menaced by the alarming spread of the buffalo fly. The fly is following the path taken several decades ago by the cattle tick, and if it should spread to the cattle areas of New South Wales and Queensland, the losses will amount to millions of pounds a year.



Mr. G. F. Jenkins

Problems Attacked

"A review of some of the problems attacked by the Council, and the results achieved, show how serious is the step the Federal Government proposes," continued Mr. Jenkins. "Probably no single problem is regarded by Australian primary producers as of such importance, and no single source of loss so great, as that caused by the blowfly attack in sheep. Research in means of control is exceedingly difficult, and involves slow and laborious investigation. The habits of various species of fly which attack sheep have been determined, and a close study of the blowfly has been made in other countries. While progress in this field is necessarily slow, the results will be far-reaching from an economic point of view.

"Again, 60 million acres of cattle raising, and even more valuable country, in Queensland, is more or less ruined by prickly pear growth—though, happily, its conquest is in sight. The loss of that land in the past has hindered settlement and production, and correspondingly reduced Australia's power to purchase from abroad. The extraordinary and spectacular results of the destruction of prickly pear by insect enemies is well known. The most striking achievement by the Council, in co-operation with the Commonwealth Prickly Pear Board, has been the discovery and spread of *Cactoblastis castorum*, an insect introduced in 1925 from the Argentine. Biological control has eradicated dense prickly pear, which it was impossible to reclaim by other means, and large areas of land have been reclaimed from the pest and brought to a state of productivity. The monetary value of this work runs into millions of pounds.

Control of Black Disease

"One of the outstanding achievements of the Council is the discovery of the practical application of an effective vaccine against black disease in sheep, which is responsible for an annual loss of £1,000,000 in New South Wales alone. The division has also assisted largely in the successful Australian work for the control of liver fluke, a disease which previously caused extremely heavy losses in sheep.

"The Division of Animal Nutrition has been engaged on work of fundamental importance to the wool industry, and has shown that the yield of wool may be increased materially at low economic cost by supplementing the natural pasture with a protein-rich diet at periods of the year when the pasture is dry and comparatively low in nutritive value.

"Bitter pit in apples has been

"Bitter pit in apples has been responsible for heavy annual losses in the export trade. Recent work by the Council has shown that the development of the disease is associated with the picking of the fruit in an immature condition. The annual losses amounting to about £100,000 from bitter pit in apples may be reduced to negligible proportions as a result of this work.

"The annual losses incurred by wheatgrowers through the ravages of such diseases as flag-smut and take-all in wheat amounts to millions a year. Scientific research on these diseases, with the object of controlling their spread, is essential for the permanent prosperity of the wheat industry.

"Apart from disease, there is the important field for scientific research in the introduction of new pastures and fodder plants, improving field practice in the cultivation of grain, the improved nutrition of the wool sheep, and the basing of future settlement schemes on a fuller knowledge of the properties of the soil.

Soil Fertility

"The irrigated areas of Australia furnish the greater part of the dried, citrus, and stone fruits of the Commonwealth, and a considerable amount of dairy products. The Division of Soils Research is carrying on investigations of soil fertility problems, and the classification of soil types in the irrigation areas.

"The losses incurred in irrigation settlements, due to a lack of soil surveys in the past, amount to large sums, and the results of the work so far completed indicate, not only that most of these losses could have been avoided, but also that future developments in irrigation settlement can be undertaken with a full knowledge of the conditions essential for successful production.

Research in Forest Products

"In the field of forest products research," said Mr. Jenkins, "the scientific work on paper pulp has been of outstanding significance. The most important result has been the working out of methods for the production of paper pulp from Australian hardwoods, and the production of wrapping papers from *Pinus radiata*, large areas of which have been planted. The operations of paper companies interested in the Tasmanian forest areas are based entirely on this original scientific work, and the way is now prepared for the establishment of the paper pulp industry.

"The researches conducted by the Division of Forests Products on the seasoning and preservation of Australian timbers, and the production of tannin extracts from certain species of hardwoods, are of great economic significance, and will lead to the conservation and full utilisation of the timber resources of the Commonwealth.

"Australia's annual bill for timber replacement, the cost of which in Government construction and railway sleepers alone amounts to well over £1,000,000, and may be expected to be substantially diminished with successful research by the Forest Products Division.

"There is little chance in the solution of these national problems," concluded Mr. Jenkins, "unless the foundation is built on modern scientific work of a high order, such work being essential to help in the recovery and further development of the country. Economic survival is dependent upon the effective utilisation of scientific forces to exploit to the full the resources of the primary industries. In view of the importance of the primary industries to national welfare it is essential that our resources should be conserved and developed to the highest degree attainable by the application of scientific enquiry and research."