KUTERRA'S REVIEW OF DNB MARKETING'S REPORT TITLED "DEEP DIVE INTO LAND-BASED FARMING" PUBLISHED FEBRUARY 1, 2017

This is the most thorough, well researched, and comprehensive report that we have seen to date regarding an evaluation of the land-based fish farming industry. Our comments are as follows:

The writer asserts that "*Land-based success or failure will depend on traditional farming's ability to resume growth."* This statement is based partly on the assumption that the prices for land-based produced fish will move in tandem with ocean produced fish.

The report writers were not able to get accurate land-based salmon product pricing information because it is so commercially sensitive and therefore producers will not share it. We know from experience that land-based product differs in several regards from commodity-based ocean produced product as follows:

i. Land-based product pricing is much more stable than commodity-based Atlantic salmon prices. Land-based product prices do not rise significantly when commodity prices rise and they do not drop when commodity prices drop. Part of the reason for this is because currently land-based production is so low, that the product is a niche product. Clearly this advantage will diminish over time as production ramps up. But there are other reasons for price stability…

ii. Feedback both from the retail and restaurant/food service industry tells us that there is the potential for Atlantic salmon sales to dramatically increase (doubling in some cases) if the Atlantic salmon being sold are from a land-based producer. There are several reasons for this as follows:

- There are people who would like to buy farmed Atlantic salmon, but will only do so if it can be shown to have been produced in an environmentally safe/sustainable manner so that it is a "clean-conscience" product.
- Others choose to buy land-based salmon because it is antibiotic free or free from the increasing amount of micro plastics or other contaminants that are in the ocean.
- Others choose to buy it because it is sushi, sashimi, and ceviche ready. Land-based salmon does not have to be frozen prior to being eaten because there is no risk of parasites, which can get into the fish when

they are in the ocean environment. Where freshness is king, land raised salmon wears the crown.

These differentiating factors will increase the size of the Atlantic salmon market, soften the impact of the additional supply brought on by increasing land-based production, and these factors will also shelter land-based producers somewhat from price swings because buyers will learn that they cannot swap ocean farmed salmon for land-based salmon as they would in a pure commodity market. Land-based Atlantic salmon are fundamentally a different product than ocean raised Atlantic salmon.

iii. One of the advantages of land-based production is the ability to consistently produce fish throughout the year and with lower risk of supply interruptions than risks faced by the ocean-based industry. This consistency, both in terms of the size and quality of the fish and in terms of the continual supply, has value to distributors and end buyers. This value translates into price stability.

In addition, it is not likely that if ocean-based production increases that it would be at the same cost of production. This is because:

1. Regulatory compliance costs for existing farms are increasing (e.g. sea lice treatments);
2. The future cost of growing salmon in Chile must/will be higher for them to be able to achieve stable production. Specifically, their biosecurity practices must improve (=higher costs) if they are to avoid future biological failures; and
3. The availability of new sites in most countries is decreasing due to siting restrictions. New farms are being forced offshore or must utilize new (expensive) technologies to minimize environmental impacts.

In summary, we do not fully agree with the report writer's conclusion that "*land-based farming's success or failure lies in the hands of traditional farmers as their success or failure in reviving supply growth will determine the attractiveness of land-based projects*." Although supply growth will undoubtedly affect the flow of capital into land-based production, we believe that land-based farming success or failure will, for the most part, lie in the hands of land-based farm designers and operators and their ability to economically and consistently produce an absolutely top quality product without interruption, and to brand and promote their product effectively.

Other comments are as follows:

1. We agree with the writer's assertion that "*Solving challenges with early maturation is a top priority…and a key area for R&D*." We point out that this is particularly important for British Columbia because currently in BC we do not have access to the genetic stock that all of the other producers in the world can purchase. Therefore we cannot rely on

growout results in other facilities that are using different strains of Atlantic salmon than are available in BC. In other words, the fact that Danish Salmon anecdotally has achieved early maturation rates of 0.5% due to low temperatures and full strength sea water, does not mean that we can assume that the BC strain of Atlantic salmon will deliver the same results if grown with the same conditions in a BC based land-based facility.

