

## REDUCING RURAL HOUSEHOLD POVERTY IN GHANA: A CASE STUDY OF WOMEN IN NON-FARM ENTERPRISE ACTIVITY IN KASSENA-NANKANA DISTRICT

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### ABSTRACT

*Through no conscientious strategic policy orientation, rural women in the Kassena-Nankani District are making a perceptible impact on household poverty reduction in their domain. They do it through their engagement in non-farm economic activities. On the basis of a number of pointers, the results of this research show that non-farm small enterprises activities constitute major sources of employment and income generation to rural women from which they make a contribution to household expenditure. The rural women entrepreneurs are able to support the provision of basic household needs and the development of sustainable household livelihood systems. Through that, industrious women are able to gain social recognition and respect at the household and community levels. To improve the situation and optimise the contribution of rural women to household poverty reduction, the study recommends the promotion of non-farm based employment for rural women.*

**Key Words:** *Poverty, Non-farm Micro Enterprises, Rural Women, Entrepreneurs.*

### INTRODUCTION

Majority of the world's poor are rural and depend largely on agricultural and other natural resource-based activities. Statistics indicate that 1.2 billion people worldwide are in dollar poverty, consuming less than a dollar a day. Of the dollar poor, 75 percent of them work and live in the rural areas (IFAD, 2001: p.15). Poverty reduction programmes must, therefore, be focussed on the rural poor if they are to succeed. Non-farm enterprise promotion is paramount in the poverty reduction endeavours. Referring to these non-farm enterprises as "industrial enterprises" in a study of poverty in the Upper-West Region of Ghana, Songsore and Denkabe observed that these activities were "indispensable for the sufficient village-based economies of the area" (Songsore and Denkabe, 1995: p.41).

In Ghana, poverty is characterised by low incomes, malnutrition, ill health, illiteracy and insecurity. There

is also a sense of powerlessness, isolation and exclusion (Dinye, 2002). Statistics on poverty reduction in Ghana during the last decade witnessed a considerable change and progress. Overall poverty in the country decreased from 52 percent in 1991-92 to 40 percent in 1998-99. Extreme poverty, referred to as including individuals unable to meet the minimum of basic and non-basic food needs, also declined from 36.5 percent to 26.8 percent over the period (Rep of Ghana 2002). The reductions in poverty were concentrated in Accra and the forest localities whilst the proportion of the population defined as poor increased during the period for the rural savannah of Northern Ghana of which the Kassena-Nankana District is a part (Figure 1).

### The Issue

Poverty in the Kassena-Nankana District manifests itself in a number of dimensions. Low agricultural

production and attendant low incomes manifest in a chronic 'seasonal hunger' that is built into the pattern of life of the people. Unmet food and nutrition needs of households are common and result in under nutrition in children, pregnant women and lactating mothers, which lead to poor health conditions. Studies in the district indicate that Protein Energy Malnutrition (PEM) is rampant as reflective of anaemia being a leading cause of morbidity (KNDA, 1996). Widespread nutritional adversity in the district exacerbates the mortality impact of infectious disease (NHRC, 1999). While this is the case, there is low economic accessibility to bio-medical health services owing to low incomes among the populace (Binka et al., 1994). Illiteracy among the population is high and in its gender dimension more pronounced among women. In the district pro-natal culture strives and male chauvinism predominates, so that poverty is not gender neutral. Reportedly, women are often among the poorest of the poor due to their gender related vulnerability (Radwan, 1995). In the district, such vulnerability reflects in their lack of ownership and limited access to the most important capital in these agrarian economies owing to patriarchal cultural values. Husbands therefore, exercise decision-making powers and establish their superiority over their spousal counterparts in the economic and social domains of life (NHRC, 1999). As a corollary, women in the district have limited decision-making influence in the management of household's agricultural output although their contributions to such outputs are often enormous.

