

Competitiveness of the Banana Sub-Sector in Uganda

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Introduction

- Highland cooking banana most important staple in East Africa Great Lakes region
- Crop has traditional roots in Uganda's central region
- Production moved to southwest and Eastern region in early 19th century
- Production and productivity have declined in the central region and increased in the southwestern region
- Government proposing production zones
- Analyzing the competitiveness of banana production crucial to inform investment decisions

Objectives

- Establish socioeconomic factors that contributed to the shift of bananas from the central to the southwest region
- To analyze the competitiveness of banana sub-sector

Methodology

Study
area



Study area

Central region

- Historic locus of banana production
- Altitude averages 1050m
- Major urban centres located within the region
- Farm sizes average 4 acres

Southwest

- region to which the locus of banana production has more recently shifted
- Most of the area is above 1400m
- Located further away from the major markets
- Farm sizes average 2.5 acres

Data and analysis

- Used IFPRI/NARO data collected 2003-2004
- Wage rates: casual labour, agricultural wage labour, non-agricultural wage labour, salaried (regular)
- Casual wage rates obtained from key informants in village
- Gross margin = value of production – variable costs
- Return to family labour = gross margin/family labour hours
- Return to labour/ha = value marginal product x hours/year/ha
- Return to land/ha = Total Value Production – Return to Labour

RESULTS

Comparison of wage rates by region

Variable	Central	Southwest
Wage rate (casual)	466.0	218.5
Agricultural wage	396.5	228.3
Non-agricultural wage	444.1	324.2
Salary (regular wage)	507.3	1288.4
Self-employment	554.9	344.3

Wage employment

- Wage rates for unskilled labour higher in central region
- Farm wage close to nonfarm wage in central region
 - Agriculture competes with the nonfarm sector for the same type of labour in central region
- Different wage rates for farm and nonfarm in southwest
 - Two labour markets

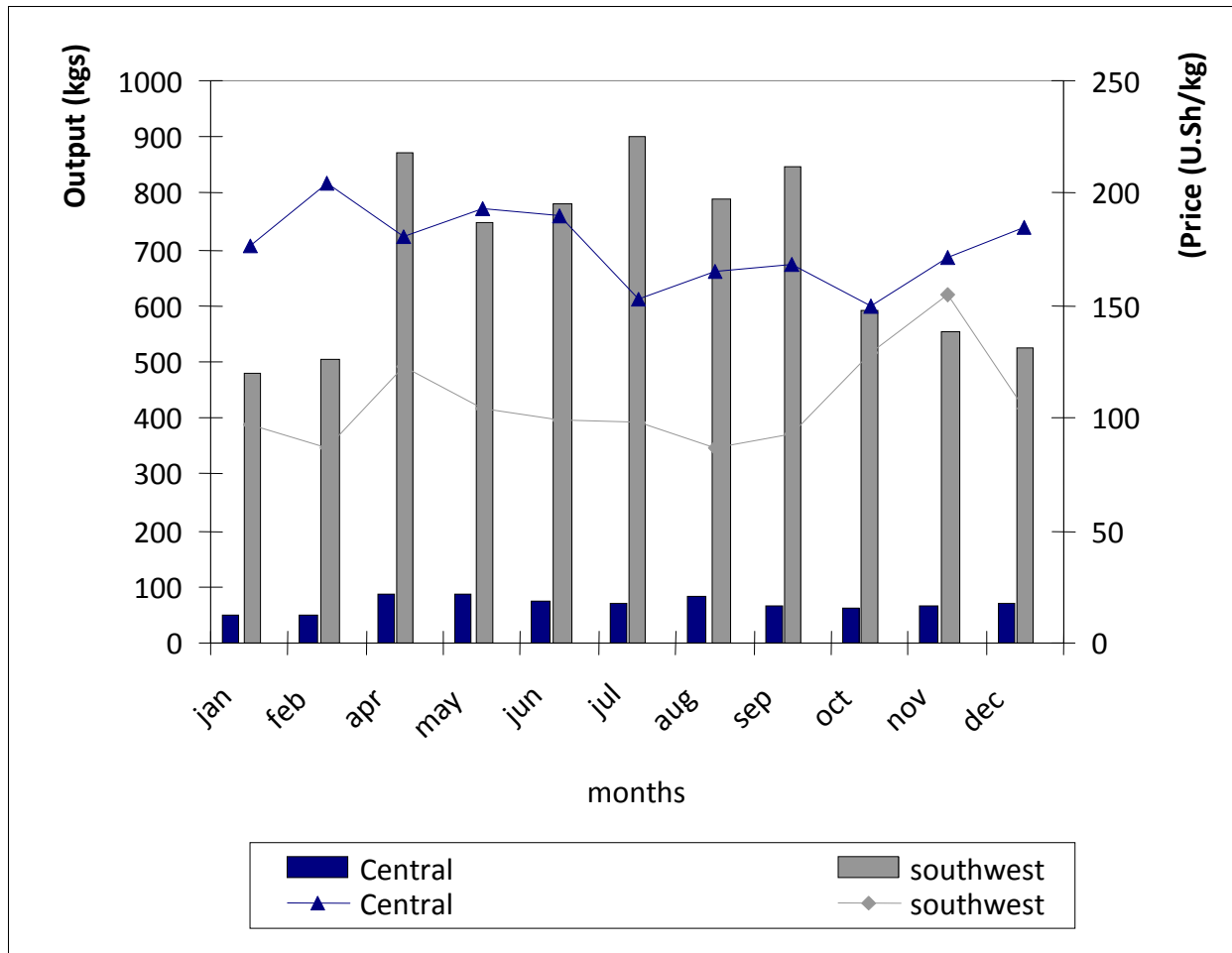
Composition of household income (x 1000)