2. The writer is based in Europe and his main sources are European suppliers and companies. We know that construction costs for land-based facilities are typically higher in North America than in Europe.

3. The writer states “NOK 18/kg saved on salmon sold on the US West Coast would represent about one-third of the total cost for the customer." NOK 18 equates to $US2.16/kg. This compares to shipping costs from Richmond, BC to the following destinations:
    - Seattle $US 0.26/kg
    - San Francisco $US 0.37/kg
    - Los Angeles $US 0.44/kg

    Although a producer that is closer to these markets than BC would have lower transportation costs, BC has existing salmon farming infrastructure that reduces costs in other areas. For example, BC has feed mills, processing plants, fish health scientists and diagnostic labs, skilled RAS operators and relatively low land costs, all of which combine to make BC an attractive place to locate land-based facilities. This attractiveness could be substantially enhanced by creating one or more aquaparks that provide shared influent water systems and shared waste management systems for tenants. Permitting costs, time to cash flow, and operating costs would all be reduced under an aquapark model.

4. The writer bases the R0E calculation on 50% debt for a land-based facility and 70% for an ocean-based farm. Land-based facilities, once proven, should be a much more stable production platform than ocean-based farms due to the elimination of all of the natural hazards that currently plague ocean-based farms. These include plankton blooms, sea lice, disease transfer, low oxygen, jellyfish, super chilling, etc. For the reasons given above in #1, we also think that the market risk for land-based producers will be less than that faced by ocean producers. We believe, therefore, that land-based facilities will quickly transition to being more bankable, to the point where they are at least as bankable as ocean-based farms.

5. We believe that **there is a window of opportunity to enter this sector and establish one's brand** before the major fish farming companies turn their attention and their capital to it. The writer points out that the major fish farming companies are currently focused on investing their capital into new land-based facilities to produce large post-smolts so that they can increase the utilization rates of their existing net pens, because it is extremely difficult for them to get additional licenses.

6. The writer identifies Kuterra as primarily being an R&D facility. We now realize that at its current scale the main value of Kuterra is as a proof-of-concept facility that can be used to prove out the remaining key production related elements of a scaled up business plan.

In summary, we disagree with the report writer's conclusion that "land-based farming's success or failure lies in the hands of traditional ocean farmers…" Instead, we believe that land-based farming success or failure will lie in the hands of land-based farmers and will depend on their ability:

a. To design low cost, reliable, efficient facilities;
b. To operate their facilities efficiently, especially as regards their ability to optimize feed conversion rates and continually reduce production costs;
c. To consistently produce an absolutely top quality product without interruption;
d. To brand and promote their product effectively

Ocean-based fish farming companies are very sophisticated and know their costs to the penny. Over the past thirty years they have refined their operations to a very high degree. Land-based fish farming is new, has attracted new, non-fish farming players, and is a very complicated business. Therefore some new producers will not thrive because their teams do not have the full set of skills to design and/or optimize their facilities. This will slowly change as they, and the aquaculture system suppliers, learn how best to design and operate these facilities, but in the early stages the advantage will be to the companies whose teams have the full set of technical skills needed to design and operate the systems, and the skills to grow the fish and optimize their performance.

Kuterra is well positioned to be able to prove out the remaining challenges to fish performance (early maturation, growth curves to 5kg, and off-flavour mitigation). The Kuterra brand is recognized globally due to coverage by 60 Minutes, National Geographic, Time Magazine, the BBC, CBC, and others, and is well positioned to grow and cement itself as a leading global land-based, sustainable, top quality brand. And Kuterra's team knows what it will take to build and operate an efficient facility that produces the highest quality fish, which will help it solidify and maintain premium pricing within the marketplace.