

AN ECONOMIC ANALYSIS OF STOCK ENHANCEMENT OF PERSIAN STURGEON (*ACIPENSER PERSICUS*) IN IRAN

Hassan Salehi*

Iranian Fisheries Research Organization
279 West Fatemi Avenue, Tehran, Iran
hsalehi_ir@yahoo.com

Several factors degrade aquatic habitat and affect fish stocks, including the sturgeons of the Caspian Sea. Many countries with different methods and various objectives are involved in the stock enhancement or reconstruction of economically valued species. Iran contributes to these efforts by enhancing ten native species. The economic advantages of stock enhancement, like other aspects of rehabilitation, have been considered in recent years. The data for stock enhancement of sturgeon and subsequent harvest in Iran suggests that the increase in the harvest of Persian sturgeon (*Acipenser persicus*) probably resulted from stock enhancement. Over the last two decades, sturgeon fingerling production in Iran has increased and reached more than 21 million by 2004. To determine the costs of production and enhancement of Persian sturgeon fingerlings, a questionnaire was prepared. An expert team completed the questionnaire, and included all sturgeon centers and other related departments.

From 1981 to 2003, the contribution of *A. persicus* was more than 82% (averaged from 62% to 91%) of the total sturgeon fingerling production. A cost analysis of Persian sturgeon production (Figure 1) shows that labor is the most expensive item, followed by the cost of fertilized eggs. From 1990 to 2003, the average annual production of Persian sturgeon fingerlings was 17 million fingerlings. On average, the cost of producing a single Persian sturgeon fingerling in Iran was between 937- 2082 Rials (US\$ 0.02-0.24) between 2000 and 2003. With a 0.8% to 1% rate of return, yearly catch would probably be between 56,666 to 70,833 female fish in the years 2015 to 2019. Cooperation between beach seine net groups and other involved organizations in Iran and the close and continued cooperation with other coastal countries in the Caspian Sea could have a positive effect on stock enhancement and the preservation of biodiversity of sturgeon in the future.

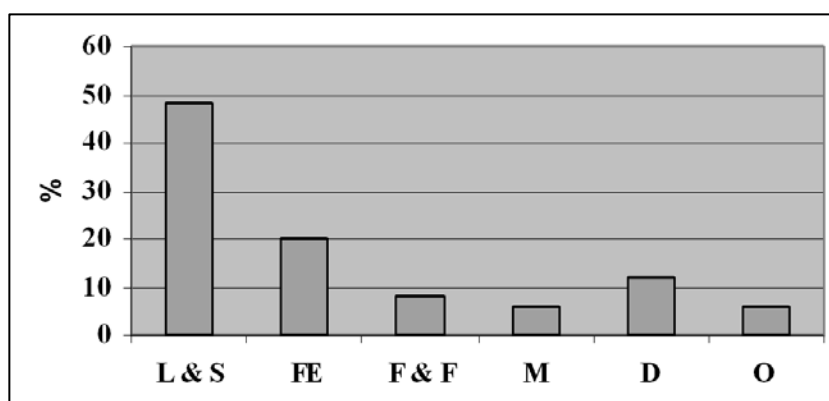


Figure 1: Cost analysis of fingerling production in Iran from 1999 to 2003.

L&S=Labor & Salary,
FE=Fertilized eggs,
F&F=Feed & Fertilizer,
M=Maintenance,
D= Depreciation
O= Other costs)