#### Research Agenda

Undisputedly, poverty in the Kassena-Nankana District is enormous in its proportion and constitutes a case for consideration in the poverty reduction efforts in Ghana. Many questions, however, remain to be answered as to the way forward and the appropriate approaches. Decentralization offers the opportunity for participation of all segments of society, including women in poverty reduction activities within the framework of District Development Planning and Management. In the light of persistent widespread poverty, the pertinent questions that need to be addressed include those relating to the non-farm micro-enterprises that women have long been engaged in. This is crucial because of the underprivileged position of women notwithstanding the significant role that they can and do play in poverty reduction. Do non-farm enterprise activities have a utility function in the

building of economic production capabilities of rural women entrepreneurs in the patriarchal communities such as those in the Kassena-Nankana District? How much are they producing and how do agricultural production of these predominantly agrarian households and the politics of household decision-making affect production of women's non-farm micro-enterprises and welfare of households? Does such production contribute to household poverty reduction and to what extent if so? To investigate these issues, the study focussed on six enterprises that include sheabutter extraction, 'pito' (local alcohol) brewing, rice milling, restaurant services, trade and pottery. The limitation of the study to six enterprises was for two reasons: firstly, the observation that the selected enterprises were common among rural women; and secondly, the need to narrow the scope of the study to manageable limits dependent on research resource constraints.

#### RESEARCH OBJECTIVES AND METHODOLOGY

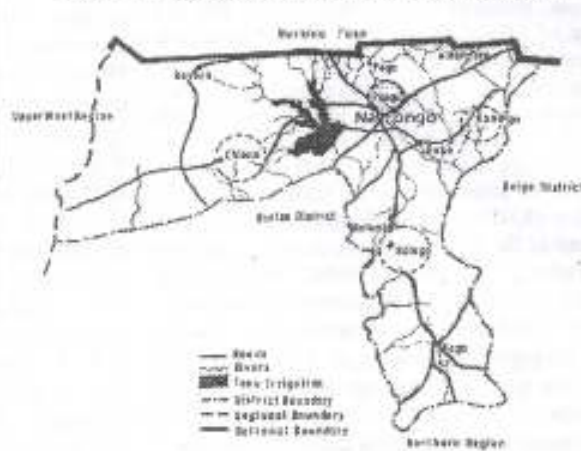
The objective of this paper is to assess the utility of non-farm micro enterprises that rural women entrepreneurs are involved in, in terms of their contribution to economic production and poverty reduction at the household level. Specifically, the study sought to find out the following: (a) to assess production levels of non-farm micro-enterprises of rural women entrepreneurs within the household; (b) to find out how household agricultural production, as a major production activity of such agrarian societies affect the development of non-farm enterprises and vice versa; and (c) to assess the contribution of women entrepreneurs to household poverty reduction from their non-farm micro-enterprise production.

The study combined survey and case study methods of data collection and analysis in the technical design. Interview schedules were particularly administered to 294 rural women entrepreneurs in the survey through a combination of purposive and accidental sampling methods in four communities - Pungu, Chiana, Kologo and Kandiga (Figure 2). The sample size for the survey exceeds the minimum sample size requirement by 8% at 90% confidence level if minimum sample size required ( $n$ ) according to Saunders et al (1997: p.412) is given by:

FIGURE 1 MAP OF GAMBIA SHOWING BAISSERA-KANARA DISTRICT



FIGURE 2 KASSALA-KANARA DISTRICT MAP SHOWING STUDY COMMUNITIES



$$n = p\% \times q\% \times z^2 = 52\% \times 48\% \times 1.65^2 = 2496 \times 0.1089$$

where  $p\%$  = proportion of rural female population (34,761) between 15 and 65 years of age;  $q\%$  = proportion of rural female population outside 15-65 age bracket (66,704);  $z$  =  $z$  value corresponding to 90% confidence level (1.65);  $c\%$  = acceptable margin of error, which is 5% for this sample. Population statistics on the district were derived from Nyarko et. al (1996). For case study methods, group interviews were conducted and a seasonal calendar was adopted for leaders of two women groups (one in Chiana and the other in Kandiga), while focus group discussions were held with traditional chiefs and their councils of elders in the four communities.