Variable	Central	Southwest
Income from crops	498.5	849.8
Agricultural wage	51.1	45.1
Non-agricultural wage	71.5	73.6
Regular (salary)	137.4	186.7
Self-nonfarm employed	467.4	130.1
Total income	1225.9	1285.3

Composition of household income

- Households in the central region earn most from self-nonfarm employment
- Households in the southwest earn most from crop production
- However, real incomes could be lower for central region if households buy food from the market (higher food prices)
- This would force households to consume from own production

Variation in output and prices



Gross margin analysis

Crop	Central region		southwest	
	Gross margin (x 1000)	Return to family labour (Sh/hour)	Gross margin (x 1000)	Return to family labour (Sh/hour)
Bananas	1190	452	1844	602.7
Coffee	95.6	64.3	1255.5	924.1
Cassava	357.3	170.1	457.4	3573
S. potato	590.9	302	523.1	592.2
Maize	382.9	139.6	601.7	2274.6
Beans	469.7	163.7	469.9	453.9
Millet	-	-	484.2	360.2

Gross margin analysis and return to family labour

- Central Uganda
 - Banana production gives highest gross margin and return to family labour
 - Returns to family labour lowest for coffee possibly due to coffee wilt disease
- Southwest
 - Banana production gives highest gross margin followed by coffee.
 - Return to family labour lowest for millet most probably because the crop is labour intensive and production depends more on family labour

Returns to land and labour per acre (x 1000 U. Sh)

Crop	central		southwest	
	land	labour	land	labour
Banana	187.1	255.8	457.7	343.4
Coffee	79.8	53.7	132.1	348.7
S. potato	239.7	260.3	246.9	77.5
Cassava	181.7	72.4	152.0	126.4
Beans	125.9	137.6	138.0	189.8
Millet	-	-	162.1	52.1

Land allocation (acres)

Crop	central region	southwest
Banana	0.45	0.83
Coffee	0.24	0.06
Sweet potato	0.39	0.07
Cassava	0.28	0.04
Beans	0.27	0.31
Maize	0.28	0.03
Millet	-	0.25

Land allocation

- Allocation guided by economic returns (gross margin, and returns to factors of production (land and labour)
 - Farmers rational
- However other factors at play
 - Market failure (food and labour)
 - High food market prices compared to farm gate in central region (farmers rely more on own production)
 - Tradition
 - Land type and fertility (e.g. land not suitable for banana production could be allocated to millet in the southwest)

Conclusions

- Shift in banana production
- Central region
 - Higher share of nonfarm income for central region
 - Higher wage rates: shift to activities that are less labour intensive (banana production labour intensive)
 - High market food prices: resource reallocation in favor of crops most suited to satisfying household food requirements (sweet potatoes)

Conclusions

- In the southwest:
 - Wage rates are lower and farm sizes smaller (higher labour land ratio)
 - Farmers adopt activities that are labour intensive (e.g. bananas)
- Southwest region most suitable for commercialization of banana production

Thank you

