

# The Potential for a Seaweed Industry in The Falkland Islands

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## THE FALKLAND ISLANDS

**Location & Area:** Lat 52°S, Long 57°-62°W: 12,000 sq km

**Population:** About 2,500 people, 96% are British

**Climate:** Maritime, low rainfall, narrow temperature range

**Economy:** Economically self-sufficient. Main income sources are: i) The sale of fishing licences (mainly squid); ii) Agriculture, which comprises extensive sheep farming for wool and increasingly farming cattle for quality beef export. The Islands are seeking full organic status for all products to be branded for premium export markets; iii) Tourism and Services

**There is a need to diversify Income – A National Aquaculture Strategy has been proposed**



## SEAWEEDS OF THE FALKLAND ISLANDS

- Rich algal flora
- Has several commercially important species for phycocolloid extraction such as **Carragenophytes**: *Gigartina skottsbergii*; *Sarcothalia crispata*; *Callophyllis variegata* and **Alginophytes**: *Macrocystis pyrifera*; *Lessonia spp.*; *Durvillaea antarctica* may be abundant.

## POTENTIAL USES OF SEAWEED

### Locally:

- Kelps as organic, indigenous fertiliser and animal feed source
- Bioremediation of coastal effluent discharge
- Part of integrated mariculture development
- Sea vegetables, food and cosmetics for tourist market

### Export:

- Food and food supplements (USA, Asia)
- Supply the hydrocolloid industry with carragenophytes and alginophytes (Chile, USA, Europe)
- Potential nutra-chemical and biomedical uses

## AN AQUACULTURE INDUSTRY?

### Advantages:

- Extensive sustainable natural source
- Unpolluted waters, sheltered bays and rias
- Dry, windy climate
- Available shipping

### Disadvantages:

- Lack of local infrastructure and experience
- High labour and electricity costs
- Lack of research into: market potential; species availability and sustainable harvest volume



*Lessonia trabeculata*



*Durvillaea antarctica*



Various seaweed species

## NATIONAL AQUACULTURE STRATEGY

- Proposed (Aug 2006) a programme to develop aquaculture in the Falkland Islands
- Following a screening exercise initial options chosen were Farming: Polychaete Worms and Sea Trout
- After additional research, farming of patagonian toothfish (*Dissostichus eleginoides*) and shellfish and cultivation of native zebra trout (*Aplochiton zebra*) for conservation and possible marketing
- At this early stage, seaweed aquaculture is ruled out (see disadvantages) but might be part of a future integrated aquaculture programme