

AQUACULTURE I

2. WEEK

IMPORTANCE OF AQUACULTURE

WEEKLY TOPICS

WEEK	TOPICS
1. WEEK	WHAT IS AQUACULTURE?
2. WEEK	IMPORTANCE OF AQUACULTURE
3. WEEK	AQUACULTURE: ANIMAL PROTEIN
4. WEEK	HISTORY OF AQUACULTURE
5. WEEK	ORGANISATION OF AQUACULTURE
6. WEEK	CHARACTERISTICS OF AQUACULTURE
7. WEEK	POND CULTURE
8. WEEK	IN STATIC FRESHWATER PONDS
9. WEEK	IN BRACKISH-WATER PONDS
10. WEEK	RUNNING WATER CULTURE
11. WEEK	CULTURE IN RE-CIRCULATORY SYSTEMS (RAS)
12. WEEK	AQUACULTURE IN RACEWAYS, CAGES, AND ENCLOSURES
13. WEEK	MONOCULTURE AND POLYCULTURE
14. WEEK	RECENT ADVANCES IN AQUACULTURE



- Importance of Aquaculture

- Health Benefit

- Economic Benefits


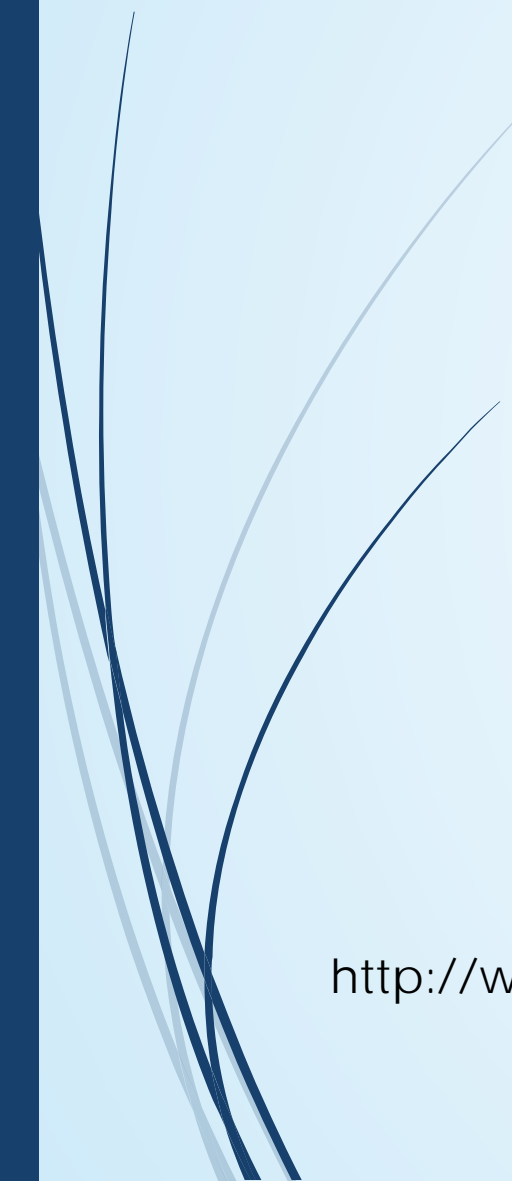
- Environmental Benefits



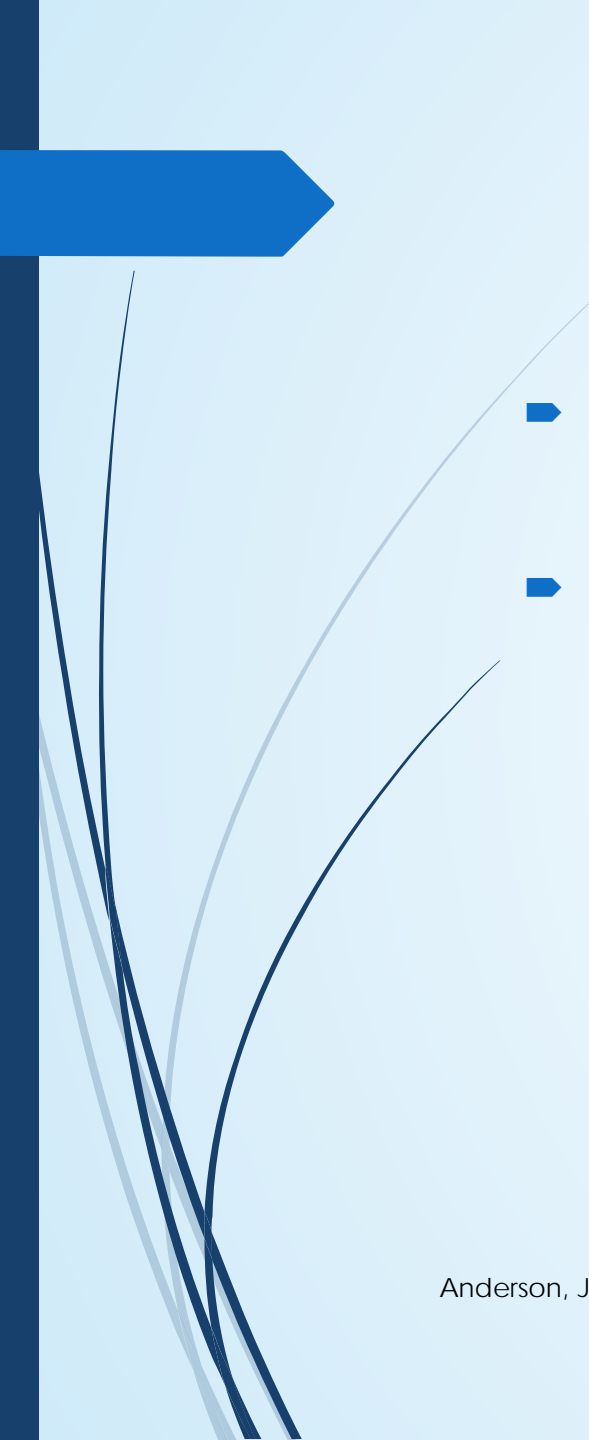
- ▶ Importance of Aquaculture

- ▶ As the human population continues to grow, finding means to feed those people is one of the most important challenges faced around the globe. Even in troubled economic times, men, women and children need to eat. And a healthy diet, high in protein is necessary to ensure that growing population does not succumb to sickness and disease. Fish and other aquatic organisms fit the model for healthy sources of protein.

<http://www.jobmonkey.com/aquaculturejobs/importance-of-aquaculture/>

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- ▶ Importance of Aquaculture
