Sentinel-3 products for detecting EUtROphication and Harmful Algal Blooms in the French-English Channel (S-3 EUROHAB).

TASK 3. Activity 3.3: Deliverable 3.3.1. Report on socio-economic impacts of harmful algal blooms in the French-English Channel.

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Summary:

Interviews with shellfish producers, processors and food businesses have been conducted to assess the impact of Harmful Algal Blooms (HABs) and associated closure of shellfish beds. This report focuses on the shellfish production from case studies in South Devon and Cornwall in the UK. The data collection was based on three questionnaires, each targeting a specific stakeholder group.

The data collected were analysed using the Value Chain Analysis (VCA) approach. Data trends in employment in the sector are consistent with existing data provided at larger scales: shellfish farms are small and medium businesses, relying on full-time skilled staff. The yearly mussel production varies greatly, reflecting the variability in the sizes of the businesses studied (from very small to medium enterprises). During a given year, demand for and thus production of shellfish increase after Easter, in spring, and peak during summer. The demand decreases around the end of September. Prices on the other hand are stable over the harvest period and from one year to year. The prices at first sale depend on the buyers (national or international market, food businesses or wholesalers). Almost half of the yearly production is exported to Europe (in volume). In value, 42% of the production is sold to local wholesalers.

HABs represent a significant threat to shellfish farmers. Impacts include: sampling costs, loss of sales (and income), loss of customers, cost of recalling shellfish and reputational damages if some clients get intoxicated. Shellfish farmers have only few options to cope with closure (even when they have shellfish beds in other locations). Based on selling price and quantities produced weekly during the summer period, the weekly loss in sales due to HABs varies between £26,350 and £100,000. The impacts on wholesalers and food businesses are limited since they are accustomed to coping with shellfish bed closures from HABs, as these are a natural phenomenon.