RESEARCH ARTICLE

A LOGIT ANALYSIS ON THE MECHANIZATION OF FARMS IN THE EJURA MUNICIPALITY: THE ROLE OF MILLENNIUM CHALLENGE ACCOUNT (MCA) FUNDS

[1]Joseph Afriyie, [2,*]Augustine Adu Frimpong and [3]Frank Obeng

[1] Department of Economics, KNUST, Kumasi, Ghana West- Africa
[2]Department of Business, Valley View University, Techiman Campus, P.O.Box 183, Techiman, Ghana
[3]Department of Economics, KNUST, Kumasi, Ghana West- Africa

ABSTRACT

Agricultural growth has remained one of the greatest issues of concern to the economies of sub-Sahara Africa. It is seen as one of the basic areas which if properly managed would alleviate the severity of poverty that most countries in Africa are saddled with. The study was purely quantitative in nature. The study made use of cross-sectional source of data. The research work randomly selected 100 beneficiary farmers of the MiDA facility and 100 non beneficiary farmers from the Ejura Municipality, specifically from the major farming territory zones of the area. The study adopted logit model to examine the determinants of level of mechanization of the farmers' farms. This model was adopted to find out whether the farmers have mechanized or non mechanized farming. With regard to the relationship between the level of mechanization and the financial facility, the regression results depict that there is a positive and a significant relationship. This implies that as the farmers have access to the facilities, there is the greater probability that mechanization of their farms will increase. The study recommended that, the farmers should therefore be further and better assisted to enable them enhance their productivity, and to also ensure the continuous increase in both the scale and mechanization of their farms.

INTRODUCTION

Indeed, agriculture needs to be said again that the oldest and noblest profession that nature bequeathed humankind with at the inception of creation is agriculture. Agriculture therefore has biblical underpinnings and consequently there should be every measure of reputable standard to put in place to underscore its ever flourishing and overt importance to the life of mankind. It is therefore in the light of this that is why this sector happens to be the bedrock of the economies of most countries in the world, particularly the developing countries. Provision of adequate food and the alleviation of poverty has been a serious issue of concern on both the international scene and the local arena. Governments' worldwide and other international institutions concerned with ensuring a comfortable life for humanity as well as major think tanks and policymakers are always poised to ensuring that the income levels of people are raised to make them meet at least the basic necessities of life. In the pursuance of this aim, measures are put in place both on the international scene and the local level to gear towards raising the well-being of people through improvement in their incomes.

The government of Ghana, in conjunction with the US government, in 2007, signed an agreement to implementing the MCA aimed at providing financial push to some sectors of the Ghanaian economy, of which the agricultural sector was no exception (Dadson et. al., 2013). The aim of the government's move was to empower the farmers to be able to increase productivity and thus their income levels in order to mechanize their farms. The problems of agriculture in Africa of which Ghana is inclusive are enormous, ranging from low productivity due to inadequate funds, post-harvest losses, through to lack of mechanization. In a situation like this, poverty will be a common disease affecting most of the people in the African continent (Abdulai, 2000). From the foregoing picture, it is very palpable and unequivocal that attempts by governments and other world leaders aimed at reducing poverty and engendering development cannot be overemphasized. The Millennium Challenge Account (MCA) is no exception in this direction. The MCA is originally supposed to address the basic problems that the agricultural sector is beset with, of which low productivity, low farm size and lack of mechanization, cannot be left out. In view of the above problem, the study sought to find out the impact of the government financial facility on the extent of mechanization of farms in the Ejura Municipality.

*Corresponding author: Augustine Adu Frimpong
[2]Department of Business, Valley View University, Techiman Campus, P.O.Box 183, Techiman, Ghana

LITERATURE REVIEW

There has been a plethora of arguments by a gamut of authors espousing the need for assistance basically by governments to help boost productivity of farmers and to also impact on the well-being of the farmers concerned. The role of the agricultural sector is critical in terms of sustainable growth and development through farm mechanization. The various theoretical propositions are unravelled below. Farmers, in India, often lack capital for investment in agriculture that is so very vital for improving their agricultural production. This paucity of capital flow perforce makes them seek loans from money lending sharks at exorbitant rates of interest and often this debt-trap reduces them to penury. It becomes difficult for the farmers to come out of this debt-trap even when faced with a favourable season and a good harvest. The problem stands compounded and further exacerbated when farmers look forward to taking advantage of modern high yielding seed technology and absorbing newer methods of scientific farming which require both working capital and investment capital (Deepak, 2002). In the present milieu, commercialization of agriculture coupled with increasing requirement of credit have put a lot of onus on various agricultural financial institutions to play a pivotal role in meeting the increasing capital needs of the farmers and in ensuring timely supply of various inputs besides providing other service facilities. The diversification of agriculture over the years has further accentuated the need for the rapid development of rural infrastructure and larger flow of credit to farming community (Deepak, 2002).

Meera et al. (2004) performed a study on Information and Communication Technology: A comparative analysis of three projects from India. The study was conducted that examined the performance of three ICT projects in India. The projects have quite different origins and purposes, but all are concerned with improving the delivery of information to farmers and other rural dwellers. One project is managed by the government of Madhya Pradesh as part of an exploration of governance. A second project is run by sugar cooperatives (with some government support) in Maharashtra and attempts to expand services to growers. The third project is an experiment by a large private agricultural input supplier to provide information to farmers in Andhra Pradesh. The study describes the organisation of each project; discusses the types of farmers involved and assesses their utilisation of the services; and looks at the backgrounds and performance of the functionaries who manage the projects. The projects studied varied with respect to the type of services provided, but these included marketing information, extension advice, information about rural development programmes, and other information from government and private sources. The study found the following results.

