# OUT OF FISHERMEN'S HANDS...

Fishermen's Role In Society and Natural Systems

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#### The Purpose of This Book:

We have tried to create a plain-speak description of the increasingly rapid degradation of the world's aquatic resources as humans swarm over the planet. Also, we have attempted to portray the frustrations of entire communities of fishers as their livelihoods are taken away by a range of activities including *imperialism*, e.g. 15th-20th Century colonization by European and Russian trappers, traders, and pirates of coastlines, rivers, and islands; overzealous political "development" schemes, e.g., hydro-electric dams and fleet subsidizations; *industrial pollution*, e.g., the Thames river, Minimata, the Great Lakes, The Aral and Black Sea; Equal Opportunity Capitalism and national greed, e.g., the demise of the great whales, and recently, entire ecosystems of George's Bank and Grand Banks, as well as the centuries of North Atlantic cod and herring wars; and the ever popular Highly Migratory Species ploy that makes what is in your EEZ, Mine...

We also see diverse fisherfolk as threatened, undervalued productive subcultures in a world where most people do not really know where their food comes from. It is to these millions of fishermen and women, and their cultures, that this book is dedicated.

#### **Front Cover Information:**

Since the 1970s, the global fish meal and fish oil industries have grown such that they now convert from 30-40+% of the total fish landings to their products. The industry originated in Europe and Scandinavia, with Norway's early efforts leading the way. Their historical involvement in cultured cod, salmon, and other species included using trimmings from their cod and capelin fisheries as a source for fish meal and fish oil. The Norwegians have also invested and helped other nations within reasonable distances of primary fisheries production, e.g., Chile, develop major aquaculture industries. The many large scale industries in South America are exemplified in our cover imagery. Once the fish have been landed, processed, and dried, the dry environment of Peru and Northern Chile provides for massive outdoor storage. The products were originally mostly sold for poultry, pig, and other animal feed additives. Today, with the growth of shrimp farms and other aquaculture facilities, the majority of the product is exported to Asia.

#### **Prologue: Placing the Fishing Cultural Crises in Perspective -**

For millennia, hunters, gatherers, fishers, spinners and weavers provided the nutrition, utilities and fabrics that differentiate early humans from other life forms. Human hands are primary tools, coordinated and guided by a big brain capable of both imagination and planning. Together they furnish powerful means for solving problems, real and abstract. Humans have thrived through these creative solutions, building upon each successive creation. While still a young boy I was repeatedly aware of the incredible agility, strength and endurance of fishermen's hands. I would watch as they sewed and repaired nets, passing various bone, metal and bamboo needles through large and often ragged meshes as they created new meshes where only gaping holes and rends existed before. I was particularly amazed at how these big, knobby, sausage-fingered hands could manipulate the even smaller needles as they mended the miniature meshes of the bait nets, or as they built bait scoops from lengths of broom handle, brass wire, pieces of small mesh net, and twine. Other dockside chores included loading salt sacks; hundred pound gunny sacks full of coarse salt for making brine to super-cool the catch out at sea. When the delivery truck arrived, the crew would pair up, and literally toss these great bags from one team to the next, eventually depositing them into an orderly stack in a specially dry space below the main deck where they could be retrieved as needed over the course of their trip. Similarly, provisions, supplies, and various mechanical bits and pieces for the engine room were moved from delivery trucks to an appropriate niche, down and through a hatch or two, or into a bin. The bare armed crew would never flex or do warm-up stretches, they just did these things as a matter of course, with their huge forearms, wrists and amazing hands.

As I got older and became more involved, first as a summer "dollar-a-ton" apprentice and later as a working scientist on board various types of fishing boats, I was even more fascinated by the continuous banter and tale spinning by those working on board. Whether it was a tedious chore, such as mending net, darning socks, or something as routine as the daily hosing down of the decks to remove the night's salt spray residues, the endless recounting and sharing of experiences and memories of special moments during other trips was routine. Each tale offered some tidbit of wisdom. Some of the banter was a form of oral history. Topics ranged from discussions of the good old days, to what their families had tackled, and accomplished. One of the messages that struck me as odd was the recurrent wish and proud declaration that a son or brother-in-law... "has a job on the beach." Many of my shipmates were unschooled and from other countries. They made their livings at sea as their fathers before them. Yet, most of all they wanted to be home with their wives and families, more than anything in the world.

In my professional activities since these earlier experiences, I have always gleaned my memories for the many shared stories, myths, misinformation, and sometimes incredibly clear insights and tidbits for something useful, that I could use to help make the lives of fishermen less tedious, and more productive.

It was always an unwritten law that fishermen did not kill anything wantonly. Little island birds that landed aboard ship, or undersized fish that took the baits were reverently coaxed back to a safer haven. Yet, during and after WWII, fishing for sharks off the stern while adrift at night was a manly and sometimes lucrative pass time. Or, when a few seal bombs did not work to scare them off, shooting at seals and sea lions that were working the bait nets or chum line was considered fair, protective behavior.

On other days, I also saw tired, soggy fishermen, jump into dangerous shark laden seine nets to remove dolphins and their calves. I witnessed the tears of frustration when everything that they could do had failed - real men, with soft hearts, and big sore hands feeling guilt and frustration as they watched the anguished survivors searching for their lost, perhaps dead mother or calf.

Over the decades of the 1950s to the 1980s, progress was made around the world as modern technologies and fishing fleets spread out over the oceans. This was called "development", and was a worthy activity, supported by the wealthier economies. Somewhere in the early 1980s, things began to go awry. Some of these things went wrong as a consequence of competition and negotiations over ownership of the various resources associated with the Law of the Sea debates. National planners focused on how to assure their nation's participation in the extractions of all resources from the world's oceans. Globally, vast fleet building subsidies had been in progress since the mid 1960s. An array of agencies, commissions, and associated bureaucrats crowded the landscape, and began slowly making decisions about who could do what, where, and how much fish there was, how much could be taken, who's information was best - and what the "best available scientific information" might be. Meanwhile, these fleets expanded way past logical limits.

Surely, this is when the management of the ocean's living resources was taken out of fishermen's hands...

What will become of them now?

Gary D. Sharp

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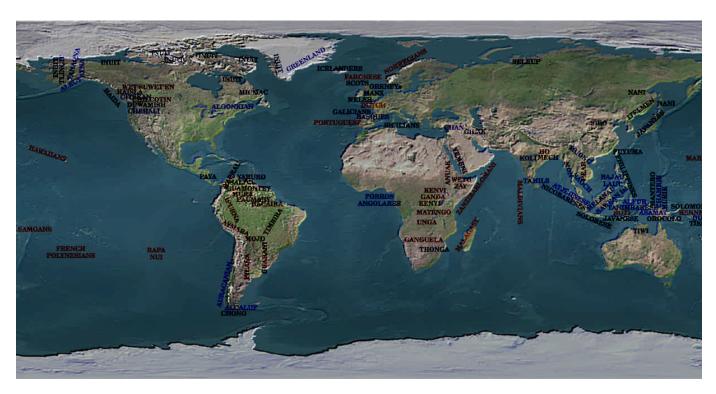
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## The principal remaining Linguistic Fishing Cultures whose major occupations are fisheries, described in Amiram Gonen's *Encyclopedia of Peoples of the World*



After millennia, among the surviving fishing cultures, some folks are coastal fishers, some are islanders. Many depend upon lakes, rivers and streams. Only a few are primary boat-building seafarers, and of those, most are derivative of either older Indo-Pacific cultures, or of European expansion.