ASSESSMENT OF THE EFFECTIVENESS OF COORDINATION OF AGRICULTURAL EXTENSION AND CREDIT SERVICES IN SUDAN: A CASE STUDY OF WHITE NILE AGRICULTURAL SERVICES PROJECT

A Thesis
Submitted in Fulfillment of the Requirements for the Ph.D. Degree in Agricultural Extension and Rural Development

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July 2006
الآية

حتى إذا أتوا على واد النمل قالت نملة يا أيها النمل ادخلوا مسكنكم لا يختمنكم سليمان وجئوه وهم لا يشعرون (18) فتبسّم ضاحكًا من قولها وقال راب أوزعني أن أشكر نعمتكم التي أنعمت علي وعلى والدي وآن أعمل صالحا ترضاه وأدخلني برحمتك في عبادك الصالحين (19)

(سورة النمل)
DEDICATION

This work is dedicated to the memory of my mother and father, and to my wife and my sons and daughters.
ACKNOWLEDGEMENT

I would like to express my sincere thanks and gratitude to Dr. Awadalla Mohamed Saeed, my intellectual supervisor, for his kindness, helpful guidance, constructive criticism and continuous encouragement which enabled me to complete this work.

I would like also to record my deep appreciation to my co-supervisor, Dr. Abda Abdalla Imam, for her help.

My thanks are extended to staff members of the IFAD-supported White Nile Agricultural Services Project at Kosti office for their help and accommodation.
ABSTRACT

This study was conducted to assess the effectiveness of the coordination of extension and credit services for agricultural development in the IFAD-supported White Nile Agricultural Services Project (WNASP). WNASP aims to improve agricultural services to small-scale farmers and rural women through the rehabilitation of selected agricultural schemes in White Nile state.

The study focused on the relationship between the Agricultural Bank of Sudan (ABS) and the Farmer’s Commercial Bank (FCB) as agricultural credit institutions and agricultural extension agents in the project area in the delivery of their services to farmers participating in company, cooperative and private farm operations. The aims were (1) to investigate the impact of credit services on farmers’ productivity, (2) to explore the nature of supervision and follow up of agricultural credit programmes, (3) to examine the role of agricultural extension within the credit supply programmes, and (4) to assess farmers’ attitudes toward credit supply services.

The research employed primary data that were collected by means of structured interview schedules, field observations, and meetings with project personnel. Secondary data were collected from WNASP documents, books, research publications, theses, scientific journals and internet sources.

The data collected were processed and analyzed to generate frequency distribution tables, percentages and graphs for comparative analysis of access to extension and credit services by company, cooperative and private farmer groups. The analysis also involved use of t-tests for assessing the significance
of observed differences between company, cooperative and private farmers in terms of the study variables. Analysis results were used to evaluate the supervision and follow up roles of credit institutions and agricultural extension agents relating to use of credit funds by farmers in the project area.

The conceptual model employed in this study has three components, which are related to the role of agricultural credit institutions and agricultural extension in supervision and follow up of credit services for the different agricultural operations and to farmers’ attitudes toward acquiring and using of inputs supplied by agricultural credit banks for different agricultural production operations.

The study concluded that farmers have only little of the knowledge and skills needed for efficient use of the received inputs, and most of the farmers were facing many agricultural uncertainties, which affect their ability to repay loans. Also the study revealed a real problem related to inadequacy of the amounts and timing of the input supply services provided by ABS and FCB, which affected agricultural production negatively. There was complete absence of medium and long-term loan services. The research revealed that agricultural credit banks supply farmers only with short–term loans. The majority of farmers were not able to benefit from agricultural credit services, as most of them have no assets to provide as guarantees for loans repayment.

It was revealed by the study that farmers spend considerable amounts of their borrowed money in meeting the expenses of family consumption needs and social occasions. That explains why most farmers prefer to acquire loans individually.
The study revealed that farmers have positive attitudes toward extension agents and negative attitudes toward bank agents concerning transfer of agricultural information and training related to different agricultural practices. They prefer to be supervised by extension agents rather than by bank agents. It was found that bank agents could transfer adequate amounts of credit information to farmers, while extension agents could not. This finding suggests a need for training of extension agents in agricultural finance and institutional loaning procedures.

