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sustainability of the ocean's capacity to continue to produce food and must be carefully managed. These very real threats endanger some of the most vulnerable populations and marine habitats around the world and need to be directly addressed to improve food security and answer other social needs.

Fish stock propagation may provide a tool to help rebuild depleted fishery resources in some instances. Propagation programs must be carefully designed and maintained in order to really benefit resource sustainability.

There are major capacity-building needs with regard to food security and food safety.

- The complexity of the issues concerning food provisioning from the sea requires a multidisciplinary approach to research. While the fields of fishery and aquaculture science are well developed, there are critical needs for research on small-scale subsistence uses of the marine environment as well as recreational, cultural and spiritual aspects of marine resources. In addition, greater understanding must be developed of the structure, function and dynamics of marine ecosystems and of the economic and social aspects of human society that depend upon these resources.

- It is necessary to improve understanding of the role of fisheries and aquaculture in commerce, employment and the support livelihoods. Therefore advanced capacity building is necessary for appropriate skills to be able to use advanced technologies to create wealth from capture fisheries and aquaculture in a sustainable way.

- Efforts have been made to create awareness to reduce post-harvest losses, especially in small-scale fisheries, as a means of increasing production. However, little is known about what

– Certain issues, particularly at the micro level, demand additional research and therefore need capacity-building to address them. The state of small-scale fisheries throughout the world, and gender issues in fisheries, are particularly prominent and are poorly studied. A further issue that has been seriously under-researched is the relationship between capture fisheries and aquaculture.

– Much better data and analysis of the trends, character and factors influencing aquaculture production are needed. In principle these data should be more accessible than capture fisheries data but in practice this is not the case. Understanding this rapidly growing sector is vital to the understanding of food security patterns and needs.
– Disease and product safety are a key challenge for aquaculture. Greater scientific and technical capacity is needed to address these challenges in many countries and data and scientific information must be shared in order to exchange lessons learned.
– Aquaculture technology crosses the spectrum from relatively simple small-scale operations to larger-scale enterprises. It includes breeding, feeding, health and safety aspects. Sharing both technology and approaches to improve efficiency and sustainability is an important aspect of improving food security and safety.

- For propagation efforts to be successful, capacity must be developed that will promote efficient and effective approaches and comprehensive monitoring of these