## AN OVERVIEW OF THE CONCEPTS

### Poverty: Definition and Measurement

Poverty is a condition or state of livelihood that can best be defined by the accounts of those who experience it (Dzradosi, 2001: p.7). It refers to circumstances of deficiency or lack of something physical and/or intangible and amounting to a status of inferiority or low self-esteem. It manifests itself in various forms, which collectively or individually impact negatively on the sufferers. It breeds apathy and lethargy amongst them and prevents them from realising their potential. The significant manifestations of poverty include material deprivation, lack of assets, isolation, vulnerability, lack of decision-making power, constrained

freedom of choice and opportunity in matters of production, consumption, employment and socio-political representation (Appiah, 2000: p.2).

In practice, evidence of poverty is captured based on an array of indicators with reference to illiteracy and access to basic education, prevalence of debilitating diseases, life expectancy levels of household incomes, employment and access to basic needs amongst others. On the basis of the single indicators, the poor can be characterised for instance in terms of designations such as the income poor, the education poor and the health poor as the case may be. Also a composite index can also be obtained involving a combination of indicators.

To obtain measures of poverty, two broad approaches are employed in the definition of poverty - "relative" poverty and "absolute" poverty. In this regard, two poverty lines are applied to the distribution of standard of living measure(s). Poverty dimensions are concerned about the censored distribution of persons below the poverty lines. Absolute poverty is the inability to secure the minimum basic needs for human survival according to standards so low that they are rightly labelled as beneath any concept of human decency (Serageldin, 1989: 28). It is "a condition so characterised by malnutrition, illiteracy, disease, squalid surroundings, high infant mortality, and low life expectancy as to be beneath any reasonable definition of human decency" (Chambers, 1983: p.1). Relative poverty refers to the situation

whereby the minimum basic needs for human survival are barely met. It is a standard measure of deprivation by which people at the bottom of society whatever their lifestyles are adjudged to be disadvantaged in comparison with the nation as a whole. Absolute and relative poverty are both defined by lines set in relation to average expenditure and income or the cost of a bundle of goods assuring basic consumption needs.

There are other definitions of poverty that attempt a blend of the two conceptions. For instance, IFAD (2001: 19) state that, "poverty can be seen as broad, multidimensional, partly subjective, variable over time, comprising capabilities as well as welfare, and in part relative to local norms, comparisons and expectations". Poverty is a value judgement that is not something one can verify or demonstrate except by inference and suggestion and even then with a measure of error. To say who is poor is to use all sorts of judgements. The concept has to be limited by the purpose for which it is to serve by the definition. Depending on whether poverty is perceived in terms of absolute or relative deprivation (Webster, 1984 p.18), the numbers classified as poor will differ and so will the approaches required for poverty reduction.

#### **Gender and Poverty**

The relationship between gender and poverty is now well established. IFAD (2001: 28) notes that "poverty is not gender neutral; women enjoy less access and control over land, credit, technology, education, health care and skilled work. Women also suffer discrimination in pay and in access to land, legacies and credit. Though the evidence (in most countries) does not suggest that women are more consumption-poor than men, their control over income is certainly less. It is based on more menial and less self-directed work accompanied by the 'double day' of care for home and children, frequent pregnancies and frequent child deaths". Deriving from the above, it is clear that the disadvantage of women stems from the socio-cultural environments that they find themselves. In relation to relative deprivation, customary values and traditional paternalistic life styles make women gradually slip out of mainstream social and economic life within the household almost unnoticeably.

#### **Women in Non-Farm Micro Enterprises**

Women engage in non-farm micro-enterprise activities that turn to fall within a range of smallholder agro-processing and extractive industries, rural crafts and trade in the informal sector. Aryeetey (2000) stated that women who use rudimentary technologies and tedious but outmoded labour-intensive methods do prepare the bulk of locally processed foods on the Ghanaian market. Women artisans and traders are widespread and involved in services such as dressmaking, hairdressing and commerce.

