



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

University of Illinois at Urbana-Champaign. Dept. of  
agricultural economics

How Do Rural Women Perceive Development? A Case Study in Zambia

Jean M. Due, Timothy Mudenda, and Patricia Miller\*

GIANNINI FOUNDATION  
AGRICULTURAL ECONOMICS  
LIBRARY  
WITHDRAWN

MAR 22 1985

Zambia became independent in 1964; foreign exchange and government revenue generated by the copper industry provided the government with significant funds to undertake economic development during the first decade. In the mid 1970's the oil crisis and drastic declines in copper prices forced significant foreign exchange and revenue constraints; the pace of development slowed materially. Now the focus of the government has shifted from copper to agriculture so that Zambia, a country with good agricultural potential, will not have to import food. During this 20 year period per capita GDP has increased dramatically from \$184 in 1964 to \$560 in 1980 (1) in current prices<sup>1</sup>, but in real terms the gain is only from K80 in 1965 to K94 in 1980<sup>2</sup>. Transport, education, and power have received significant amounts of government development funds as has agriculture through guaranteed minimum prices

---

Dr. Jean M. Due is Professor of Agricultural Economics, University of Illinois at Urbana-Champaign; Timothy Mudenda is a Research Associate, Rural Development Studies Bureau, University of Zambia, Lusaka. Patricia Miller is a graduate student at the University of Illinois. Funds for this research were contributed by the Research Board, Center for International Comparative Studies, and African Studies Programs, University of Illinois and Rural Development Studies Bureau, University of Zambia. Data were collected in Zambia by James Malungo and Christopher Shandipu (university students) and Steve Kapoyo and K. Sipula of the Rural Development Studies Bureau. The authors wish to thank government officials and families without whose cooperation this research would not have been possible.

<sup>1</sup> These figures are in current dollars each year and do not reflect changes in inflation or exchange rates.

<sup>2</sup> The Kwacha was valued officially at U.S. \$1.20 in 1980. 1980 is the latest year for which data were available.



and input and credit supply for farmers, and subsidies for consumers. Do farm women, who provide one-half the labor inputs in farming, believe that they have benefitted from this development? This article attempts to ascertain whether or not Zambian rural women have observed development occurring in their area and the types of development which would most assist them.

This research was prompted in part by Liz Wily's excellent study undertaken in 10 villages in Arusha region of Tanzania (3). Tanzanian government personnel moved people from scattered farm households into ujamaa villages in the mid 1970's so that education, health, water, and politicization could be provided more inexpensively; government operations were decentralized to provide more rapid and responsible development and lip service was given to "development from below." The government's development focus is that women should not be singled out for "special" projects. Yet the political women's organizations and the ujamaa programs are oriented toward women "as homemakers"- a much too narrow focus in Wily's view-since rural women are actively involved in the farming enterprise as well as in other income generating activities. Wily concludes:

"In neither of the critical productive areas, agriculture and livestock, are programs designed to reach women farmers. Small Industries Development tends to bypass women as poor managers and disinterested parties, despite their widespread involvement in small scale production of handicrafts and utility items. More broadly, the sum effect is that the needs of rural women are still by and large falling beyond the bounds of regional development" (3, p. 15).

It is not surprising then "that few women were able to identify developments or changes since independence which had an impact, negative or positive, upon their lives." (3, p.21). Of the few women who

did respond to the question, "the answer was uniform: the provision of either water or a clinic service represented the development which had the most significant impact upon their lives." (Ibid, p.21) "Nothing has changed since Independence"; "no development has helped us" were statements continually restated (Ibid, p.21).

