No. 459 FALKLAND ISLANDS. **MIN/KEL/1#1** NMENT Governor's Office. 25 DEC. 315 KLAND SUBJECT. From the terrest and there the a new boost time with A KELP INDUSTRY FOR THE PRODUCTION OF POTASH. Secretary of State for the Colonies. Date No. 125 17th Novr., 1915. MINUTES. Colonial Secretary's Record No. Hon Col See. This might be circulated amongsto Members of Ex Co for consistration at Registered Number of last Despatch. kext useting. N/ Gor 18.1.16 H. E. Considered in Sz. Co. 29th march 1916. Council was A opinion that a kelp industry for the production of potash in the falleland Islands could not be undertaken with pupit. C.S. 73 16. CA Condelle 01 Aup to Ser getate he 49 9 15 april 1916. 31.3.16. No. next Despatch. A/ 16



DOWNING STREET. Try November, 1915.

Sir,

I have the honour to state that, Mr W.L. Allatdyce having drawn my attention to the possibility of establishing in the Falkland Islands a kelp industry for the production of potash, I caused the Director of the Imperial Institute to be invited to furnish his observations on the suggestion.

2. I enclose for your consideration, a copy of the Director's reply, together with a copy of the pamphlet "The World's Supply of Potash" and of the Report on Home Industries in the Highlands and Islands.

I have the honour to be,

Sir.

Your most obedient, humble servant,

A. Non Law

GOVERNOR

28 October, 1915.

Cd. 7564

W.D.YOUNG ESQ., C.M.G. &c. &c. &c.

he 124 cancelles.

FALKLAND ISLANDS

NO:125.

No. 125 OF 17/11/15.



## IMPERIAL INSTITUTE OF THE

UNITED KINGDOM, THE COLONIES AND INDIA.

South Kensington, London.S.W.

28th October, 1915.

4370/1915.

12

8

Sir,

In reply to your letter No.45223/1915 of the 9th instant I beg to inform you that an account of the use of seaweed as a source of potash in various countries is given in "The World's Supply of Potash", a pamphlet recently published by the Imperial Institute, a copy of which is enclosed. The reference to the industry on the Pacific Coast of the United States on pages 20-24 will be of special interest in connection with the proposal that a kelp industry should be established in the Falkland Islands.

The chief use of potash salts is as an artificial manure (or "fertiliser", the American term used in the article in the "New York Times" to which reference is made). The ashes of seaweeds, or the seaweeds themselves, are used in many parts of the world as a potash manure.

Seaweeds are used commercially as a source not only of potash salts but also of iodine, ammonium salts, charcoal, and various distillation products, as well as of adhesive and sixing materials, such as algi

edible

THE UNDER SECRETARY OF STATE COLONIAL OFFICE LONDON. S.W. edible products are prepared from certain species, notably in Japan.

It is possible that during the present scarcity of potash manures, seaweed ash might be profitably exported from the Falkland Islands, but under normal conditions it is very improbable that this would be the case. The preparation of potash salts and other substances from the ash is a much more complicated matter, requiring the erection of plant and expert chemical supervision, and, as statue below, is hardly likely to be remunerative under ordinary conditions.

According to a report by Mr E.E. Free who was formerly connected with the United States Department of Agriculture, dealing with the Pacific seaweed industry, the profits obtainable in the United States from the treatment of 100 tons of wet seaweed for the production of potassium chloride ammonium sulphate, charcoal, iodine and other products should be from 0.47 dollars (ls.ll<sup>1</sup>/<sub>2</sub>d.) under Tavourable market conditions to 1.21 dollars (5s.0<sup>1</sup>/<sub>2</sub>d.) under favourable conditions, assuming that 500 tons are treated per day. It is however pointed out that these estimates are subject to revision after more experience has been gained.

Mr Free's report is reproduced in part in "The American Fertiliser", January 9th, 1915, pp. 50-51 which is published by Ware Brothers Company 1010, Arch Street, Philadelphia, U.S.A. Interesting Interesting information regarding the production of kelp in Scotland is furnished by Dr W. Scott on pages 118-131 of a "Report to the Board of Agriculture for Scotland on Home Industries in the Highlands and Islands", 1914 (Cd.7564), in which an optimistic view is taken of the prospects of the industry in Scotland.

An account of the Japanese seaweed industry is given in the "Bulletin of the Imperial Institute", Volume IV (1906) page 125.

Detailed information as to the technology of the industry of the United States is given in Appendix Q of "Fertiliser Resources of the United States, which was issued as Document 190, 62nd Congress of the Senate, 2nd Session (Government Printing Office, Washinton 1912). There does not appear to be any technical reason why the processes there described should not be carried out in the Falkland Islands, but it would be necessary to consider in detail such local questions as the amount of labour available, the cost of shipment etc, and also to have representative samples of the seaweeds analysed, as the composition of seaweed is very variable. The cost of importation of the chemicals necessary for the manufacturing proceeses would also have to be considered, and it is not improbable that this would be prohibitive. as stated in the report which I submitted to you on the 16th June 1905, regarding the possibility of utilising

utilising seaweed in the Falkland Islands.

It may be mentioned that the question of the shortage of potash has no direct connection with the dyeing industry, as the article in the "New York Times" might lead one to suppose.

I am etc.

(Sd) WYNDHAM R. DUNSTAN.

PALKLAND ISLANDS.

let spril, 1916.

81r,

I have the honour to acknowledge the receipt of your despatch To. 135 of 17th Povember, 1915, and to say that the possibility of establishing in this Colony a Kelp industry for the production of petash, has been considered by the members of the Executive Council, and the opinion come to that such an industry could not profitably be undertaken.

I have the honour to be.

Sir,

Your most obedient, much servant,

Dougla Jours.

Governer.

TIP RIGIN FONOURATLE

THE SECR TARY OF STATE FOR THE COLONIES.