

Preface

The key thrust of modern marine resources management is to strike balance between environment sustainability and economic viability, and to accomplish such task, comprehensive information on the environment and its resources is essential. With the emerging trend in the application of Information and Communications Technology (ICT), a wide variety of computer-based systems and techniques have paved way and have dramatically revolutionized the way natural resources are integrated and how environmental management is practiced. Geographic Information Systems (GIS) and satellite-based earth observation or remote sensing (RS) are some of the important tools developed on the onset of ICT, and have an extensive range of applications, serving as a framework to support decision making processes, from generation, storage, and display of geographic information, to influence prediction and for planning evaluation and making correct decisions. With the Philippines being an archipelago and one of the biological hotspots in the world, the use of remote sensing and GIS for a wide variety of resource management applications is of substantial interest.

This training manual was produced to provide an introduction to Geographic Information System (GIS), its importance and its application to fisheries management. More importantly, it offers a step-by-step guide on the fundamental functions of Quantum GIS, with its latest version, v1.8 'Lisboa'. It is structured with numerous illustrations based on actual use of the software which will serve as the principal learning devices backed up only with textual descriptions for easy comprehension and application.

The authors are aware that this comprehensive tutorial is likely to contain small inaccuracies, variations, and misconstruction. The references and resources provided could offer additional information. Our aim is that readers will involve themselves and will share information, methods, insights and learning techniques with others in order that all will gain from experiences in enhancing the forming of future GIS professionals in the fisheries sector.

Any comments and suggestions on the content, of this manual are very much welcome. Moreover, if you have any questions regarding the use of Quantum GIS v1.8 'Lisboa', you may contact the authors at graceousvonyip@yahoo.com.ph and mudjiesantos@yahoo.com.

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