Wily states:

"A growing body of opinion exists which asserts that improved agricultural practices have usually had an adverse impact upon women farmers, in the sense that they create more work for women. It is the women who do the planting, the weeding, the manuring, and the spraying, not the men. Only the introduction of ox-ploughs and tractors has reduced their burden.... As long as women do not own the returns of their labor (the income) the benefits of improved production might well seem inadequate to them. It is quite likely that village women will not consider agricultural extension as having had a positive impact upon their lives until they share directly in its benefits. The women were emphatic that agricultural extension programmes over the years had had precisely no impact upon their lives at all. Rice culture was introduced into the area in 1946 and has been widely practiced along side of more traditional crops. An agricultural extension agent (Bwana shamba) has worked in the area for over 10 years. As far as women are concerned, however, "he only comes to us to buy bananas or other foods for his family." (Ibid, p. 26-7)

In conclusion, Wily found that:

"Women interviewed were more conscious and positive of those developments which had involved only women than more general village development projects. This may be the result of convention, or it may indicate that only women's projects have reached real areas of concern for women or that women consider only women's projects can tackle those concerns." (Ibid, p. 29).

Wily is not the only author who found that development is not having the desired positive impact on women which was intended. Claire Robertson, after reviewing the literature written since 1976 on women in African agriculture concludes:

"The substantive findings indicate that, despite African cultural diversity, incorporation into the world capitalist economy combined with indigeneous ideology have disadvantaged women farmers in many ways. Although African women generally do upwards of 60% of the agricultural labor, ...women do not reap proportionate profits. Instead they are losing direct access to land, and do not generally receive the benefits of extension service, vocational education, or capital inputs." (4)

Is the same view held by Zambian rural women? In order to ascertain whether or not Zambian women believe development has affected their areas and the manner in which it has done so, 112 farm women and 30 market women were interviewed in three rural areas of Zambia. The areas chosen were at three different levels of agricultural development, from traditional to more modern (using oxen and hired mechanical equipment). The most traditional area was at Mpika in Northern province, the most modern (outside the commercial farming areas) was Mazabuka in Southern province; the other area was Mwumba in Central province. Data from each of these areas had been gathered earlier in 1976; thus the sample was repeated in the same areas as the earlier study (5).

#### Sample selection

In conversations with government personnel it was ascertained that less than 5 percent of the male farmers in the areas of interest had multiple wives. Since the initial objective of the research was to document female contributions to the household income and to family labor and since the estimation of the household income would be much more complicated with multiple rather than single wives, it was decided

to select only families with one wife. The wife was interviewed although often the husband also was present. Both married and single female co-heads or heads of farm households were interviewed; 15% of the farm sample consisted of female headed households.

In Zambia each province is divided into districts and each district is subdivided into wards (party units) and the wards into agricultural camps (extension units) having a certain area, number of agricultural assistants (AAs) and number of farmers under their jurisdiction. The decision was made to select farms of between 2 and 25 hectares in size primarily producing domestic rather than export crops; farm families in settlement schemes were excluded because of special services provided. Districts were chosen purposely with concentrations of small farms to reduce transport costs. Wards were chosen at random within the districts as were the farm families; AAs normally have lists of all families in their wards; some AAs also have data on farm size and yields. In each province the same districts and wards were chosen as in 1976 with a sample of 40 farm households being drawn. In the closest market town 10 market women were selected at random with the objective of including as wide a variety as possible of market activities being undertaken.

The study was undertaken jointly with personnel of the Rural Development Studies Bureau (RDSB), University of Zambia; the questionnaire was designed by Due and Mudenda and pretested in the Mwumba area. Two staff members of RDSB participated in data collection and hired the two University of Zambia students who participated. An effort was made to recruit female students for this research but none agreed to serve



because of the short term nature of the employment and the poor housing conditions in the field. (In order to reduce costs, RDSB personnel and the students slept in sleeping bags in AA offices or unused houses and cooked their own meals while in the field.) There was concern that farm wives would not be "allowed" to be interviewed by males without their husbands' consent; this was not a problem in the field as the AA of the ward informed the families before or at the time of the interview of the nature of the study. At first the AAs brought the husbands to their offices for interviews in spite of instructions that it was the wives who would be interviewed. However, that oversight was soon corrected and females were interviewed at their homes or at AA offices, whichever was more convenient.

