Introduction

The permanent and rapid evolution of aquaculture is called the blue revolution[1]. The blue revolution requires best environmental and social practices regarding sustainable business, work safety[2] and gender equality. Aquaculture is an important source of local food and livelihood[3] for people worldwide. Consequently, it is necessary to improve animal health conditions, social inclusion, sustainability and eco-friendly activity in aquaculture industry.

The rapid development of aquaculture has led to the intensification of farming by increasing the stocking densities. Therefore, any changes in water quality or poor management may cause the emergence of disease and increased animal mortality. Good management practices and new methodologies for rapid diagnosis are effective measures for establishing animal health in aquaculture.

Undoubtedly, a new and innovative aquaculture needs to adopt sustainable and eco-friendly practices. Responsible aquaculture requires minimizing negative environmental impact and conserving soil and water[4]. The environmentally friendly is associated to use of probiotics[4] which can improve water quality and animal health. Additionally, organic production in aquaculture has recently gained importance in major organic food markets[5]. Organic aquaculture is an approach that addresses environmental impact, safety issues in aquaculture products[6], eco-certification, feed composition, sustainable alternatives, general nutritional principles and product quality[5].

Furthermore, the social impacts of the aquaculture sector have been neglected[3]. Small-scale aquaculture, work safety and gender equality must be strongly encouraged. Small-scale and artisanal aquaculture includes ownership by a family or community[7] which can contribute to poverty alleviation, food security and rural livelihoods[9]. Meanwhile, safety and health issues for aquaculture workers remain unaddressed[10]. Reducing farm hazards and establishing safety policies in the fishing sector could eliminate occupational health problems[10,11]. From a gender perspective, men have long dominated aquaculture as well as the academic world[12] in marine sciences. Women’s work is frequently unrecognized and unpaid[13]. All scientists and aquaculture professional should a responsibility to ensure that all projects and policies promote gender equality[14] and women’s empowerment.

Aquaculture continues to provide many benefits, including a valuable food supply and economic support for many countries[15]. Establishing a smart aquaculture, which addresses health and social issues and is environmental friendly, should be a priority. Only under these conditions, aquaculture could contribute for a better world indeed.

References