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.
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.
مستشار البحث

اجريت هذه الدراسة بثلاثة مُحلات في ولاية سنار-السودان (أبوحجرال، المزموع والدالي). يهدف دراسة العوامل المؤثرة على كيفية حصول المرأة المزارعة على موارد الإنتاج الزراعي والخدمات وإثارةها على الدخل المزرعي، ومهما يكن من المحاصيل الرئيسية هي (الشدة، السمسم والذرة) وأيضاً شملت الدراسة مقارنة بين النساء والرجال المزارعين في سلسلة من العوامل المؤثرة على حصول المرأة المزارعة على موارد الإنتاج الزراعي والخدمات المكونة لفروض في شكل نموذج تخطيطي. جمعت الدراسة في الموسم الزراعي 2008م استخدمت العينة الطبقية العشوائية لاختيار 120 مزارع (60 من النساء و60 من الرجال) للمقارنة الإحصائية. جمعت البيانات الأولية من خلال المسح المدني باستخدام الاستبانة والمقابلات الشخصية. وقد دُعمت هذه المعلومات الأولية بمعلومات ثانوية جمعت من مصادر ذات صلة. و أفريقيا تحليل البيانات لتحقيق أهداف الدراسة استخدام الحزمة الإحصائية للعلوم الاجتماعية.

أوضحت التحليل الإحصائي أن المزارعين غير متجانسين من حيث المستوى التعليمي وتوجد اختلافات معنوية في عدد سنوات التعليم النظامي بين النساء والرجال المزارعين. كما وجدت امينة واضحة وسط النساء مما أثر على فهم واستخدام المعلومات التقنية. بينما الدراسة أيضاً أن المزارعين الرجال يتمتعون بفرص أكبر للحصول على التسهيلات الإرشادية والتموينية مقترنة بالنساء المزارعون. والمعلومات التي حددت من انضمام المزارعين في المنظمات الاجتماعية والجمعيات التعاونية الزراعية خاصة النساء أوضح تحليل الأثر الجزئي سلب الأثر الرياحي المباشر والغير مباشر للمرأة الزراعية والخدمات على إمكاني الدخل المزرعي. كما وجد أن الدخل المزرعي تأثر بحجم المراعية والمساحة المزروعة وتعليم وحاجة التمويل. المساهمة المزرعة تتأثر بحجم المراعية وبحث حجم الإنتاج الموديلي والمستوي التعليمي. تحدعبر التعليم لعب دوراً أساسيًا في زيادة حجم المراعية. تنبئ الزحمة التقنية للحصول تأثر بخدمات الإشراز الزراعي وحجم المراعية والتعليم. كما أوضحت النتائج كلما زاد حجم المراعية كلما زاد فرص الحصول المزارعين علي موارد الإنتاج الزراعي والخدمات في ولاية سنار. ومن أهم التوصيات تحقيق عدالة التوزيع لموارد وخدمات الإنتاج الزراعي بولاية سنار بين النساء والرجال المزارعين.
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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