Seafood Demand And Aquaculture Growth

Relationships Vary In Developed, Emerging Markets

Summary:
An analysis of the relationships between aquaculture development and its consequences on seafood consumption found both similarities and differences across countries and species. Developing and emerging producing countries coincided across seafood consumption and the share of local aquaculture in total supply. The relationships between consumption and local supply was weak in developed importing countries. Despite significant differences across countries, some general ideas could be extracted and applied to explain the relationships across aquaculture and seafood consumption in the majority of the 12 countries analyzed.

Results
While results generally pointed in a similar direction in every group, there were differences among countries with regard to the relevant indicators. Developing and emerging producing countries significantly coincided across seafood consumption and the share of local aquaculture in total supply. For Vietnam and Thailand, the association was stronger with global aquaculture share than with local. The exception was Germany, which with low seafood consumption was a major importer and exporter of processed fish and shellfish, resulting in inconsistent parameters and lack of significance in the relationships above.

Related Information
Some facts help explain the results shown in the table. Brazil is not a significant importer or exporter of aquaculture products. Aquaculture is mainly developed for the domestic markets there. Hunger is still a dramatic issue in India. Besides cultural and religious factors, any additional supply of food will be locally consumed. The United States is a major importer of aquaculture species such as shrimp and tilapia. Domestic aquaculture is concentrated in specific regions and species, with high production costs. Spain is another major importer of aquaculture species such as shrimp and Pangasius. In its domestic aquaculture faces an important market crisis, however. Shellfish culture is a traditional activity in a specific region that supplies the whole country at low prices.

Perspectives
Although some results can be replicated in almost all countries, a general conclusion can not be presented. There are several particular cases. Consumption in almost all developing or emerging countries relates to aquaculture supply. However, in Thailand and Vietnam, global supply appears to have a stronger influence than local supply.

Aquaculture production has been significantly increasing its contribution to the worldwide seafood supply in the last two decades. Such an increase would be expected to have impacted seafood consumption and food security. On the other hand, it should also be expected that aquaculture growth may be driven by seafood demand, whether at a national or global level.

Aquaculture Organization of the United Nations using the indicator of total fish supply (code 141). Regarding aquaculture supply and growth, several indicators were computed using Fishstat data at national and global levels for every year between 1990 and 2011. The share of aquaculture in total seafood production was determined by dividing aquaculture production by total seafood production, resulting in indicators for domestic and global production.