**Abstract**

We have conducted a research titled (Use of King Fahd Dam Lake Water in Bisha in Fish Farming by Modern Techniques). The Research Problem was (much talk about pollution of dam water, especially in summer, and after study, it is found that the main reason is the death of fish in the lake which is difficult to be hunted, therefore we thought to purify the Lake water and try to benefit from its water in fish farming by transferring water to fish farms near the lake or home fish farms to provide employment opportunities and also change the dietary habits in the society). This was under the following objectives (1. To use of King Fahd Dam Lake Water; 2) To change eating habits; 3) To make small and profitable projects to provide the proper food for fish farming; 4) To introduce modern technology in fish farming; and 5) To purify the Lake water). The Research Importance was (To use the environmental and natural resources of the Bisha city in the development of the community, in terms of health and economy). Then, we put several questions to the hypotheses which were (Is the environment where fish lives in the lake suitable for growth? / Is this geographical environment in Bisha and climate of Bisha suitable for fish farming? / Can the Dam Lake be used as a fish farm to breed several species of fish? / Are there contaminants in the Lake affecting the growth of fish? / Are modern technologies in aquaculture increasing fish production and water purification? The hypotheses are as follows: (1. When thinking about fish farming or establishing a fish farm, it is necessary to choose the appropriate location and to observe several things, such as being close to a permanent source of water and suitable in terms of quality of the water, soil and plankton in the water to feed the fish; and 2) Lake water samples are taken and analyzed biologically and chemically to determine their relevance to aquaculture). After that, we have made many experiments: (1. A physical analysis of the Dam Lake in ​​Bisha; 2) Six water samples were collected from a different places of the lake water from different areas in Bisha, and the following analyzes were performed: Biological analysis of samples (Microscopic examination of algae in water) / chemical analysis of samples, (Turbidity) / (Total hardness, TDS, Alkalinity, PH, DO) / Health Canada, 2007). The results were (physical analysis: according to the results of the Faculty of Sciences and results of the Water Services Laboratory in Bisha Governorate: The average depth of water in the Dam Lake ranges from 55 to 60 meters / as said by the people of the area it is difficult to hunt in the Dam Lake where the coast is uneven and the depth is different, so the quantity and size of fish increases but they can hunt them, therefore the probability of such fish death due to changes in temperature or low water level is large arises, which may lead to water pollution with high temperature / turbidity level / when measuring the turbidity level in the Lake water, the turbidity was between 30-40%, according to the reports of the General Authority for Fisheries Development in Egypt, similar to the limits allowed in the water of fish farming. The Chemical Analysis Results: Through the results of the lake water samples analysis through the Water Services Labs in Bisha and labs of the Faculty of Sciences, we find that the results are very close and by comparing these results with the water analysis suitable for fish farming according to the General Authority for Fisheries Development Egypt 2014, water is useable in fish farming for some kinds of fish, provided that this water is free of toxic substances and heavy compounds. According to the reports of the Ministry of Agriculture 2015, it is confirmed that the analysis of dam water samples was in the limit allowed. We have conducted several analyses, including (physical analysis, chemical analysis and biological analysis). We were helped by some of the following references (**Arab References:** Ahmed Abdel-Wahab Baranieh (Prospects & Limitations of Using New Techniques in Fish Farming, 2016) /Ahmed Ismail Noor Eldin, (A Substitute to Reduce Microbial Pollution in Aquariums, 2017) / Amal Ibrahim Al-Awad (A study on Obstacles Facing Fish Farming in Sudan, 3013) / General Authority for Fisheries Development, Ministry of Agriculture and Land Reclamation, 2014 / Jassim Al-Jassim, Saudi Studies calling for expansion of Fish Farming Projects, Dammam / Reham Hamdi Al-Majazi, (Obstacles to Fish Farming in Egypt 2012) / Mai Marzouki (Environmental Study of King Fahad Dam Lake Water & its Potential for Fish Farming, 2018).

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