 - ▶ Harvests of wild sources of fish, crustaceans and other aquatic species cannot keep up with the demand presented by the growing human population. Trying to match demand through commercial fishing interests would eventually result in over-fishing and the loss of those species entirely. Therefore, while aquaculture is required to meet the human demand, it also relieves the strain on wild species to allow them to continue to be a significant source.

<http://www.jobmonkey.com/aquaculturejobs/importance-of-aquaculture/>

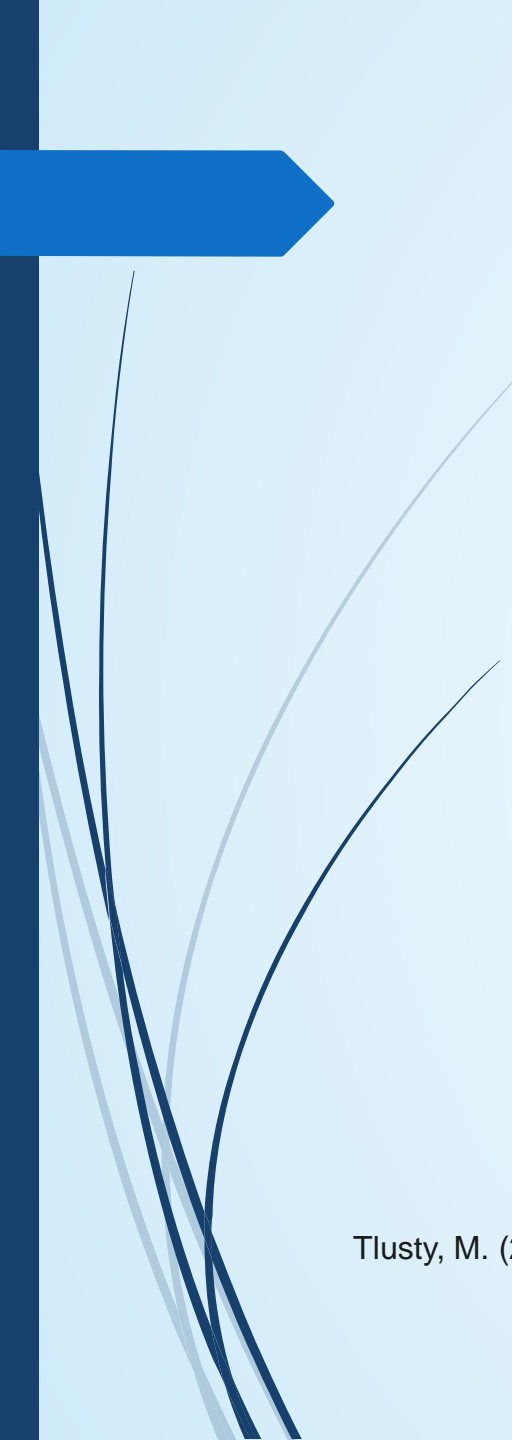
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- ▶ **Aquaculture and the Future: Why Fisheries Economists Should Care**
 - ▶ This paper explores the relationship between traditional fisheries, fisheries enhancement (ranching), and aquaculture. It evaluates why they are different and why fisheries economists have largely neglected aquaculture issues, despite the fact that most of the growth in fish supply over the past two decades has been the result of aquaculture development. It is argued that the core difference between aquaculture and traditional fisheries is the degree of control; control of the environment, production, and marketing systems. It is further argued that the degree of control is closely related to the strength of property rights. Three examples are presented to provide empirical support for the propositions. They focus on the salmon, lobster, and shrimp industries.