It was also found that farmers find great difficulty in understanding the salam system of Islamic agricultural finance. The Barriers that face access to credit by farmers were found to be the complicated credit supply procedures. Most of farmers are also aware about the harsh measures that banks take against farmers who fail to repay loans, and because of that they tend to be apprehensive about applying for getting loans from agricultural finance institutions.

The study recommended that agricultural institutions should adopt policies that facilitate small farmers’ access to production credit and to household consumption loan funds as well, and that loans should be made on individual bases and with close institutional supervision. Farmers should also be provided with opportunities to receive medium and long-term loans. The study also recommended that agricultural institutions should arrange to supply farmers sufficiently and timely with agricultural inputs, and to strengthen their credit supervision units. It is recommended that agricultural credit services be accompanied by educational efforts of general and technical nature to make farmers aware about credit risk problems, how to acquire credit funds and
how to use credit funds efficiently for agricultural production purposes. This requires involvement of extension agents in agricultural credit programmes.

The research highlighted the importance of establishing effective coordination between agricultural credit and extension institutions in the Sudan.
الخلاصة

أجري هذا البحث لدراسة فعالية التنسيق بين خدمات التمويل والإرشاد الزراعي لإغراض التنمية الزراعية مشروع النيل الأبيض للخدمات الزراعية لغرض تحسين وتنمية المرأة من خلال تأهيل مشاريع زراعية مختارة.

استخدم في البحث أسس المقارنة لتقديم العلاقة بين البنك الزراعي الرسمي وبنك الزراع

التجاري والإرشاد الزراعي والمزارعين داخل وخارج مشروع النيل الأبيض للخدمات الزراعية المتضمنين في فئاتهم الثلاث (المزارعون بمشاريع الشركات و المزارعون بمشاريع التعاونيات الزراعية والمزارعون في المزارع الخاصة) حيث استقصى تأثير خدمات التمويل والإرشاد الزراعي على إنتاجية المحاصيل، وأيضاً اكتشاف مدى المتابعة والإشراف وتنفيذ برامج التمويل الزراعي، كما أن الدراسة هدفت إلى معرفة اتجاهات المزارعين نحو الخدمات التمويلية المقدمة من بنوك التمويل الزراعي.

استخدم البحث المصادر الأولية لجمع المعلومات والتي تمثلت في الاستبانة الميدانية، الملاحظة الموضوعية، مقابلات مع العاملين بمشروع، بينما تم جمع المعلومات من المصادر الثانوية من الكتب والإصدارات البحثية، والبحثية السابقة، والمجلات العلمية وشبكة المعلومات.

لقد تم إجراء العمليات الإحصائية المتنوعة لتحليل المعلومات الأولية التي جمعت بواسطة البحث حيث تم استخدام الجداول التكرارية والنسب المئوية واختيار الرسم البياني وذلك لمعرفة تأثير المتغيرات المختلفة وأجراء المقارنات بين مجموعات المزارعين الثلاثة (شركات –تعاونيات –قطاع خاص) داخل وخارج مشروع النيل الأبيض للخدمات الزراعية لبيان دور مؤسسات التمويل والإرشاد الزراعي في الإشراف ومتابعة طلب واستخدام القروض الزراعية والعمليات الإنتاجية.

النموذج النظري الذي تم استخدامه في هذه الدراسة ذو ثلاث مكونات مرتبطه بدور التمويل والإرشاد الزراعية في الإشراف ومتابعة خدمات التمويل في مختلف مراحل العمليات الزراعية بجانب معرفة اتجاهات المزارعين المرتبطة بالطلب واستخدام القروض الزراعية.
خلص البحث إلى أن معظم المزروعين تنقصهم المعرفة والمهارات المطلوبة للتعامل مع خدمات التمويل والإستخدام الأمثل للقرض المقدم لهم، ويعانون من المخاطر الزراعية التي تعيق مكراراتهم لسداد القروض، وأيضاً وجد أن البنوك لا تقوم بتسليم المزارعين التسليف العيني في الموعد المثلى وبالكمية المطلوبة مما كان له الأثر السلبي على الإنتاج الزراعي، و هنالك غياب خدمات التمويل متوسطة و طويلة المدى، وتنحصر خدمات التمويل في التسليف قصير المدى، وتبين أن معظم المزارعين غير قادرين على الاستفادة من خدمات التمويل، حيث أنهم في معظمهم لا يمتلكون الضمانات المطلوبة للحصول على خدمات التمويل.