The definition of micro-enterprise or what may also be referred to as small-scale industry differs in criteria and from country to country. The criteria range from the number of employees, level of capital investment and turnover to the location of the enterprise. The commonest criterion, however, is often the number of people employed in the enterprise. In using the employee criterion, Poppe (1998) characterizes cottage and household industries as employing 1-9 persons and small-scale industries. He distinguishes between two forms of non-farm enterprises, namely household based rural industries and owner operated workshops, which are both common in rural communities of Ghana. Employment seems to be the most important criterion for classifying industries in Ghana. The standards are that industries that employ between 1 and 29 persons are "small scale industries" while those that employ between 30 and 200 persons are medium-sized enterprises. Micro-enterprises are small enterprise activities, which employ less than 5 persons and ownership is in the main sole proprietorship.

## **RESULTS AND DISCUSSION**

### **Production Levels of Rural Women**

#### **Entrepreneurs**

Women undertake non-farm enterprise activities within the household production system. The calculation of weekly mean outputs and their respective standard deviations for the different enterprises are presented in Table 1.

**Table 1: Production Levels of Non-Farm Micro-Enterprises Per Week**

Enterprise Type	Production Level		
	Unit Measure/Volume	Mean Output	Standard Deviation
Shea Butter Extraction	Calabash (1000 ml)	12.3	32.7
Rice Milling	"Olonka" bowl	6.2	2.7
Pito Brewing	Calabash (300 ml)	18.5	26
Restaurant Services	"Olonka" bowl	6.6	3.2
Pottery	Pots (varied sizes)	19.5	21.6

Men's outputs vary between enterprise types perhaps due to the varied nature of their respective products. Standard deviations of outputs for entrepreneurs in rice milling and restaurant operators indicate little departures from their mean outputs. This also implies entrepreneurs in these enterprises are producing at levels in the vicinity of the mean outputs. The deviations in output in the areas of shea-butter extraction, pito brewing and pottery are significant and indicate wide variability in production levels between women entrepreneurs in these enterprises. Deriving from this, it is also plausible to observe that wide variability in capital distribution amongst women in these enterprises is partly accountable for wide variability in their output levels. Although these enterprises produce all year round, it is important to caution that their production levels vary because of seasonal variations in the supply of raw materials.

#### Household Agriculture and Non-Farm Enterprise Development

The study highlights how agriculture as the main production activity of agrarian households affects the development of non-farm enterprises and vice versa. The results show that households are predominantly engaged in agriculture within the household production system. Within this framework, they are producing food crops, livestock and poultry. Although little quantities of food crops may be sold, they are directly and strongly tied to the subsistence of the household. Livestock and poultry are hardly eaten at home as part of routine feeding practice. Rather they constitute a resource pool from which husbands sell to generate income for varied purposes. Agriculture production is predominantly dependent on an erratic pattern of rainfall, and as a result food crop production levels are characterized by fluctuation.

From focus group discussions, discussants reported that it was a common practice for husbands to support their wives engaged in non-farm enterprises with cash from the sale of livestock and poultry particularly when their businesses run into financial crisis. They also reported that some husbands allow their wives to use their animal drawn carts to meet transportation needs of their businesses. This, however, is so as long as husbands perceive wives to be making up for household food deficits from enterprise activities. Other conditions husbands reportedly consider include cultural acceptability of the behaviour of women in terms of respect for husband and consultations on expenditure from returns to enterprise activities. It became clear that husbands generally entertained fears of arrogance of wives in the event that they get richer than them through enterprise activities. Amidst these concerns, however, women entrepreneurs have contributed to investments in household agriculture production from non-farm enterprise production. When food crop production fails and seed for next production season is not available from household produce, women have contributed to the purchase of seeds. In certain instances, women had hired casual labour to work on household farms but this must be to allow them some time to engage in non-farm enterprise production. In other instances, women entrepreneurs had bought livestock and poultry to add to household stock for production purposes.