#### Socio-economic characteristics of the families

A profile sketch of these farm women shows that they were in their early 40's, and had less than 3 years of formal education, while their husbands had an average of 3 years. There were 6.9 persons in the household on average and the families were farming 4 acres in Northern province, 9 acres in Central and 16 acres in Southern province. These women were spending an average of 6.6 hours per day in farming during the farming season compared with 5.6 hours per day for the spouses; children were spending an average of 5.1 hours per day and others in the household 1.5 in farming. In addition the women allocated 4.2 hours per day to household activities (food preparation, child care,



household maintenance, etc.) while the spouses contributed 0.4 hours, the children 2.3 and others 0.5 hours per day. These data are shown for families sampled in each province in Table 1.

Table 1. Socio-Economic Data of Sampled Zambian Farm Families,  
By Province, 1982.

Means of:	<u>Southern</u>	<u>Central</u>	<u>Northern</u>
Age of wives	43.7	41.3	41.7
Level of education			
Wife	3.0	4.2	1.5
Spouses	4.0	3.0	2.0
Number in household	7.7	7.1	5.8
Size of farm (acres)	16.4	9.2	4.4
Hours worked in farming			
Wife	6.8	7.0	6.0
Spouse	6.4	5.6	4.9
Children 8-11	2.1	2.3	1.7
12-17	3.4	3.6	2.2
Others	2.5	1.5	.6
Hours worked in household			
Wife	3.7	4.2	4.6
Spouse	.6	.4	.1
Children 8-11	.6	1.0	.2
12-17	1.7	2.2	1.1
Others	.6	.6	.2



Has any economic development occurred?

In order to ascertain whether or not these rural women believed they had benefitted from economic development in their areas, the first question asked was, "Has any economic development occurred in your area in the last 10 years?" Development was interpreted broadly as improvements. The responses of the women are shown in Table 2. Fifty-one percent of the farm women and 57% of the market women believed that some development had occurred. There were interesting contrasts by area; in Northern province (the least developed) 77% of the farm women believed improvements had occurred; in Southern province (the most developed) only 40% saw positive changes. Women were asked what kinds of improvements they noted; improvements in farming, availability of educational opportunities, clinics and wells, village cooperation and roads and transport had the highest number of responses. For the market women, improvements in the markets, in education and in farming were mentioned most frequently. When referring to improvements in farming, women included farm inputs (improved seeds, fertilizer, tools available), oxen and ploughs, tractors and ploughs for hire, better farm prices, maize depots, dipping tanks, and so forth. Credit was listed separately although it relates to farming. Other items mentioned were roofing sheets and improved incomes. Market women observed that better farming conditions benefitted them as improved incomes increased their sales.



TABLE 2: Has Any Economic Development Occurred in Your Area  
in the Last 10 Years?

<u>PROVINCE</u>	<u>N</u>	<u>YES</u>	<u>PERCENT</u>	<u>KINDS (IMPROVEMENT IN)</u>
SOUTHERN	40	16	40	Education 5, Clinic 4, Road & Transport Improvement 4, Farming 3, Wells 3, Improved Housing 2, Maize Depots 2, Village Cooperation 2, Credit 1
CENTRAL	42	18	43	Farming 9, Education 7, Clinic 2, Improved Housing 2 Credit 2, Village Cooperation 2, Road & Transport Improve- ment 1
NORTHERN	30	23	77	Farming 8, Education 7, Women's Clubs 5, Village Cooperation 2, Wells 1, Train- ing 1, Improved Housing 1
<hr/>				
Total				
Farm Women	112	57	51	Farming 20, Education 19, Clinic & Wells 10, Village Cooperation 6, Housing 5, Road & Transport 5, Women's Club 5, Credit 3, Maize Depots 2, Training 1
Market Women	30	17	57	Markets 6, Education 5, Farming 4.

Have you gained from this development?

When these farm women who thought some development had occurred were asked if they believed they had gained from this development, 88% believed that they had (thus 45% of the total sample believed that they had benefitted). These farm women saw benefits from improved educational opportunities for their children, improved farming (including maize depots, dip tanks, seed and fertilizer availability), clinics and wells, and availability of credit. A higher percentage of the farm women in Southern province believed they had benefitted from changes that had occurred than in other areas sampled.



Ninety-four percent of the market women who said development had occurred believed they had benefitted in terms of improved educational opportunities, improved farming conditions in the area and improved markets (Table 3).

