

الإستهلال:

بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ

قالی **تغلی** ((وهو الذی أنزل من السماء ماءً فأخرجنا به نبات كلشیء فأخرجنا منه خضیراً نخرج منه حباً متراكباً **ومیلنخل** **میلها** **قنوان** **دانیة** وجناتٍ من أعنابٍ **والزیتون** **والرمان** مُشْتَبِهًا و غیر مُشْتَبِهًا **انظروا** إلى ثمره إذا أثمر **وینعه** إن فی ذالک لآیاتٍ لِّ قومٍ **یؤمنون**))

سورة الأنعام الآية (99)

و قال **تعالی**: ((وأرسلنا الرياح لواقح فأنزلنا من السماء ماءً فأسقيناكموه وما أنتم له **بخازنین**))

سورة الحجر الآية (22) **صدق** الله العظيم

:Dedication

,(To my parents (father and mother

,To my brothers and sisters

,To my wife Tahani

,To my sons Monadil and Mohammed

& To my daughters Al Zahara and UmKalsoom

To my uncle Suleiman for their

.encouragement and patience

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:List of Abbreviation

| | |
|-------------------|--|
| :B.N | Blue Nile |
| :B.C | Before Christmas |
| :C | Centigrade |
| :(MANRI of B.N.S) | Ministry of Agriculture, Natural Resources and Irrigation of the Blue Nile State |
| :FNC | National Forests Cooperation |

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الخلاصة:

تمت الدراسة فى منطقة جنوب خزان الروصيرص وهدفت الى معرفة المردود البيئى الذى ينتج من مشروع تعليية الخزان.

بالإضافة الى معرفة المردود على مساحة الأراضى الزراعية التى تغطى بمياه بحيرة الخزان بعد التعلية, كذلك المردود على المجموعات السكانية القاطنة فى المنطقة, ومعرفة الأثر على الموارد الطبيعية فى المنطقة من غابات ومراعى.

تم تصميم استبيان لجمع البيانات من منطقة الدراسة بأخذ عينة من أربعة قرى تتكون من 61 استبيان, من مجموع ثمانية وعشرين قرية تمتد على شاطئى النيل الأزرق شرقاً وغرباً حتى الحدود الأثيوبية. بعد جمع البيانات وإدخالها فى الكمبيوتر تم تحليلها باستخدام برنامج تحليل الحزم الأحصائية وعرض المعلومات فى شكل جداول.

من ثم تم الحصول على نتائج التحليل الأحصائى والمناقشات فى شكل تقارير, على أساس النسب المئوية و التكرارات من جداول المعلومات, وجدت أن هناك من 15000 الى 20000 فرد فى كل قرية سيتأثر بتعلية الخزان, ومعظم الأسرى حوالى 65% ستفقد من (1 الى 5) فدان من أراضىها الزراعية بسبب التعلية. كما أن حوالى 36% من المواشى ستتأثر بشح المراعى الخضراء حول بحيرة الخزان. وحوالى 70% من السكان أكدوا أنه ستكون هناك صعوبة و قلة فى الحصول على حطب الوقود والفحم النباتى, وهناك 60% من السكان قالوا بأنهم سيفقدون مياه الشرب الرخيصة من بحيرة الخزان, كما أن 19% أفادوا بأنهم سيفقدوا مهنة صيد الأسماك.

من خلال استبيان السكان المحليين هناك تباين فى آرائهم فمنهم من ذكر بأن تعلية الخزان سوف تنعكس إيجاباً على حياتهم, حيث 78% ذكروا بأنهم سيعوضوا بمبانى حديثة وثابتة, وبينما 50% أكدوا ستتوفر لهم خدمات تعليمية متطورة, و54% من السكان قالوا سيوفر لهم أراضى

زراعية مروية, كما أن 42% قالوا سيوفر لهم خدمات صحية, وكما أن 37% ذكروا ستتوفر لهم الكهرباء.

وأخيراً خلصت الدراسة بأن هذه النتائج مطابقة للواقع بهذه المنطقة وأوصت بأن تكون هناك حلول للآثار السالبة الناجمة من التعلية مع دعم الآثار الموجبة حتى يكون المشروع من مشاريع التنمية النظيفة والمستدامة فى السودان.

:Abstract

This study was carried out at the area which is located south of Rosieres Dam and aimed to know the impacts of the dam heightening

The objectives of the study are to identify the area of agricultural land which will be covered by water after the dam heightening, and to study its effects on people who are living in the area, and also to identify the size of affected area of natural resources like forests and rangeland

A questionnaire was designed to collect data from the study area. The sample size consists of 61 respondents representing four villages from total of 28 villages extending along east and western banks of the Blue Nile River. SPSS program was used for data analysis and at the time the data were presented in tables in percentage and frequencies

The results were written as reports forms according to percentage and frequencies from those tables. The results of the study showed 15,000 to 20,000 individuals in all villages will be affected by the heightening, and 65% of the people said that they will lose 1-5 feddan of their agricultural land, and 36% said that their animals will suffer from shortage of green fodder around the dam lake, 70% said they will find difficulty to get firewood and charcoal in the new area, 60% of the population said they will lose cheap drinking water from the river and 19% said they will lose fishing facilities in the lake of dam

On the hand some people said that the heightening project is very important for their life. 78% said the project will provide them modern houses, 50% said it will improve the education services, 54% said it will give them more irrigated agricultural land, 42% of people said the project will improve the health care, and 37% said it will offer them electricity

Finally, the study recommends to solve the negative impacts and support the positive ones of the heightening project which leads in term of sustainable development for the whole country