ولقد أوضحت الدراسة أن عدداً كبيراً من المزارعين يستخدم جزءاً معتبراً من أموال القروض الزراعية في توفير المستلزمات الأساسية ونقاط المناسبات الاجتماعية، و ربما يكون هذا هو السبب في تفضيلهم للحصول على القروض بصورة شخصية.

خلصت الدراسة أن معظم المزارعين لهم اتجاهات موجبة نحو قيام المرشدين بدور نقل المعلومات الزراعية وتدريب المزارعين و لهم إتجاهات سلبية نحو قيام وكلاء البنوك بنفس تلك المهارات. و بينت الدراسة أن معظم المزارعين يفضلون قيام المرشدين بمهام متابعته استخدام القروض الزراعية على مستوى الحقل، و هذا يشير لأهمية تدريب المرشدين في التمويل الزراعي و إجراءات التسليف المؤسسي.

و تبين أن المزارعين يجدون صعوبة كبيرة في فهم الصيغ الإسلامية للتسليف الزراعي خاصة السلم، و أن من أهم المعوقات التي تواجه المزارعين في عملية الحصول على القروض هي الإجراءات الإدارية الطويلة المعقدة المرتبطة بالحصول على القروض، و تبين أن هذه الدراسة لدى المزارعين بالإجراءات القانونية التي تتخذها البنوك ضد المزارعين مما سبب للمزارعين نوع من التخوف ولأحجام من التعامل مع بنوك التسليف الزراعي.

أوصت الدراسة ضرورة أن تتيح البنوك الفرصة للمزارعين للحصول على سلبيات الإنتاج والسلفيات الاستهلاكية بتيسير الإجراءات والضمانات المطلوبة مع ضرورة توفير السلفيات متوسطة و طويلة الأمد لصالح المزارعين، كما أوصت الدراسة بضرورة تمكين المزارعين بالمخلص الزراعية بالكمية والتوفيق المناسبين. على مؤسسات التمويل الزراعي إنشاء وحدات إشراف تمولي للمساعدة في مراقبة ومتابعة القروض بالتماشي مع الإرشادات الزراعية. كما أوصت الدراسة أيضاً
بضرورة أن يلعب الإرشاد الزراعي الدور الفعال في المتابعة والإشراف على القروض في مستوى الحقل بجانب نشر المعلومات عن التقنيات الحديثة والمشاركة في تدريب المزارعين. أبرزت الدراسة أهمية التنسيق بين مؤسسات التمويل الزراعي والإرشاد الزراعي بالسودان.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Item</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dedication</td>
<td>ii</td>
</tr>
<tr>
<td>Acknowledgement</td>
<td>iv</td>
</tr>
<tr>
<td>Abstract</td>
<td>V</td>
</tr>
<tr>
<td>Arabic Abstract</td>
<td>ix</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>xi</td>
</tr>
<tr>
<td>List of Tables</td>
<td>xvii</td>
</tr>
<tr>
<td>List of Graphs</td>
<td>xx</td>
</tr>
<tr>
<td>List of Figures</td>
<td>xx</td>
</tr>
<tr>
<td>List of Abbreviation</td>
<td>xxi</td>
</tr>
</tbody>
</table>

**Chapter One: INTRODUCTION**  1
1.1 Background  1
1.2 Statement of the research problem  2
1.3 Research justification  4
1.4 Research questions  5
1.5 Research site  7
1.6 Importance of the study  8
1.7 Objectives of the study  8
1.8 Hypotheses  7