#### Farm and Non-farm Activity Interrelationships

A number of issues are discernable from the findings. In the first place, there is a mutual resource flow between agriculture and non-farm enterprises of women within the household production system. In the light of fluctuations that characterize agriculture, particularly food crop production, it is plausible to conclude that the essence of promoting

diversification in household production must be to widen household safety nets and reduce risk of failure in household livelihood. According to Martinussen (1997), households are, in the real world, not free to choose how to allocate time, the basic resource of the household in relation to material and social reproduction. They are constrained by the necessities of producing a livelihood for their members:

Secondly, to the extent that non-farm micro-enterprises of women contribute to household livelihood, they have become to some extent partnership enterprises in disguise to which spousal counterparts are the latent partners who support from the background. By implication, there is a potential for increase capitalization of non-farm enterprises through household agricultural production that husbands exercise decision-making authority over. Taking cognisance of resource flows between household production activities can serve as an entry point for external interventions geared towards capitalization of non-farm enterprises and development of sustainable household livelihood.

The above, are of particular relevance to poor households. Firstly, that the households' production of livelihood implies a merging of economic activities and other life generating forces. This then helps to explain that time allocations of household members to considerable part of the economic activities, are not geared towards limitless accumulation, but to creating a livelihood for the producers and their households: Secondly, it follows that consumption as an activity, cannot be meaningfully separated from production as in neo-classical economics. In this light, Martinussen concludes that:

"as producers of their own life and livelihood, households are viewed as proactive and capable of pursuing their own interests, again unlike neo-classical economies where their role consists primarily of consumption and biological reproduction of labour... Poor and resource-weak households may not always succeed, of course, in achieving a decent level of living, but the point is they are generally capable of making the best possible out of the situation they live in" (Martinussen, 1997: 312).

## WOMEN ENTREPRENEURS AND HOUSEHOLD POVERTY REDUCTION

### Employment for Rural women

Non-farm enterprises constitute the major occupations and sources of income to rural women. This is however, aside the fact that all rural women are engaged in agricultural production as a primary activity of the rural household. The survey data show that 71% women entrepreneurs were engaged in home based non-farm enterprise activities as their major occupations. Of the total number of women entrepreneurs interviewed, 37% were involved in trade, 20% in shea-butter extraction, 18% in local restaurant services and 14% in local alcohol "pito" brewing. Relatively few women entrepreneurs were found to be involved in rice milling and pottery as reported by 8% and 3% of respondents, respectively. Pottery was found to be common only in Chiana and Kandiga with 3% and 5% of respondents reporting to be involved in the activity, respectively. The findings further show that only about 2% of women entrepreneurs were involved in more than one of the non-farm enterprises studied. This means economic specialization is emerging from these rural communities in the area of industry.

### Capitalisation

The non-farm productive activities are undertaken within the household production system so that in the light of low capitalisation, they often have location advantage of utilising household resources particularly free for production purposes. These characteristics then remove such enterprises from the scope of formal sector employment and production so that they are most suitably classified under the informal sector.

Deriving from the results, a number of issues are discernable for discussion. It is not only conclusive that non-farm enterprises are offering employment to many rural women. In the light of seasonal agriculture, non-farm enterprises contribute to reduction in underemployment amongst rural women in the area. To the extent that non-farm micro enterprises are the major occupations of women, Boapeah and Poppe (1992) observe that it indicates a sense of permanence, close attachment and incentive for long-term improvements of the enterprises.

### Fungibles of Time

Characterising employment conditions in the informal sector, Paul Streeten identifies four distinct groups amongst which one best describes the situation in the study district: "the self employed, who sometimes use the unpaid labour of members of their families" (Martinussen, 1997: 315). Mainstream approaches within development research until 1970s, is said to have mainly paid attention to the informal sector as a segment of society bound progressively to disappear as a result of economic growth and structural transformation. Modernization and Neo-Marxist theories regarded the informal sector as part of traditional society that will be replaced by modern institutions and practices that is integrated into the capitalist and market economy. Contrary to these speculations, the informal sector has survived over time in the vast majority of developing countries. The experience has been a greater growth in informal employment than in formal, whipping up interest in understanding the salient features of the informal sector and its dynamics (Martinussen, 1997).

