Income Diversification and Seasonality for Smallholder Farmers in Kilosa, Tanzania

Lacey Harris-Coble

MDP Student University of Florida | lharriscoble@ufl.edu

Committee Members: Dr. Sandra Russo, Dr. Renata Serra, and Dr. John Kraft

Tanzania is an Eastern African country. Nearly 80% of the population depends on agricultural livelihoods and the poverty rate for rural farmers is 34% (FADO, 2011; source). Improving the livelihoods of rural farmers is important in order to achieve the first Sustainable Development Goal of “no poverty by 2030”.

1. Kilosa, Tanzania

The Tanzania Forest Conservation Group (TFCG) is an NGO composed of a multidisciplinary team of foresters, biologists and communicators who are committed to conserving Tanzania’s forests and improving the livelihoods of those who depend on them. TFCG was established in 1985 and is the largest non-profit organization in Tanzania working on forest conservation. Currently, TFCG is implementing a five-year multi-sectoral sustainable charcoal project funded by the Swiss Development Corporation (SDC). There are three main components of this project: 1) sustainable forest management and charcoal production; 2) village savings and loans groups; and 3) farmer field groups.

2. Host Organization

TFCG Village Savings and Loan Group

3. Field Practicum Objectives

- What are the main activities that farmers working TFCG engage in to earn income? What is their level of diversification? How does this change with level of income?
- What seasonal income patterns do farmers working with TFCG experience? Do these vary with level of income or diversification?

4. Methods

The methods I used for my field practicum data collection were:
- Focus group discussions
- Surveys
- Participant Observations

I conducted 2 focus groups with small groups of farmers to inform the survey design. The surveys were conducted with 75 farmers in total, 15 farmers from 5 villages in the Kilosa district, who were members of TFCG’s farmer field groups. Of the survey respondents 52% were female and 48% were male.

**Income Diversification** – the number of activities that generate income within a livelihood strategy as well as the share of income derived from different types of activities (i.e. crops, livestock, small business etc.)

**Income Seasonality** – the variation in income between the months/seasons in the year due to temporal changes in climate and agricultural production

5. Results

Income diversification was present throughout income levels among farmers. Share of income from non-crop sources was highest for the wealthiest farmers and lowest for the poorest farmers.

<table>
<thead>
<tr>
<th>Income Quintile</th>
<th>Avg. Income</th>
<th>Crop Income</th>
<th>Non-Crop Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (poorest)</td>
<td>$124.55</td>
<td>86%</td>
<td>14%</td>
</tr>
<tr>
<td>2</td>
<td>$228.66</td>
<td>49%</td>
<td>51%</td>
</tr>
<tr>
<td>3</td>
<td>$344.46</td>
<td>52%</td>
<td>48%</td>
</tr>
<tr>
<td>4</td>
<td>$1,285.63</td>
<td>59%</td>
<td>41%</td>
</tr>
<tr>
<td>5 (richest)</td>
<td>$3,679.87</td>
<td>26%</td>
<td>74%</td>
</tr>
</tbody>
</table>

Average income varied over the course of the year with peaks in income visible for the sesame and pigeon pea harvests.

6. Recommendations

**Support Cash Crop Production**

Sesame and pigeon pea are an important source of income for farmers and income from these crops may be used to diversify into more profitable non-farm activities. TFCG could support cash crop production by facilitating access to inputs and market linkages.

**Support Non-Farm Activities**

Wealthier farmers earn a higher share of their income from non-farm activities than poorer farmers, however there are significant capital barriers that impede entry into these business activities. TFCG could use the Village Savings and Loans Groups to support entry into these non-farm activities.

**Address Income Seasonality**

Farmers sampled experienced income seasonality and poorer farmers may not be able to smooth income or consumption. TFCG could address seasonality through savings mechanisms in the Village Savings and Loans groups and by supporting off-season income generating activities.

7. Acknowledgements

Thank you to my committee members for all of their help and advice throughout this process, Glenn and Andy for their constant support, to Charles Meshack for the opportunity to work with TFCG, and to Charles Leonard, Peter Mtoro and Michael Nilongo for their incredible support in the field! Asante sana!