**Chapter Two: Literature review**  10
2.1 Introduction  10
2.2 Agricultural development  10
2.3 Components of agricultural system  14
2.4 Four approaches to rural development  15
2.5 Agricultural change  18
2.6 Agricultural extension

2.6.1 Definition of agricultural extension

2.6.2 Element of strong agricultural system

2.6.3 Interpretation of agricultural extension system

2.6.4 Role of agricultural extension workers

2.6.5 Relationship between research and extension

2.6.6 Alternative agricultural extension approaches

2.6.7 Extension information as knowledge system

2.7 Communication process

2.7.1 Communication models

2.7.2 Analysis of the SMCRE model

2.8 Adoption of new agricultural technology

2.8.1 Definition of agricultural technology

2.8.2 Problems facing adaptation and transfer of technology

2.8.3 Different models of innovations diffusion and adoption

2.8.4 Innovation Adopter categories

2.8.5 The adoption index

2.8.6 Characteristics of Innovations

2.8.7 Diffusion process of innovation

2.9 Agricultural credit

2.9.1 Concept of agricultural finance

2.9.2 Definition of credit

2.9.3 Importance of the agricultural credit

2.9.4 Financial markets function and policy
2.15.6 Supervised role of agricultural extension

2.15.7 The supervisor as a motivator

2.15.7 Tasks of supervisor toward his job

2.16 Coordination

2.16.1 Definition of coordination

2.16.2 Why coordination is essential

2.17 International Fund for Agricultural Development of United Nations (IFAD)

2.18 White Nile Agricultural Services Project “IFAD”

2.18.1 Introduction

2.18.2 Objective of White Nile Agricultural Services project

2.18.3 Agricultural development component of WNASP

2.18.4 Agricultural extension component of WNASP

2.18.5 Project's agricultural extension methodology

2.19 Summary of literature review

---

**Chapter three**

**Research Methodology**

3.1 Conceptual framework

3.2 Research population

3.3 Data collection

3.3.1 Primary data

3.3.2 Secondary data

3.3.3 Method of choosing the sample

3.3.4 Sample size

3.3.5 Analysis techniques
Chapter Four
Presentation and Discussion of Data Analysis Results
Part: 1
4.1 Frequency distribution tables analysis...............................100
4.1.1 farmer’s age..........................................................100
4.1.2 Farmer’s educational level .........................................100
4.1.3 perceived timeliness of agricultural inputs ......................103
4.1.4 Perceived sufficient of fertilizer amount supplied by the agricultural credit services for durra, wheat and cotton. .........................105
4.1.5 Perceived timeliness supply of insecticide for cotton cultivation..107
4.1.6 Perceived suitability of the amount and receiving time of the credit funds. ..........................................................107
4.1.7 Problems facing the process of requiring agricultural inputs.....110
4.1.8 Farmer’s knowledge of the type of insecticide used for cotton..........................................................110
4.1.9 Ability of farmers to use insecticide for cotton...........113
4.1.10 Supply of loan related services by credit banks..............113
4.1.11 Farmer’s Perceived information related to use of agricultural Inputs supplies from different sources.................................115
4.1.12 Transfer of agricultural credit information......................117
4.1.13 Farmer’s access to credit information from credit banks......119
4.1.14 Farmer’s access to guarantees required by financial instantiations..........................................................121
4.1.15 Type of credit received by farmers I the sample..............123
4.1.16 Distribution of farmers by perceived involvement of different sources in follows up of agricultural inputs use....................123
4.1.17 Different Sources involvement in processes of receiving credit Installment, credit fund amount and kind loan.............125
4.1.18 involvement of different sources in follows up of agricultural practices..........................................................128
4.1.19 preferred by farmer's Sources to supervise agricultural credit funds at field level..........................................................130
4.1.20 Extent of failure to pay back loans in time by farmers.........132
4.1.21 Measures used by credit banks against the farmer who fail to pay back loans..........................................................133
4.1.22 (A) Consideration of agricultural credit legislations........135
4.1.23 (B) Consideration of economical aspects

4.1.24 (c) Consideration of administrative aspects

4.1.25 (D) Tendency of the project to be financed according to modes credit contract