TABLE 3. Do You Feel You Have Gained From This Development?

(Asked Only of Those Who Believed Development Had Occurred)

<u>PROVINCE</u>	<u>N</u>	<u>YES</u>	<u>PERCENT</u>	<u>HOW</u> (IMPROVED)
SOUTHERN	16	15	94	Education 3, Wells 3, Clinic 3, Farming 2, Transport 2, Housing 1, Credit 1
CENTRAL	18	15	83	Education 7, Farming 5, Increased Income 3, Credit 2, Improved Roads & Transport 2, Improved Housing 1
NORTHERN	23	20	87	Education 5, Farming 5, Access To Training 3, Village Organizations 3, Housing 1
Total Farm Women	57	50	88	Education 15, Farming 12, Clinic & Wells 6, Credit 4, Transport & Roads 4, Training 3, Village Organization 3
Market Women	17	16	94	Education 3, Farming 3, Markets 2

Did you have any influence on this development?

Sixty-five percent of the farm women who saw development occurring believed they had influenced the path of development by working on projects, participating in meetings, by hard work and setting an example in good farming, and by donating money. Seventy-six percent of the market women believed they influenced the pattern of development by donating money, hard work, and





and setting an example in good marketing. Responses of both groups are shown in Table 4. These women see development as a two way street; one has to take advantage of opportunities offered as well as have access to the opportunities.

TABLE 4: Did You Have Any Influence on This Development?

<u>PROVINCE</u>	<u>N</u>	<u>YES</u>	<u>PERCENT</u>	<u>WHAT? (PARTICIPATED IN)</u>
SOUTHERN	16	11	69	Meetings 5, Worked on Projects 4, Hard work 1
CENTRAL	18	10	56	Meetings 5, Donated Money 2 By Example of Farming 2, Hard Work 1
NORTHERN	23	16	70	Worked on Projects 8, Hard Work 4, By Example of Farm- ing 2, Meetings 2
<hr/>				
Total				
Farm Women	57	37	65	Worked On Projects 12, Meetings 12, By Example 4, Hard Work 6, Donated Money 2
Market Women	17	13	76	Donated Money 4, Hard Work 3 By Example 2.

In summary, only one-third of the farm women and less than one-half of the market women believed that they had influenced the development taking place in their areas; however, about half of the women did not believe any development had occurred. Northern and Southern province women believed they had influenced development more than women in Central province; both groups of women who believed they had influence had worked on "special" projects. There

were, of course, many women who believed they had no influence. One woman responded, "There is a need for development but as a woman, I have no say in such matters." Four women said, "Women are excluded from loans;" "we need oxen to expand our acreage".

What kinds of development would most assist you?

When asked the kinds of development that would most assist these farm women, the responses were overwhelmingly farming improvements (53 responses), credit (25), clinics (19), wells (18), improved transport and roads (9), and improved extension and farmer training centers (8). (Table 5). In all areas farming improvements were the most important items that were needed by these farm women, credit was second in all areas except Northern province where wells were more important. Of the 53 who desired better farming services, 11

TABLE 5: What Kinds of Development Would Most Assist You?

<u>PROVINCE</u>	<u>N</u>	<u>KINDS</u>
SOUTHERN	40	Farming Improvements 22, Credit 11, Wells 5, Clinics 5, Road & Transport Improvement 4, Lower Input Prices 2, Markets 1
CENTRAL	42	Farming Improvements 18, Credit 12, Clinics 10, Surplus For Sale 10, Transport 5, Wells 5, More Cattle 5, Extension 2
NORTHERN	30	Farming Improvements 13, Wells 8, Farm Training Center 4, Clinics 4, Credit 2, Extension 2, Housing 2, Lower Input Prices 2, Coop for Women 1
<hr/>		
Total		
Farm Women	112	Farming Improvements 53, Credit 25, Clinic 19, Wells 18, Improved Road & Transport 9, Extension and Training Center 8, Cattle 5, Lower Input Prices 4
Market Women	55	Improve Market 10, Loans 6, Coop. for Women 5, Farm Improvement 2, Schools 2, Clinic 2

wanted oxen and ploughs, 14 higher prices and a surplus to sell, 9 tractors for hire, 9 lower input prices, 6 loans to purchase more cattle, and others wanted a maize grinding mill and assistance in drainage. Hence labor-saving devices (oxen and ploughs and mechanical assistance in ploughing) covered 20 responses. Farm credit needs added another 25 in addition to the 53.