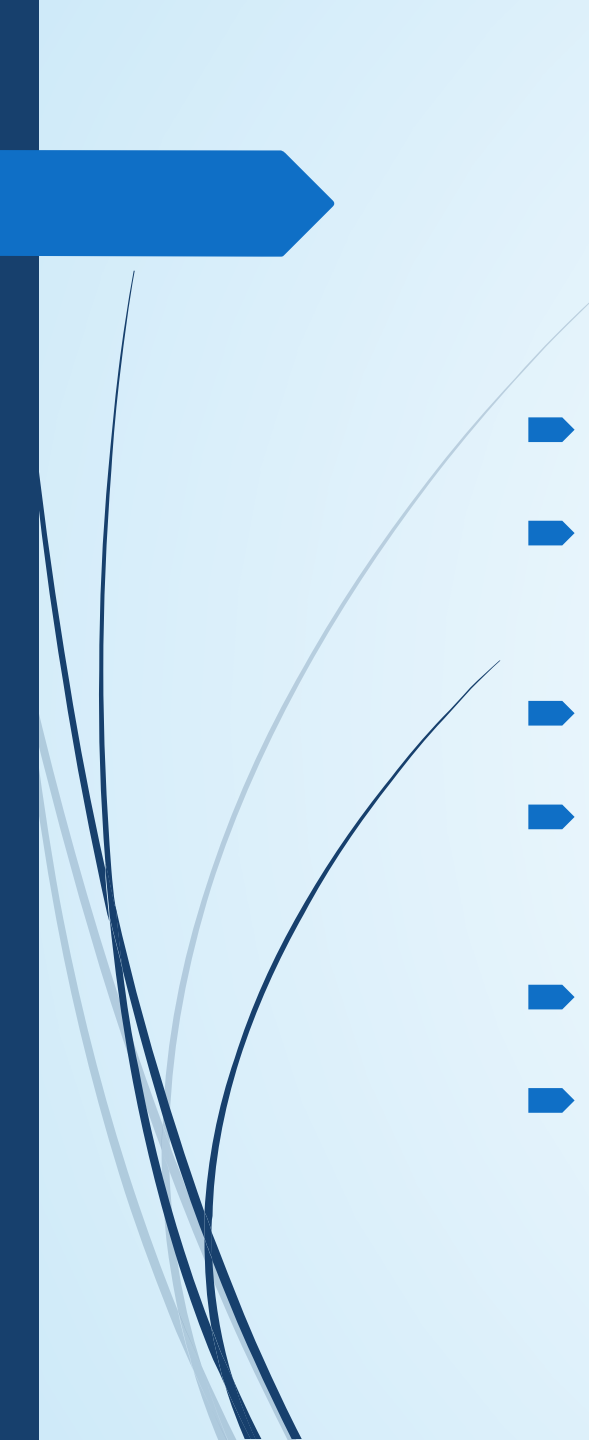


- ▶ **Aquaculture, fisheries, poverty and food security**

- ▶ Fisheries and aquaculture play important roles in providing food and income in many developing countries, either as a stand-alone activity or in association with crop agriculture and livestock rearing. The aim of this paper is to identify how these contributions of fisheries and aquaculture to poverty reduction and food security can be enhanced while also addressing the need for a sustainability transition in over-exploited and over-capitalized capture fisheries, and for improved environmental performance and distributive justice in a rapidly growing aquaculture sector. The focus of the paper is on the poverty and food security concerns of developing countries, with an emphasis on the least developed. The emphasis is on food security rather than poverty reduction policies and strategies, although the two are of course related. The food security agenda is very much to the fore at present; fish prices rose along with other food prices in 2007-8 and as fish provide important nutritional benefits to the poor, food security has become a primary concern for sector policy.

Allison, E. H. (2011). Aquaculture, fisheries, poverty and food security.

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- ▶ The benefits and risks of aquacultural production for the aquarium trade
 - ▶ Production of animals for the aquarium hobbyist trade is a rapidly growing sector of the aquacultural industry, and it will continue to become more important as restrictions are placed on collecting animals for the wild. Currently, approximately 90% of freshwater fish traded in the hobbyist industry are captively cultured. However, for marine ornamentals, the reverse is true as only a handful of species is produced via aquaculture technology. Given the future importance of aquaculture production of ornamental species, it is important to elucidate the benefits and risks for this sector. Thus, here the production of ornamental species is compared to the production of food species. The most notable difference is that the marine coastal environment is not currently utilized in the production of ornamental species. Thus, public opposition will not be as great since there is no direct impact on the marine environment. In assessing the benefits and risks of ornamental aquaculture production, the cases where further development should and should not be pursued are developed. In general, aquaculture production of ornamental species should be pursued when species are difficult to obtain from the wild, breeding supports a conservation program, there is some environmental benefit or elimination of environmental damage via the breeding program, or to enhance the further production of domesticated species. Aquaculture production of ornamental species should be avoided when it would replace a harvest of wild animals that maintains habitat, a cultural benefit, or an economic benefit.

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- References
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