4.1.26 The farmer who fails to repay loans

4.1.27 Awareness about the possibility of seizure of property in case of farmer failure to repay loan funds

4.1.28 Awareness about the possibility of not to get finance services again in case of farmer failure to pay back loans funds

4.1.29 Different sources that did not give farmers information related to agricultural services

4.1.30 Different sources that did not give farmers information that related to credit services

4.1.31 Different sources that their advice did not suit farmer’s farm circumstances

4.1.32 Different sources who offered new methods of agricultural practices

4.1.33 Preferable source that to train farmers

4.1.34 Farmer’s different reasons related to choose of credit funds

4.1.35 Execution of farmer’s training that related to new farming technology and modern agricultural practices by different sources

4.1.36 Agricultural training practices, which executed by different sources

4.1.37 Farmer’s difficulty in understanding salam mode

4.1.38 Farmer’s Use of credit funds for different farm production Operations

4.1.39 Farmer’s use of credit funds for their family needs

5.1.40 Extension education methods that used by different sources

4.1.41 Barriers related to acquiring of credit funds

Part .2

4.2 Graph analysis

4.2.1: Differences in scores on educational years by project farmers

4.2.2: Differences in scores on social participation

4.2.3: Differences in scores on farm net income by project

5.1.4: Differences in scores on area under durra

4.2.5: Differences in scores on durra production

4.2.6: Differences in scores on area under cotton
4.1.7: Differences in scores on cotton production.........................187
4.2.8: Differences in scores on area under wheat.......................187
4.2.9: Differences in scores on wheat production.......................187
4.2.10: Differences in scores on amount of durra fertilizer.............189
4.2.11: Differences in scores on amount of wheat fertilizer............189
4.2.12: Differences in scores on amount of cotton fertilizer..........189
4.2.13: Differences in scores on amount of cotton insecticides.......191

