Theme: Aquaculture
Session: TuA3 - Use of fishmeal in salmon aquaculture: sustainability, PCBs and International Trade

Title: Aquaculture Growth and the Fishmeal Trap

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Abstract: Fishmeal prices have increased sharply since the mid-2005 and the relationship between the prices of animal and vegetable proteins have become weaker, at least temporarily. This can be explained by a relatively constant fishmeal supply, which have varied around 6-7 million metric tons the last two decades, and an increasing demand. Although much of the recent price pressure has been attributed to the economic growth in China, it is the expansion of global aquaculture that is associated with increasing fishmeal demand. Estimated fishmeal usage in aquaculture is 53% in 2005, while pig and poultry use most of the remaining supply (Tacon, 2005). At first sight, this development can be interpreted as evidence of the fishmeal trap. However, little suggests that fishing pressure has increased and there seems to be only a small part of the increased fishmeal price that has been passed on to the price of fish feeds. Since the fish feed industry appears to operate with tight profit margins they have little ability to adjust prices over marginal cost. This implies that feed producer must substitute fishmeal for other ingredients in order not to pass on increasing fishmeal prices to fish farmers. In general, the aquaculture industry seems adaptable to changing input prices in marine resources. The largest impediment for continued aquaculture growth is not technical limitations. Many downstream buyers require farmed fish fed with marine raw instead of alternative nutrient sources. Hence, it is not the fishmeal trap that represents the most serious growth constraint for aquaculture, but consumer perceptions.