### Informal Sector Growth

Following empirical studies, various theories have been proposed to explain why the sector continues to grow in Africa and Asia. One of these explanations simply holds the view that the labour force in the countries concerned has grown much more rapidly than the number of jobs in the organized economy and the public sector. An increasing number of people have therefore, turned to the informal sector productive activities for their livelihood.

Although this may hold true for the study district, the problem convincingly is much more of underemployment conditioned by seasonal agriculture and patriarchal cultural practices of land tenure and household resource management that limits women's access to productive resources. The International Labour Organization (ILO) in its 1972 Employment Strategy Mission to Kenya popularised production and employment in the informal sectors for two reasons: firstly, a look at the "informal sector" as a large source of employment potential; and secondly, a recognition that the major employment problem was not unemployment, but the existence of large numbers of the "working poor", involved in unrecognised, unrecorded, unprotected or unregulated production of various goods and services. Many such workers are self-employed and their poverty can be attributed to inadequate access to productive assets (Radwan, in Bruan, 1995: P. 28).

### Incomes Sources for Rural Women

The survey revealed that non-farm enterprises, farming and remittances constitute the major sources of income from which rural women undertake expenditures. The study examined the sources of income from which rural women entrepreneurs contributed to household expenditure under the following broad categorizations: food, education, health and water levies over given time periods, which are highlighted later. The results are presented in Table 2.

Table 2: Income Sources of Women for Contributions to Household Expenditure

Household Expenditure Item	Frequency (f) of Responses by Type of Source						Total Freq. (f) of Responses for Household expenditure items	
	Enterprises		Farming		Remittances		No.	%
	No.	%	No.	%	No.	%		
Food	276	93	12	4	9	3	297	100
Education (Uniforms/Fees)	41	91	1	3	3	6	45	100
Health (Drugs/User fees)	34	94	1	4	1	2	36	100
Water Levies	39	94	1	3	1	3	41	100
Total	390	93	15	4	14	3	419	100

Source: Derived from Authors' Field Survey, May 2003

It is clear that non-farm enterprises constitute the most important source of personal income to rural women from which they make contributions to household expenditure as evidenced by 93% of total responses. For the remaining expenditures, 4% and 3% was financed through incomes from farming and remittances, respectively. In the light that non-farm enterprises constitute the major source of income to rural women, how much are they earning from enterprise production? The data shows that rural women entrepreneurs earn different levels of incomes depending on the type of enterprise activity. For the purpose of this study, total incomes accruing to women entrepreneurs were obtained by an assessment of the current market values of their production outputs. For the analysis, per unit prices of products/services of non-farm enterprises were obtained from a market survey in the district. These market prices were then used together with outputs to assess incomes accruing to women entrepreneurs. Statistical analysis of the data reveals different measures of central tendencies and dispersions for women entrepreneurs. The measures are presented in Table 3.

Women entrepreneurs in restaurant services, pottery and rice milling earn higher incomes as evidenced by their mean incomes than their counterparts in shea-butter production, pito brewing and trade (Table 3). The standard deviations of incomes accruing to women entrepreneurs are quite high in values and indicate that income distributions are generally well spread out about the mean incomes. The standard deviation of income for restaurant operators and women in pottery are extremely high and indicate an extremely high variability of income distribution about the mean income. An assessment of profits from the survey revealed that, a woman entrepreneur is making an average profit of €9,325 per week after deducting cost of materials and energy. Respondents in most cases could not estimate transportation and labour costs particularly when labour input came from they themselves. In this light, profits are about 24% of total sales after deducting only material and energy cost only. A standard deviation of €13,000 about the average profit was derived and point to a fairly wide variability of profits among women entrepreneurs. By implication, profits generally fall below 24% of total incomes (sales) if all cost elements of production were considered.

