

Dedication

*I dedicate this work with devotion and love to Prophet
Mohammed (May Peace Be Upon Him);
To my mother, my path to paradise;
To my dear father;
To my dear brothers and sisters;
To the souls of my nephews Taha and Talha;
And To my refuge and residence,
Abu Hujar, Sennar State, Sudan*

.

Acknowledgement

I praise *Allah* for bestowing on me health and patience to conduct this study, and I warmly thank my parents, brothers and sisters for their support and encouragement. I wish also to express gratitude and appreciation to my supervisor, Professor Awadalla Mohamed Saeed, for his invaluable guidance, encouragement and dedicated assistance throughout the course of this work, to my co-supervisor, Dr. Elshifa Ali Merghani, for her continuous encouragement and valuable assistance, and to the University of Zalingei for financing my program.

ABSTRACT

This study was conducted in Abu Hujar, Dali and Mazmum localities of Sennar State, Sudan. Its aim is to identify the principle factors affecting women's access to agricultural services and farm income - the proceeds from production of dura, sesame and millet. In addition, the study is intended for comparing female and male farmers in terms of a set of variables constituting the hypothesized path model of factors affecting access to agricultural production resources and services and their impacts. Data for the study were collected during the 2008 agricultural season. A stratified random sampling procedure was used to select 60 male farmers and 60 female farmers for comparative analysis. The primary data were collected through use of structured interview schedules. Secondary data were obtained from relevant sources. In data analysis, the researcher used the Statistical Package for the Social Sciences. The analysis of data revealed that farmers were heterogeneous in terms of educational level. There were significant differences between female and male farmers in the number of years of schooling completed. Illiteracy was found to be more prevalent among females. This had a negative effect on grasping and benefiting from technological information. The study also demonstrated that male farmers have better opportunities to access extension and financial services. Farmers' participation in agricultural cooperatives and community-based organizations was modest, especially among women. Path analysis revealed the magnitude of direct, indirect and total effects on *farm income and the causally prior variables in the hypothesized causal model*. *Farm income was found to be affected principally by farmland size and area under crops, education and access to credit. The principal significant predictors of area under crop were found to be farmland size, access to credit and education. Access to credit was affected principally by farmland size, adoption of the recommended crop production packages and education. Farmland size was found to be dependent on years of education, a finding which indicate that the relatively more educated farmers possess larger farming units. The adoption of recommended crop production package was found to be principally dependent on access to extension services, farmland size and education. Access to extension services was found to be significantly associated with farmland size and education. This finding suggests that larger farmers have more access to agriculture production resources and services in Sennar State.* On the basis of the study findings, a set of recommendations for achieving equitable access to agricultural production resources and services by male and female farmers was put forward.

مستخلص البحث

اجريت هذه الدراسة بثلاثة محليات بولاية سنار-السودان (ابوحجار, المزموم والدالي) بهدف دراسة العوامل المؤثرة علي كيفية حصول المرأة المزارعة علي موارد الانتاج الزراعي والخدمات واثارها علي الدخل المزرعي واجمالي العائد من المحاصيل الرئيسية هي(الذرة, السمسم والدخن) وايضاً شملت الدراسة م مقارنة بين النساء والرجال المزارعيين في سلسلة من العوامل المؤثرة علي حصول المرأة المزارعة علي موارد الانتاج الزراعي والخدمات المكونة للفروض في شكل نموذج تخطيطي. جمعت الدراسة في الموسم الزراعي 2008م استخدمت العينة الطبقية العشوائية لإختيار 120 مزارع (60 من النساء و 60 من الرجال) للم مقارنة الإحصائية. جمعت البيانات الأولية من خلال المسح الميداني باستخدام الاستبانة والم قابلة الشخصية. و قد دُعمت هذه المعلومات الأولية بمعلومات ثانوية جمعت من مصادر ذات صلة. واقتضي تحليل البيانات لتدقيق اهداف الدراسة استخدام الحزمة الاحصائية للعلوم الإجتماعية.

أوضحت التحليل الأحصائية ان المزارعيين غير متجانسين من حيث المستوى التعليمي وتوجد اختلافات معنوية في عدد سنوات التعليم النظامي بين النساء والرجال المزارعيين. كما وجدت امية واضحة وسط النساء مما اثرعلي فهم واستخدام المعلومات التقنية. بينت الدراسة ايضاً ان المزارعين الرجال يتمتعون بفرص اكبر للحصول علي التسهيلات الإرشادية والتمونية م مقارنة بالنساء المزارعات. والمعوقات التي حدثت من انضمام المزارعيين في المنظمات الاجتماعية والجمعيات التعاونية الزراعية خاصة النساء. أوضح تحليل الارتباط الجزئي الأثر الإيجابي المباشروالغير مباشرلموارد الإنتاج الزراعي والخدمات علي اجمالي الدخل المزرعي. كما وجد أن الدخل المزرعي تأثر بحجم المزرعة والمساحة المزروعة والتعليم وحجم التمويل. المساحة المزروعة تأثرت بحجم المزرعة وتبني حزم الإنتاج المحصولي والمستوي التعليمي. نجد ان التعليم لعب دورا اساسيا في زيادة حجم المزرعة. تبني الحزم التقنية للمحصول تأثر بخدمات الإرشاد الزراعي و حجم المزرعة والتعليم. كما اوضحت النتائج كلما زاد حجم المزرعة كلما زاد فرص تحصيل المزارعيين علي موارد الإنتاج الزراعي والخدمات في ولاية سنار. ومن اهم التوصيات تدقيق عدالة التوزيع لموارد وخدمات الإنتاج الزراعي بولاية سنار بين النساء والرجال المزارعيين.

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agricultural production resources and services in Sennar
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ACRONYMS

CBOs	Community-Based Organization
ECA	Economic Commission for Africa
FOS	Federal Office of Statistics
FAO	Food and Agriculture Organization
GASAT	Gender and Science and Technology Association
ICTs	Information and Communication Technologies
IFAD	International Fund for Agricultural Development
NGOs	Non-governmental organizations
OPEIT	Office and Professional Employees Insurance Trust Fund
ROSCAs	Replication of Savings and Credit Associations
SEWA	Self-Employed Women's Association
SPSS	statistical Package for Social Sciences
TATA	The Name of Industries in the private sector in India
BAIF	The Name of Industries nongovernment sector in India
UNIFEM	United Nations Development Fund for Women
UNDP	United Nations Development Program
WID	Women In Development
WB	World Bank
WFP	World Food Programme