Unlocking investments for mussel farming in the Baltic …
…or my experience of funding mussel projects

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Investing in mussel farming

1. Time:

Mussels spawn and larvae mainly settle during 2 – 4 weeks in June.

In the Baltic, about two years growth of the mussels is needed before harvest.

The mussel farm may have good years as well as bad years, depending on weather conditions etc.

Consequently, it may take at least three years to find out if a site, the farming equipment or harvesting technique are adequate. Still, there is no time for large mistakes.
Investing in mussel farming

1. **Time:**
   Experience and comment

   Thus, an investment must last over time long enough to have a realistic chance to be successful.

   Further, it takes a number of years before a mussel farm can become profitable. The investor must have a long perspective and a large patience.
Investing in mussel farming

2. Size:

A small test mussel farm trial can normally be handled from a small boat and with local and existing infrastructure.

Larger scale mussel farms trials requires a larger vessel for launching, maintenance and harvest as well as land-based infrastructure like a dock and crane. If these resources are not locally available, it may require a large investment for a relatively small trial.

The investment of a full scale mussel farm must include all the aspects mentioned above.
Investing in mussel farming

2. **Size:**

Experience and comment:

It is complicated for a small or medium sized project to buy, own and finally sell expensive equipment, e.g. a vessel. Check carefully in advance what is available locally, but take into consideration that the planning has to be very flexible. All this is difficult to communicate to a funding agency and/or investor who want to know exact costs, deliverables etc.
Investing in nutrient trading

To trade nutrients and improve coastal water quality by farming and harvesting blue mussels are both completely new activities in the Baltic. The investors are to be found at governmental levels of the Baltic countries and EU.
Investing in nutrient trading

Experience and comment:

The mussel farmers must be paid for the environmental service provided. There is at present no clear advice according to by which principle this service should be paid. Consequently no nutrient trading is ongoing. The Baltic countries and EU should together come up with a common solution.
Investing in mussel meal production

It has clearly been shown that mussel meal is a valuable protein source that can replace fish meal in feeds for many mono-gastric animals.

Two different processes how to manufacture mussel meal have been developed and is running at pilot scale. One of these processes can handle the small and fragile Baltic mussels and produce mussel meal of Baltic origin.

Mussel meal is so far too expensive to use more than for experiments and trials due to that the mussels are at present too costly to farm.
Investing in mussel meal production

Experiences and comment:

The fish meal and feed industry have shown quite small interest in mussel meal. This is understandable in the short run due to that mussel meal costs more than other protein sources on the world market.

However, the low interest is difficult to understand when the future global support of marine protein is taken into account. At the best, it seems as mussel meal in timing is ahead of the industry.
Parallell investments in mussel farming and mussel meal manufacturing

Investing in a full scale mussel farming operation requires also an investment in using the produced mussels. These two investments have to grow in balance to each other, both in time and in size in order to be optimal and cost effective.

Further, the investment in nutrient trading schemes will also be an important part of the total investment.
Comment:

Business development on the total concept of mussel farming as an environmental measure must be guided at national governmental or Baltic regional authority levels and in co-operation with the industry. Then a win – win situation for the environment, society and industry may be created.
Investing in a patent pending mussel meal manufacturing process for Baltic mussels

Mussel meal manufacturing using a lysis process

- Cracking
- Lysis through heating and agitation
- Heating and drying

Recommendation:
Please, come and listen to a presentation at session F on 6:th September. Also, talk with me after the workshops about investing.
Investing in mussel farming – a winning measure for the future.

Thank you for your attention!