There were not major differences in responses between farm women who believed development had occurred in their areas and those who did not in terms of the kinds of development which would most assist them. These responses are shown in Tables 6 and 7.

For the market women, improved marketing facilities were most important (10 responses) followed by loans (6), a women's cooperative (5) and improvement in farming (2), education (2) and clinics (2).

TABLE 6: What Kinds of Development Would Most Assist Zambian Women

Who Believed Development Had Occurred?		
<u>PROVINCE</u>	<u>N</u>	<u>KINDS</u>
SOUTHERN	16	Farming Improvements 7, Credit 4, Clinic 4, Improved Roads and Transport 2, Wells 1, Markets 1
CENTRAL	18	Clinic 6, Farming Improvements 5, Credit 4, Improved Roads and Transport 4, Wells 2, Extension 2, Coop for Women 1, Housing 1
NORTHERN	23	Farming Improvements 12, Wells 6, Clinic 3, Credit 1, Extension 1, Coop for Women 1, Housing 1, Input Prices Lower
Total		
Farm Women	57	Farming Improvements 24, Clinic 13, Credit 9, Wells 9, Improved Roads & Transport 6, Extension 2, Housing 2, Cooperatives for Women 2
Market Women	17	Coop for Women 5, Credit 5, Improved Markets 4, Schools 2, Farming Improvements 1, Clinic 1

TABLE 7: What Kinds of Development Would Most Assist Zambian Women Who Did Not Observe Development Occurring?

<u>PROVINCE</u>	<u>N</u>	<u>KINDS</u>
SOUTHERN	24	Farming Improvements 15, Credit 6, Wells 4, Improved Road and Transport 2, Lower Input Prices 2, Clinic 1, Coop for Women 1
CENTRAL	24	Farming Improvements 13, Credit 8, Clinic 4, Wells 3, Extension 1, Improved Road & Transport 1, Coop for Women 1, Grain Mill 1
NORTHERN	7	Wells 2, Credit 1, Farming Improvements 1, Extension 1, Clinic 1, Schools 1, Housing 1
<hr/>		
Total		
Farm Women	55	Farm Improvements 29, Credit 15, Clinics 11, Wells 9, Improve Road & Transport 3, Extension 2, Cooperatives for Women 2, Lower Input Prices 2, Housing 1, Grain Mill 1, School 1
Market Women	13	Improve Markets 6, Credit 1, Farm Improvement 1 Clinic 1.
<hr/>		

It is not surprising that these farm women, who spend an average of 6.6 hours a day farming during the farming season (compared to 5.6 hours for their spouses) in addition to an average of 4.2 hours doing household tasks, want labor saving devices and improved farm technologies-seeds, fertilizer, tools, oxen, ploughs and tractors for hire-and credit to assist in improving their livelihood. It appears that the rural Zambian women sampled, who are providing one-half of the labor in farming, want to have improved farming practices which will lead to improved income if they are going to be contributing such a high percentage of the labor.

Women were also asked for general comments. Again most of these related to farming, credit, clinics and wells. They complained about the cooperatives or marketing boards not paying for the grain for months (often payment was so late they could not obtain loans or purchase farm inputs for the next season). They wanted higher farm prices, lower fertilizer prices and availability on time, availability of farm implements, oxen and ploughs, mechanical ploughing for hire, assistance with drainage, and women's clubs. They stated that "the AAs were biased toward men or would not come to see them as their farms were too small"; they complained "loans were too slow and cotton sprays were not available for women"; "the AAs discriminate against women for fertilizer loans and other inputs." One woman stated that "The men have taken over all the money put for projects meant for women."

Are women's clubs available in these areas? In general the answer is "No"; the women who did belong to women's clubs were few; there were 3 in gardening, 3 in sewing, 4 knitting, and 5 handicraft (pottery making). Only 5 women in Mumbwa, 6 in Mazabuka and 2 in Mpika had attended farmers' training centers, home economics training, or any other type of training.

