## **DEDICATION**

To the soul of my father, sisters; Khalda and Magda.

To the soul of Omda Omran, Ed-Duiem mayer.

To the soul of Dr. Abdalla A. Kareem Eldin, Ex-Chancellor, University of Bakht Elruda.

I dedicate this humble work.

## بسم الله الرحمن الرحيم

## RELIABILITY OF THE CURRENT RANGE ASSESSMENT TECHNIQUES IN SEMI ARID RANGELANDS "EL BAJA" AREA - WHITE NILE STATE

By

## **BASHIR BALLA HAJ AHMED ZAHRAN**

BSc (Agric.), University of Khartoum; 1975

MSc 9Agric.), University of Western Australia; 1987

A thesis submitted for the fulfillment of the degree of Doctor of Philosophy (PhD) in range management

College of Forestry and Range Sciences
Sudan University of Science and Technology