Part. 3
4.3 Results of T-test analysis..............................................193
4.3.1 Farmer family members.............................................193
4.3.2 Education family members.........................................193
4.3.3 Family labours member.............................................195
4.3.4 Knowledge of types of fertilizer used for durra growing........195
4.3.5 Perceived amount of fertilizer for durra compared to growing area.................................................................197
4.3.6 Farm animals (sheep).................................................197
4.3.7 Farm animals (goats)..................................................199
4.3.8 Involvement of extension agent in supply of adequate amounts of credit funds.........................................................199
4.3.9 Family members........................................................201
4.3.10 Educated family members..........................................201
4.3.11 Family labours..........................................................201
4.3.12 Knowledge of fertilizer type used for sowing of durra..........203
4.3.13 Perceived amount of fertilizer for durra compared to growing area.................................................................203
4.3.14 Farm animals (sheep).................................................205
4.3.15 Farm animals (goats)..................................................205
4.3.16 Involvement of extension agent in supply of adequate amounts of credit funds.........................................................205
4.3.17 Family members........................................................207
4.3.18 Educated family members..........................................207
4.3.19 Family labours..........................................................209
4.3.20 Knowledge of fertilizer type used for sowing of durra..........209
4.3.21 Perceived amount of fertilizer for durra compared to growing area.................................................................211
4.3.22 Farm animals (sheep).................................................211
4.3.23 Farm animals (goats)..................................................213
4.3.24 Involvement of extension agent in supply of adequate amounts of
Chapter Five
Summary of the findings, Conclusions and recommendations…..215
5.1 Summary of the findings......................................................215
5.2 Conclusion........................................................................227
5.3 Recommendations..........................................................228
References.............................................................................232
Appendix..................................................................................235
### LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Age</td>
<td>101</td>
</tr>
<tr>
<td>4.2</td>
<td>Farmer’s educational level</td>
<td>102</td>
</tr>
<tr>
<td>4.3</td>
<td>Perceived timeliness of fertilizer supplies for durra, wheat and cotton</td>
<td>104</td>
</tr>
<tr>
<td>4.4</td>
<td>Perceived sufficient of fertilizer amount supplied by the agricultural credit services for durra, wheat and cotton</td>
<td>106</td>
</tr>
<tr>
<td>4.5</td>
<td>Perceived timeliness supply of insecticide for cotton cultivation</td>
<td>108</td>
</tr>
<tr>
<td>4.6</td>
<td>Perceived suitability of the amount and receiving time of the credit funds</td>
<td>109</td>
</tr>
<tr>
<td>4.7</td>
<td>Problems facing the process of requiring agricultural inputs</td>
<td>111</td>
</tr>
<tr>
<td>4.8</td>
<td>Knowledge of the type of insecticide used for cotton</td>
<td>112</td>
</tr>
<tr>
<td>4.9</td>
<td>Ability of farmers to use insecticide for cotton</td>
<td>114</td>
</tr>
<tr>
<td>4.10</td>
<td>Supply of loan related services by credit banks</td>
<td>114</td>
</tr>
<tr>
<td>4.11</td>
<td>Farmers perceived information related to use of agricultural inputs supplies from different sources</td>
<td>116</td>
</tr>
<tr>
<td>4.12</td>
<td>Transfer of agricultural credit information by different sources</td>
<td>118</td>
</tr>
<tr>
<td>4.13</td>
<td>Farmer’s access to credit information from credit banks</td>
<td>120</td>
</tr>
<tr>
<td>4.14</td>
<td>Farmer’s access to guarantees required by financial instantiations</td>
<td>122</td>
</tr>
<tr>
<td>4.15</td>
<td>Type of credit received by farmers in the sample</td>
<td>124</td>
</tr>
<tr>
<td>4.16</td>
<td>Distribution of farmers by perceived involvement of different sources in follows up of agricultural inputs use</td>
<td>124</td>
</tr>
<tr>
<td>4.17</td>
<td>Sources involvement in the process of receiving (credit installment, credit fund amount kind loan)</td>
<td>126</td>
</tr>
<tr>
<td>4.18</td>
<td>Sources involvement in follows up of agricultural practices</td>
<td>129</td>
</tr>
<tr>
<td>4.19</td>
<td>Sources preferred by farmers to supervise agricultural credit</td>
<td>131</td>
</tr>
<tr>
<td>4.20</td>
<td>Extent of failure to pay back loans in time by farmers</td>
<td>134</td>
</tr>
<tr>
<td>4.21</td>
<td>Measures used by credit banks against the farmer who fail to pay back loans</td>
<td>134</td>
</tr>
<tr>
<td>4.22</td>
<td>(A) Consideration of agricultural credit legislations</td>
<td>136</td>
</tr>
<tr>
<td>4.23</td>
<td>(B) Consideration of economical aspects</td>
<td>138</td>
</tr>
</tbody>
</table>
5.24 (c) Consideration of administrative aspects.........................140
4.25 (D) Tendency of the project to be financed according to modes credit contract.................................................................141
4.26 The farmer who fails to repay loans......................................143
4.27 Awareness about the possibility of seizure of property in case of farmer failure to repay loan funds........................................145
4.28 Awareness about the possibility of not to get finance services again in case of farmer failure to pay back loans funds...............148
4.29 Different sources that did not give farmers information related to agricultural services..............................................................150
4.30 Different sources that did not give farmers information that related to credit services..........................................................152
4.31 Different sources that their advice did not suit farmer’s farm circumstances .................................................................156
4.32 Different sources that offered new methods of agricultural practices..................................................................................158
4.1.33 Preferable source that to train farmers...............................161
4.34 Farmer’s different reasons related to choose of credit funds .....165
4.35 Execution of farmer’s training that related to new farming technology and modern agricultural practices by different sources.....166
4.36 Agricultural training practices, which executed by different sources.................................................................................168
4.37 Farmer’s difficulty in understanding salam mode.........................170
4.38 Farmer’s Use of credit funds for different farm production Operations................................................................................172
4.39 Farmer’s use of credit funds for their family needs..................174
4.40 Extension education methods that used by different sources.......167
4.41 Barriers related to acquiring of credit funds...............................181