Table 3: Income Levels of Women Entrepreneurs in Cedis Per Week

Entrepreneur Type	Mean Income	Standard Deviation
Shea Butter Producers	21,525	19,623
Rice Millers	81,311	34,340
Pito Brewers	27,865	38,801
Restaurant Operators	166,346	79,871
Potters	97,500	87,117
Traders	40,869	34,510

Source: Derived from Authors' Field Survey, May 2003

Non-farm enterprises are the major sources of income to rural women. They also represent the potential sources of increasing household incomes in the rural areas. Permanent salaried employment particularly in the developing world is said to be an important source of incomes for only a minority of families. Rather, "combinations of subsistence production, petty commodity production, small-scale trading, services and other forms of unregistered informal activities have become more important sources of income to a fast growing number of households" (Martinussen, 1997: 314).

#### Contribution of Women Entrepreneurs to Household Expenditure

The subject of decisions over expending from enterprise returns was predominantly reported to be the preserve of women entrepreneurs themselves. Within this framework of decision-making, the study found that women entrepreneurs generally contributed to meeting food, educational, health and potable water needs of their households. Table 4 is a tabulation of the contribution of women entrepreneurs to household expenditure.



Table 4: Contribution of Women Entrepreneurs to Household Expenditure in Cedis

Expenditure (000's)	Frequency of Response By Expenditure Type												
	Food weekly			Education termly			Health quarterly			Water yearly			
Class	X	f	fx	fx <sup>2</sup>	f	fx	fx <sup>2</sup>	f	fx	fx <sup>2</sup>	f	fx	fx <sup>2</sup>
0 < 2	1	176	624	176	2	2	2	16	16	16	14	14	14
2 < 4	3	28	300	252	1	3	9	3	9	27	8	24	72
4 < 6	5	29	510	725	12	60	300	4	20	100	8	40	200
6 < 8	7	10	252	490	5	35	245	1	7	49	2	14	98
8 < 10	9	12	396	972	1	9	81	3	27	243	5	45	405
10 < 12	11	9	352	1089	2	22	242	1	11	121	2	22	242
12 < 14	13	24	1118	4056	15	195	2535	6	78	1014	1	13	169
14 < 16	15	9	480	2025	7	105	1575	2	30	450	1	15	225
Total		297	1129	9785	45	431	4989	36	198	2020	41	187	1425
Mean		3,800			9,600			5,500			4,560		
S.D		4,300			4,400			5,200			3,700		

Source: Derived from Authors' Field Survey, May, 2003.

Note:  $x$  = class mark = average output per classification of the variable.

$f$  = frequency of responses.

Mean = the value of the variable which constitute the average of the total frequency distribution given by the formula:  $(\bar{x}) = \sum fx / \sum f$ .

SD = standard deviation is a measure dispersion of the frequency variables from the mean which can be positive or negative.

### Enterprise Development and Household Food Security

A woman entrepreneur is contributing an average of ₵3,800 in a week to household food expenditure (Table 4). A standard deviation of ₵4,300 for the data on food expenditure indicates a fairly wide variability of the data. By implication some women are either contributing below the average or far more than the average expenditure on food. This statistic is however, only on cash contribution and does not include what is directly consumed from women's non-farm enterprise production. The results revealed that the household directly consumes part of women's non-farm enterprise production. This therefore, means that the woman entrepreneur, in reality is contributing far above the statistically derived average expenditure of ₵3,800 per week to total household food expenditure. Deriving from Table 2, as much as 70.9 percent spending constituted expenditure on food; 10.7 percent as expenditure on education; 9.8 percent as expenditure on health and 9 percent as expenditure on water. The responsibilities of women have gone beyond providing 'soup ingredients' and undertaking household tasks to

actually providing the grains such as millet, sorghum, (normally a man's task), in times of poor harvest during the lean season.

The rural women entrepreneurs in Kassena-Nankana District are contributing immensely to meeting household food needs. As the analysis shows, the contribution of women entrepreneurs to meeting food needs goes beyond monetary contribution to include direct household food security in recent times as a result of erratic rainfalls and decreasing soil fertility, non-farm enterprises have become an important source of household food security. Women sustain households from returns on non-farm enterprises during periods of dire need and hunger. Indeed, what seems plausible is that women's contribution to household food budget has persistently increased over the past and gradually been institutionalised as the norm in these patriarchal communities. It must be for this that spousal counterparts of women entrepreneurs find it necessary to support the capitalization of non-farm enterprises their wives are engaged in.