#### SUMMARY AND CONCLUSIONS

It is often perceived that rural development, when occurring, is not neutral in terms of its benefits to males and females. This study ascertained from a sample of farm and market women in three areas of Zambia whether they perceived development occurring, whether or not

they had benefitted or had influenced its path, and what types of development would most assist them. These farm women are investing on average 6.6 hours a day in farming during the farming season compared with 5.6 hours contributed by their spouses; in addition they spend an additional 4.2 hours per day doing household tasks.

One half of the farm women and 57 percent of the market women sampled believed that some economic development had occurred during the last 10 years; improvements in farming, in availability of education for their children, in clinics, and wells were mentioned most frequently. Farming improvements included availability of seeds, fertilizer, tools, oxen and ploughs, ploughs and tractors for hire, and higher farm prices. Credit was itemized separately. These women had benefited from the development.

Only one-third of the total sample of farm women and one-half the market women believed that they had influenced the path of development.

What kinds of development would most assist these rural women? There were no important differences between the choices of those who believed development had occurred and those who did not. The overwhelming first choice of the farm women was farming improvements; labor saving devices constituted 40% of these--tractors and ploughs for hire, oxen, ploughs and maize mills to purchase. Other farm improvements included higher farm prices, lower input prices, and more cattle. Credit was itemized separately and provided the second most important category followed by clinics, wells, improved roads and transport, and extension and training centers.

The market women desired better markets, loans, a cooperative for women, schools and clinics.



The authors agree with Wily that development which focuses on women as "homemakers" is a much too narrow focus for East and Central African women who allocate a great deal of time to farming as well as to "homemaking" roles. In contrast to conclusions reached by Wily and Robertson, the Zambian rural women sampled believe that they will benefit most from improvements in farming conditions; credit was the second most preferred item of assistance.<sup>3</sup> The Zambian and Tanzanian women agreed that availability of clinics and water also rated high as items which would benefit their lives.

Again in contrast to the Wily study, at least half of the women believed some development had occurred in their areas in the last 10 years. The kinds of development which had assisted them were greater availability of educational opportunities for their children, improvements in farming conditions, and in clinics and wells.

Development planners assume they know the kinds of development which will benefit farm families; usually those activities are planned with the assumption that farmers are males. In much of tropical Africa women contribute one-half the farm labor. It is important to ask both men and women which kinds of development would most assist them if the goal of increased agricultural production is to be achieved. Farming systems research also should include questions as to the development priorities of both males and females as should the ZAMARE<sup>4</sup> project in Zambia. This research has shown that rural Zambian women want improvements which assist their farming roles rather than development which focuses on their homemaking roles.

<sup>3</sup> Currently the Agricultural Finance Company (the government organization created to finance the agricultural sector) does not provide credit to women when they apply in their own names unless they are widowed or divorced.

<sup>4</sup> The ZAMARE project is a research and extension project financed by USAID and the Government of Zambia.

References

1. World Development Report 1982, World Bank, Washington, D. C.:  
p. 110.
2. United Nations Statistical Yearbook, 1979/80, United Nations, N. Y.:  
p. 639 and Bank of Zambia Annual Report, 1981, Government of Zambia,  
Lusaka, 1982. In this estimate we have used Kwacha throughout to  
avoid the foreign exchange conversion problems; the Kwacha have been  
converted into constant values.
3. Wily, Liz, Women and Development: A Case Study of Ten Tanzanian  
Villages, A Report Prepared For Arusha Planning and Village Development  
Project, Arusha, Tanzania, Regional Commissioner's Office, Arusha:  
1981.
4. Robertson, Claire, "An Overview of Literature on African Women's  
Agriculture, 1976 to the Present," an abstract of a paper to be  
presented at the African Studies Association meeting, December 1983  
(forthcoming).
5. Due, Jean M., Agricultural Credit in Zambia By Level of Development,  
Rural Development Studies Bureau, University of Zambia, Occasional  
Paper, 1978, Lusaka: 1978.