4.42 Farmer family members.........................................................194
4.43 Education family members.....................................................194
4.44 Family labours member..........................................................196
4.45 Knowledge of types of fertilizer used for durra growing............196
4.46 Perceived amount of fertilizer for durra compared to growing area.....................................................................................198
4.47 Farm animals (sheep)............................................................198
4.48 Farm animals (goats)..............................................................200
4.49 Involvement of extension agent in supply of adequate amounts of
credit funds.................................................................200
4.50 Family members......................................................202
4.51 Educated family members ..........................................202
4.52 Family labours........................................................202
4.53 Knowledge of fertilizer type used for sowing of durra......204
4.54 Perceived amount of fertilizer for durra compared to growing are.................................................................204
4.55 Farm animals (sheep)..................................................206
4.56 Farm animals (goats)...................................................206
4.57 Involvement of extension agent in supply of adequate amounts of credit funds.................................................................206
4.58 Family members......................................................208
4.59 Educated family members ..........................................208
4.60 Family labours ........................................................210
4.61 Knowledge of fertilizer type used for sowing of durra......210
4.62 Perceived amount of fertilizer for durra compared to growing area.................................................................212
4.63 Farm animals (sheep)..................................................212
4.64 Farm animals (goats)...................................................214
4.65 Involvement of extension agent in supply of adequate amounts of credit funds.................................................................214
LIST OF GRAPHS

4.1: Differences in scores on educational years by project farmers......183
4.2: Differences in scores on social participation.................................183
4.3: Differences in scores on farm net income by project.....................185
4.4: Differences in scores on area under dura..................................185
4.5: Differences in scores on dura production.....................................186
4.6: Differences in scores on area under cotton.................................186
4.7: Differences in scores on cotton production..................................188
4.8: Differences in scores on area under wheat..................................188
4.9: Differences in scores on wheat production.................................188
4.10: Differences in scores on amount of dura fertilizer......................190
4.11: Differences in scores on amount of wheat fertilizer....................190
4.12: Differences in scores on amount of cotton fertilizer...................190
4.13: Differences in scores on amount of cotton insecticides..............192

LIST OF FIGURES

Title                  Page
1.1                         Linkage supporting the farm family..........................12
1.2                  Extension as function in various sector of society................24
1.3                Flow of technology to farmer from research through extension....27
1.4                The SMCRE model..................................................................33
1.5            Frequency and cumulative curves for an adopter distribution......42
1.6        Adopter categories......................................................................44
**LIST OF ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS</td>
<td>Agricultural Bank of Sudan</td>
</tr>
<tr>
<td>AWPB</td>
<td>Annual work plan and budget</td>
</tr>
<tr>
<td>AOAD</td>
<td>Arab Organization for Agricultural development</td>
</tr>
<tr>
<td>CARE</td>
<td>Cooperative for Assistance and Relief Everywhere</td>
</tr>
<tr>
<td>FCB</td>
<td>Farmer Commercial Bank</td>
</tr>
<tr>
<td>GO</td>
<td>Government organization</td>
</tr>
<tr>
<td>IFAD</td>
<td>International Fund for Agricultural Development of the United Nations</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organization</td>
</tr>
<tr>
<td>SMS</td>
<td>Subject Matter specialist</td>
</tr>
<tr>
<td>T &amp; V</td>
<td>Training and Visit System</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>VEA</td>
<td>Village Extension Agent</td>
</tr>
<tr>
<td>WNASP</td>
<td>White Nile Agricultural Services Project</td>
</tr>
<tr>
<td>WNAS</td>
<td>White Nile Schemes</td>
</tr>
<tr>
<td>PUMs</td>
<td>Project Management Units</td>
</tr>
<tr>
<td>AWPB</td>
<td>Annual Work Plan Budget</td>
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<tr>
<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
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<tr>
<td>SMCRE</td>
<td>Source, Message, Channel, Receiver, Effect</td>
</tr>
<tr>
<td>FSR</td>
<td>Farming System Research</td>
</tr>
<tr>
<td>Rs</td>
<td>Risk, Return, Repayment</td>
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</tbody>
</table>