

**The 5<sup>th</sup> Global Feed and Food Congress, Antalya, Turkey, 18-20 April 2016**

**Workshop 2: Sustainable Aquaculture - Prospects & Challenges**

Abstract:

**Marine origin feed ingredients and contributions towards sustainable aquaculture (The Importance of Fishmeal and Fish Oil in Sustainable Aquaculture Development)**

Dr Neil Auchterlonie, Technical Director, IFFO The Marine Ingredients Organisation

Fishmeal and fish oil are highly nutritious components of aquafeeds and have held an important position in the development of feeds for many of the major cultivated aquatic species as this highly successful industry has developed over the last 50 years. As the fastest growing protein sector globally, aquaculture is a major contributor to food security. The continued supply of feeds for the sector is vital, and the sustainability of raw materials for those feeds is of importance in managing the required increasing production levels through the 21<sup>st</sup> Century. With approximately 68% of global supply of fishmeal and 78% of global supply of fish oil going to aquaculture, these marine ingredients are essential for the maintained development and success of the global industry.

Fishmeal and fish oil are important in aquafeeds for several of the widely farmed aquatic species due to the nutritional profile of both macro and micro-nutrients, which often have health and welfare benefits for the farmed animal as well as conferring some advantages in production (growth and survival). They are also highly digestible and palatable for farmed aquatic species, often providing advantages in protein utilisation and feed conversion efficiencies, thereby contributing to the sustainability of aquaculture operations through the lowering of waste excretion as well as improvements in growth and survival. As the industry develops there is increasing interest in specialised feeds to meet varying circumstances in the production cycle. As fishmeal and fish oil have moved from commodities to strategic feed ingredients their importance in aquafeeds will be maintained, and in some instances increase. There is a large and growing commitment to responsible sourcing with over 40% of global supplies of fishmeal and fish oil now produced from certified sources. With specialised nutritional properties, marine ingredients hold a central position in the developing sector.