



on them. Along with increased primary productivity and resulting sh resources of the vast numbers of "poor" populations. What they will stocks, a reduction in the use of marine sh meal and sh oil could consume for protein to replace sh is a major and unaddressed issue. make available much of this major shery for human use and marine. Poverty in some developed countries (ie. USA) is actually increasing mammals and birds. What is the potential growth: perhaps the level and is not greatly decreasing in developing countries. Food is an issue current sh capture for meal production of 33 mmt. Combined with that could spark conflict. Water is and will be another. the additional freshwater and marine aquaculture production, the potential for additional global seafood supply may be on the order of 114. Water supplies are limited and essential for human existence. mmt. Although this is an increase of 72% from 2012, by compounded calculation it represents approximately 25 years of additional supply. Without water, humans will perish in several days, long before food deprivation. Clean water is another issue. Humans are and will be at the recent 3.15% per annum growth rate. Reductions in population increasingly forced to drink and use unclean, unsafe water supplies. growth and per capita consumption would reduce the needed growth. For example, the presence of arsenic in well water supplies in Bangladesh has not reduced consumption, only health. Water supplies rate and extend the supply. Herein lies the wild card. Who will benefit for basic human needs take precedent over food production, although from these new sources of production? aquaculture is most efficient in using water for animal production and

Fish is presently a major source of global animal protein for is getting better with less degradation. Unless countries work together developing nations. This results from wild sh stocks traditionally being to sustainably use water resources and reduce income inequality, the the cheapest source of animal protein. As we have indicated, the cost above is just as it is: A projection assuming the current dominant seafood will rise in coming decades. Fish may well become beyond the utilization will exist.