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**The gendered production - marketing continuum of nerica upland rice in hoima district, Uganda**

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**Introduction**

NERICA (New Rice for Africa) is a new group of high-yielding and stress tolerant upland rice varieties developed by the Africa Rice Center.¹

Since the NERICA release in 2002, the upland rice area in Uganda has increased from ~1,500ha to ~90,000ha. While depending on big volumes of imported rice, NERICA has significantly contributed to the country’s ability to cut the annual rice import bill by a third over the past five years, saving $30m.² In July 2010, Ugandan daily the New Vision reported the country now is one of the major producers of NERICA in the world.³

Here, we document the recent surge and its gendered implications for smallholders in Hoima District, one of the major NERICA producing districts in the country. We focus on NERICA production performance and economic welfare creation.

**Methodology**

Data was collected during 2008–2010 using a mixed methods approach, including:

- a survey of 302 NERICA smallholders in 18 villages in Hoima District;
- over 50 thematic group interviews with women and men farmers;
- key informant interviews with various rice value chain stakeholders.

The farm-level survey data was analyzed using e.g. t-tests and chi square tests in SPSS while the qualitative data was explored in an inductive way and coded according to the different themes that arose in line with grounded theory.

**Table 1: NERICA production performance 2nd season 2008**

<table>
<thead>
<tr>
<th>head of household</th>
<th>male</th>
<th>female</th>
<th>all</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=274</td>
<td>n=28</td>
<td>n=302</td>
</tr>
<tr>
<td>total cultivated area (acres)</td>
<td>3.25*</td>
<td>2.33*</td>
<td>3.16</td>
</tr>
<tr>
<td>NERICA area (acres)</td>
<td>1.15*</td>
<td>0.80*</td>
<td>1.12</td>
</tr>
<tr>
<td>NERICA area as % of total area</td>
<td>36.8</td>
<td>35.4</td>
<td>36.7</td>
</tr>
<tr>
<td>NERICA total production (kg)</td>
<td>1045***</td>
<td>588***</td>
<td>1007</td>
</tr>
</tbody>
</table>

Numbers in parentheses indicate standard error means. * difference significant at the 5 per cent level ** difference significant on the 1 per cent level

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**Farmer voices**

“Rice is the most popular crop now. Everybody is thinking rice rice rice!”

“You eat it consciously that you’re eating money!”

“In the tobacco days there was less food and less money, because tobacco money at the end of the day is man’s money”

“It is the highest income-generating crop amongst women”

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**Results**

(i) NERICA has become an important food and income earner for these farmers.

>1/3 of their total cultivated acreage is dedicated to this new crop, and with >75% of the harvest being sold off at competitive rates, it makes a significant contribution to the households’ income portfolios (see tables 1 and 2).

We trace the absence of gendered crop yield differentials between female- and male-headed households to equivalent levels of input use and a comparable human capital base.

(ii) NERICA has provided an effective entry point for many women farmers into more commercially oriented modes of production.

Traditional cash crops are generally controlled by men, and the food crop surpluses women usually market fetch low prices. Perceptions of rice not solely as a commercial crop but also a staple have made it more accessible to women since it escapes cultural norms regarding gendered crop divisions.

Since it has expanded the space for women farmers to earn money, NERICA has provided socio-economic leverage for these women vis-à-vis men farmers both within and among households. It has even made it possible for female-headed households to reach the same level of rice market integration as their male counterparts.

(iii) However, welfare impacts on married women depend on the degree of control they are able to attain over the proceeds from NERICA in relation to their husbands. Nevertheless, our data indicate that their control over these proceeds is greater than for the traditional cash crops.

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**Table 2: NERICA market performance 2nd season 2007 & 1st season 2008**

<table>
<thead>
<tr>
<th>head of household</th>
<th>male</th>
<th>female</th>
<th>all</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=274</td>
<td>n=28</td>
<td>n=302</td>
</tr>
<tr>
<td>total household cash income (USD)</td>
<td>840***</td>
<td>337***</td>
<td>793</td>
</tr>
<tr>
<td>farm cash income (USD)</td>
<td>697*</td>
<td>289*</td>
<td>658</td>
</tr>
<tr>
<td>farm cash income share of total cash income (%)</td>
<td>84.6</td>
<td>84.3</td>
<td>84.5</td>
</tr>
<tr>
<td>quantity sold of NERICA (kg)</td>
<td>1034***</td>
<td>593***</td>
<td>995</td>
</tr>
<tr>
<td>NERICA sales as % of total production</td>
<td>76.1</td>
<td>69.3</td>
<td>75.5</td>
</tr>
<tr>
<td>realized cash income from NERICA (USD)</td>
<td>301**</td>
<td>154**</td>
<td>287</td>
</tr>
<tr>
<td>NERICA share of farm cash income (%)</td>
<td>54.9</td>
<td>60.4</td>
<td>55.4</td>
</tr>
</tbody>
</table>

Numbers in parentheses indicate standard error means. Currency converted from Ugandan Shillings (UGX) to US Dollars (USD) where 1000UGX = 1.41USD (rate referring to 26/03/2008, www.xe.com).

* Value deviates from Table 1 due to a different time period here. * This variable only refers to the 2nd season 2007. ** difference significant on the 5 per cent level *** difference significant on the 1 per cent level

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**Conclusions**

NERICA’s production performance has not only released much-needed foreign exchange for a country heavily taxed by rice imports, but also offered its smallholder farmers an economic opportunity in terms of cash income that for many of them goes unmatched. This is even more so if the farmer happens to be a woman, although many women, given the patriarchal structure of the households, are yet to reap all the sweet fruits of their work. The fact that women were not excluded from this agricultural innovation the way they so often have been in relation to new technologies should lend explanatory power to the recorded successes of NERICA in Uganda.

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**References**

2. The Daily Monitor. 20/07/2010. “Uganda receives $1m for improved rice production”

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