### Enterprise Development and Household Social Service Provision

As can be deduced from table 4, women are also contributing to meeting vital social services in the areas of education, health and water supply. The data show that a woman entrepreneur is contributing on the average €9,600 on education per term as school fees and cost of uniforms, €5,500 on health quarterly as user fees and cost of drugs and an average of €4,560 on potable water per annum. The standard deviations as can also be seen from the table are also quite substantial and reveal a fairly widespread expenditure differences on education, health and water between women entrepreneurs. The statistics on health expenditure are limited to the area of modern bio-medical health services and does not include traditional medicine. It is therefore, important to caution that statistical figures could be higher than they are if expenditure on traditional medicine were captured. Nonetheless, expenditure on biomedical health services rather seem to be on the lower side and in conformity with findings by Binka et al. (1994) that finance may be a more constraining factor to health service utilization in the district because even in communities where health centres are located, their utilization is considerably low. In the light of this, and widespread illiteracy, the contribution of women no matter how little such contributions are, impinge on family welfare and human resource development, and as a whole contributes to poverty reduction in households.

### Enterprise Development and Household Resource Management

Non-farm enterprises of women create additional household wealth and change the politics of household resource management decision-making. With additional household resources created from non-farm enterprises, women are generally allowed within culturally accepted norms to take decisions as to how to expend such resources, although spousal consultations may be made in some instances. It is therefore, conclusive that firstly, women derive economic resources from non-farm enterprises and secondly, that such economic enhancement brings with it, social recognition and the realization of self-esteem among women in the context of a patriarchal culture.

Deriving from the evidence on resource management decisions of women entrepreneurs, it

is indisputable that while they seek the sustainability of their enterprises by investing in them and participating in the market, the ultimate and overriding objective is not capital accumulation but the provision of basic subsistence to their households that impinge on their culturally prescribed normative roles as wives and mothers. Economic relations and economic activity are deeply embedded in the matrix of social and cultural relations. They further assume that "the specific characteristics of these social relations are more important determinants of human behaviour than the incentive structures proposed by mainstream economists, that is the utility and profit maximization" (Martinussen, 1997: 310).

### SUMMARY OF FINDINGS

The paper sought to examine the contributions of rural women entrepreneurs to household poverty reduction from non-farm enterprise production that they undertake in rural Kassena-Nankana District. The rural women entrepreneurs in the district are contributing to household poverty reduction from the incomes they get through their engagement in non-farm enterprise production. The evidence point to some indications, which include the following:

- Women in non-farm produce relevant and affordable items to rural household consumption and production, which in this case include sheabutter, processed grains, clay pots and pito;
- The contribution of women goes beyond monetary contribution to include promoting household food security as a result of erratic rainfall and soil infertility which has led to widespread food shortages within the home;
- The rural women also contribute towards meeting household food needs and security as well as vital services comprising education health and water;
- Non-farm enterprises of women create additional household wealth and change the politics of household resource management and decision-making. Industrious women are allowed within culturally accepted norms to take decisions on how to utilise their own generated resources.
- The economic enhancement of the women brings with it social recognition and self-esteem in this patriarchal culture
- There is a mutual flow of investment resources between agriculture and non-farm enterprises

of women within the household production system implying that the household economy can be diversified as strategy for developing sustainable household livelihood.

## CONCLUSION

In conclusion, women entrepreneurs are contributing to household poverty reduction in rural Kassena-Nankana District. The evidence reveal that rural women are largely engaged in non-farm enterprise activities as their major occupations and that these provide them with the economic resources from which they are contributing to household poverty reduction. Non-farm enterprises of women have become important in developing sustainable household livelihood systems – providing food particularly when agriculture fails and promoting household economic access to social services. In its gender dimension, non-farm enterprises have helped push women up the social ladder, promoting gender equity in household resource management decision-making. As a corollary, the study recommends that developing non-farm enterprises of women is a “sine qua non” to catalysing the role of rural women in household poverty reduction in the Kassena-Nankana District of Northern Ghana.

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