

# **Dedication:**

**To: my father**

**To: my mother asking to her long life.**

**To: my sisters & brothers for their  
strong solidarity.**

**To: every one who helped or  
supported this research.**

## **ACKNOWLEDGEMENTS**

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I extend my thanks for enormous hospitality and engagement of the community, tribal leadership and local authorities, who have done all they could to help on my study, once more the hospitality of Hygiene Volunteers has warmed my heart, and I am deeply saddened at unfair sufferings inflicted upon them. I hope that this study is worthy of all their kindnesses and generosity and makes small inroads to promoting production and future gender equality.

## **Abstract**

The main objective of this study was to determine the impact of gender on adoption of animal plough thesis in Zalingei western Darfur area, Sudan, in which agricultural services had been diffused since 1982. The study was based on primary data collected through a field survey that covered three extension centres in Jebel Marra area, namely Zalinge, Dankog, and Nertety. The stratified sample technique was used for collecting information by using a questionnaire (120 respondents). The chi-square analysis revealed that the respondents are highly aware of animal plough, their rate of animal package adoption were still below optimum, and male respondents exceeded female respondents in their rate of adoption. In addition to animal plough attributes were measured.

The research came out with the major following results:-

- 1- Difference is dominant on gender basis.
- 2- Thirty five percent of women age is between 24-44 Years. Although on its social characteristics, there were significant different between the two groups 0.006 at the level 5%.
- 3- Thirty four percent point two percent of the men married two wives (polygamy).
- 4- Illiteracy is about 68.8% among women.
- 5- Forty two point two percent point one percent of women had private land ownership.
- 6- Fifty two percent of women annual income is between (1000-6000) Sudanese pounds.
- 7- Thirty three point three of women got agricultural information from agricultural extension.

- 8- Food crops especially sorghum took priority on planting among other crops with 29.2%.
- 9- Fifty percent of the females reported that animal plough use were easy.
- 10- Fifty eight point three percent point three percent of the women stated that animal plough is better than hand hoe on reducing efforts. but Fifty eight point three percent point three percent of men said it was expensive, and weeds weeds partially 61.7%.
- 11- Hundred percent of women and men adopted animal plough.
- 12- Sixty six point seven percent of women discontinued using animal plough last season.
- 13- There were significant differences between the two groups on animal plough packages adoption at level of 5% level of significance.

. The study recommended the following

1- **Regional Agricultural Ministry; is advised** to support agricultural services, and needs, through establishing strong communication centers or institutions of women societies with skilled agents for agricultural inputs.

2- **Government;** is advised to raise confidence soul among citizens through establishing direct and indirect agricultural infrastructures.

3- **Daiwan alzakat;** is advised to introduce the system of productive family through creating income-generation activities through giving animals.

4- **Social Planning Ministry;** is advised to organize women on institutional framework integrated with their community culture.

5- **State Ministry of Agriculture and Forestry:** is advised to insert local, suitable technologies of field and household.

(Introduce intermediate technology both of farm and home level).

6- **Ministry of higher education and Scientific research**

**Ministry of Science and Technology;** are advised to carrying out further applied research on female activities. In addition to form body involves all institutions that working on development and promotion of females on agriculture.

## ملخص البحث

يهدف هذا البحث لمعرفة تأثير نوع المزارع والميزات النسبية من وجهه نظر المزارعين على تبني المحراث بالحيوان لمعيلي الاسر من الرجال و النساء بولاية غرب دارفور محافظة زالنجى التي نفذت بها خدمات الاشاد الزراعي منذ 1982م. حيث تم اختيار نسبة متساوية(120) من الرجال و النساء معيلي الأسر أى 60 من كل عن طريق الاختيار لعينة عشوائية طبقية لتحديد تأثير نوع المزارع (ذكر،انثى) علي تبني بالمحراث. يوضح مساهمة نوع المزارع فى النشاطات الانتاجية، وكيف استطاع النوع على استخدام المحراث كمنشأ حقلى واثرتلك الممارسة على تبنيه.البحث ايضا عرض الاثار الاقتصادية الاجتماعية، خصائص وسمات المحراث، و الحزم التقنية للمحراث.

وفيما يلى أهم ما توصلت اليه الدراسة من نتائج:

- 1- التفرقة سمة سائدة على أساس النوع.
- 2- يتصف مجتمع البحث بصغر العمر 55% من النساء يتراوح اعمارهم من مابين (24-44)سنة.كما ان العمر هى السمة الوحيدة فى الخصائص الاجتماعية الذى يوجد به اختلاف معنوى ما بين المجموعتين (0.006) عند مستوى المعنويه 5%.
- 3- ظاهرة تعدد الزوجات مرتفع حيث 34.2 % من الرجال لهم زوجتان.
- 4- نسبة الأمية بين النساء 68.8%.
- 5- نسبة الممتلكات ارض زراعية خاصة بين النساء تبلغ 40 %.
- 6- نسبة الدخل السنوى للنساء فى المدى (1,000\_6,000 جينة سودانى) 52.9%.
- 7- نسبة النساء الاثني يحصلن على المعلومات الزراعية من الارشاد الزراعى 55%.
- 8- تحتل المحاصيل الغذائية من حيث الاولوية الزراعية نسبة أعلى بين المحاصيل خاصة الذرة 29.2%.
- 9- نسبة سهولة استخدام المحراث لدى النساء 58%.
- 10- يعتبر المحراث الذى يجره الحيوان افضل من الالة اليدوية من حيث توفير الجهد والوقت, ألا انه غالى فى نظر النساء 58.3%, علاوة على ذلك يزيل الحشائش جزئياً بنسبة 61.7%.
- 11- نسبة تبني المحراث 100% من بين المبحوثين.
- 12- نسبة الذين أوقفوا استخدام المحراث فى الموسم الماضى 66.7%.

- 13- هنالك أختلاف معنوية بين المجموعتين فى تطبيق الحزم التقنية (أعتبرات الشد والحرث، وضبط المحراث،المسافة بين خطوط الحرث، أتجاه الدوران، اوامر تدريب الحيوان) للحرث بالحيوان.
- كما تقترح الدراسة التوصيات التالية:
- 1- تقترح أن تعمل وزارة الزراعة الولائية على توفير و توصيل الخدمات الزراعية للنساء من خلال انشاء جمعيات للمدخلات الزراعية.
  - 2- تقترح على الحكومة بث روح الثقة بين المواطنين من خلال دعم البنيات التحتية للزراعة والأمن.
  - 3- تقترح على ديوان الزكاه ادخال نظام مشاريع الاسرة المنتجة من خلال تمليك الحيوان.
  - 4- تقترح على وزارة الرعاية الاجتماعية تنظيم النساء فى أطار مؤسسى يتوافق مع ثقافة مجتمعاتهن.
  - 5- تقترح على وزارة الزراعة والغابات الولائية العمل على أذخال التكنولوجيا المحلية الملائمة فى الحقل و المنزل.
  - 6- تقترح على وزارتى التعليم العالى و البحث العلمى والعلوم والتقانة أجراء المزيد من البحوث التطبيقية الواقعية فى مجال نشاطات النساء, مع تكوين جسم تجمع كل الاجهزة العاملة فى مجال تنمية وترقية المرأة فى المجال الزراعي .

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