Academy of Romanian Scientists *Volume 4, No. 1, 2015, pp. 18 - 30*
Annals Series on Biological Sciences Online Edition

ISSN 2285-4177

AQUACULTURE
–
A WORLD-WIDE ECOLOGICAL REVOLUTION

Received for publication, march, 30, 2015.
Accepted, june, 15, 2015

Ionel MIRON[1]
Faculty of Biology, "Alexandru Ioan Cuza" University of Iaşi, 21A Carol I Bvd, 700505 Iaşi, Academy of Romanian Scientists 54 Splaiul Independentei 050094, Bucharest,
e-mail: mironi@uaic.ro

Abstract. This paper presents a global overview of the current status of aquaculture in 2010. Intensive development of aquaculture compared with fishery capture was due to an increase in world population and a stagnation of fishery capture. The comparative fish capture and aquaculture productions were presented at world level and by region. A top ten of world and European countries involved in aquaculture, the main species used in aquatic controlled growth systems, the global human consumption and per capita food fish supply, the importers and exporters of fish and fishery products were also considered. The contribution to the nutrition security, the great expense involved in research and application of biotechnologies, increase the number of jobs and services, need for environmental and biodiversity preservation provide to aquaculture the status of a world-wide ecological revolution.

Key words: World and Romanian aquaculture, fish cage aquaculture, per capita food fish supply.

Introduction

1. **Why Aquaculture?** Because waters represent two-thirds of the earth's surface, providing a lot of new and important food resources.
2. **Why revolution?** Because at a point in the human history has moved from hunting of animals to cultivation of them, as a new food source.
3. **Why at global level?** Because the nutrition security is global required.
4. **Why ecological revolution?** Because the efficiency of aquaculture is possible only preserving the quality of environment and biodiversity (Natura 2000).

These motivations arise from the next considerations (FAO, 2012):

- the human population reached seven billion people, requiring new sources of food;
- the world fishery capture during the last two decades is stagnant at 90 million tonnes;
- the aquaculture production (fish, crustaceans and molluscs) is continuous increasing, reaching 60 million tonnes in 2010, with an economic value of 119 billion US$;