The problem of stocking fish types to fish pond in the Ghanaian setting is highlighted and addressed using a simple but powerful algorithm. A case study of matching fish types of specific quality requirement to a given pond quality at a given location in Ghana is illustrated. The proposed model is used as a management tool to identify criteria which do not satisfy the desired pond standards, and also to assist policy makers in making informed decisions for implementation, monitoring and evaluation. These would ultimately reduce risk, uncertainty and hazard associated with fish pond culture. Keywords: Fish pond culture, Utility function, Inclusion matrix, Index Scheme.