- The ICT projects provided external and on-the-job training for personnel, although there were variations with respect to sufficient orientation towards ICT for agricultural extension.
- All projects reviewed had younger, better educated, male farmers as their primary users, but a government project in a marginal area was fairly effective at reaching poorer and illiterate clientele.
- In the state government project, users most valued access to market information, land records and information on rural development programmes. In the cooperative project, question-and-answer services, accounting, and farm management information were valued most. In the private company experiment, participating farmers valued various types of information on practices, management of pests and diseases, and rural development programmes.

MATERIALS AND METHODS

The study made use of primary data as its basic source. The research work randomly selected 100 beneficiary farmers of the MiDA facility and 100 non beneficiary farmers from the Ejura Municipality, specifically from the major farming territory zones of the area. The research concentrated on these sizeable numbers basically to be able to conduct thorough one-on-one interactions with the farmers to have a firm grasp of knowledge on the study area. Additionally, researches of this nature requires heavy funding to be able to even make the target group willingly avail themselves to release all necessary bits of information needed for the research. That is, it was believed that with the numbers as stipulated above, giving motivation to the selected farmers in the event that they would feel reluctant and unwilling to release the information needed would not be much of a problem. The outcome of data gathered for the research is output levels as measured in terms of such changes in physical output of the beneficiary farmers as compared to times when they were not having access to the external source of financial boost. The explanatory variables for the study basically included the millennium account package given to the farmers as dummy, expenditure on children's education and expenditure on extension officers and post harvest treatment, labour and capital.

Model Design: Logit Estimation for Mechanization

The logit model was employed to examine the determinants of level of mechanization of the farmers' farms. This model was adopted to find out whether the farmers have mechanized or non mechanized farming. Such phenomenon is generally modeled using the relationship.

$$Y_i = \beta X_i + \mu_i$$

where Yi is equal to one when the farm is mechanized, and zero when the farm is non mechanized. X_i represents the independent variables. Equation represents a binary choice model involving the estimation of the probability of a farmer having a mechanized farm (Y) as a function of independent variables (X). Mathematically, this is represented as

$$\text{Logit } (Y_i = 1) = F (\beta^1 X_i),$$

$$\text{Logit } (Y_i = 0) = 1 - F (\beta^1 X_i),$$

where Y_i is the observed response for the ith observation of the response variable, Y. This means that $Y_i = 1$ for a farmer having a mechanized farm and $Y_i = 0$ for a farmer having non mechanized farm. X_i is a set of independent variables, which are government loan financial facility, capital, labour, expenditure on extension services/post harvest treatment and expenditure on farmers' wards education, associated with the ith farmer, which determine the probability of having a mechanized farm (P). The dependent variable is qualitative/binary variable which takes into accounts yes or no responses.

It would be useful to capture the dependency of Y on X as a simple function, particularly when there are several explanatory variables. For example, in ordinary multiple regressions, the link function is called the identity link since

$$g(\mu_i) = \mu_i \quad \text{and so} \quad \mu_i = \eta_i, \text{ or}$$

$$E(y_i) = x_i' \beta = \mu_i = \eta_i$$

The usual assumption

$$Y_i = \beta_0 + \beta_1 X_1 + \quad + \beta_k X_k + \varepsilon_k$$

where $\varepsilon_k \sim N(0, \sigma_\varepsilon^2)$ and ε_i and ε_k are independent for $i \neq k$. The expectation of Y i.e

$$E(Y_i) = E(\beta_0 + \beta_1 X_1 + \quad + \beta_k X_k + \varepsilon_k) \quad \text{and so} \quad \pi_i = \beta_0 + \sum \beta_k X_k$$

For this reason, the regression model to a dummy response variable is called the probability logit model. For a Logit model

$$Logit_r(Q = 1) = \phi^{-1}(p_i) = \sum_{k=0}^{k=n} \beta_k X_{ik} = \phi(X'\beta)$$

Hence the logit model for the study is given as;

$$Logit_k(Y = 1) = \Phi(\beta_0 + \beta_1 GOV + \beta_2 ESP + \beta_3 K + \beta_4 L + \beta_5 SCH + \varepsilon_k)$$

Where **Y** = Qualitative dependent variable: if a farmer having a mechanized farm =1; if not=0.
GOV = Government Loans: Dummy variable (if a farmer gets government loan facilities =1, otherwise (male) =0)
ESP = Expenditure on extension services
K= Capital
L = labour
SCH = Expenditure on child education
Φ= Cumulative standard normal distribution function
ε=Error-term

STUDY HYPOTHESES

The study expects a positive relationship between the dependent variable and the independent variables. Thus, theoretically, there exists a positive relationship between skilled labour, quality and reliable capital with a mechanized farm. Also, funds availability (i.e. government loan facilities) is also expected to be positively related to mechanization. In consideration to an output revealed from the logit analyses, we test the appropriateness or otherwise of each of the model parameters such that one of the coefficient of the

$$\beta_i \neq 0 \quad for \ at \ least \ one \ i.$$

The appropriate hypothesis is given as

$$H_0: \quad \beta_1 = \beta_2 = \beta_3 \dots = \beta_k = 0 \ against \ the \ alternative \ that$$
$$H_1: \quad \beta_i \neq 0 \quad for \ at \ least \ one \ i$$

At $\alpha = 0.01, 0.05 \ and \ 0.1$ *level of significance respectively*

Where β_i are the model parameters (independent variables). The implication for applying the logit model in this study is to find whether the combined effects of all the explanatory variables will contribute to mechanization. The preference for the logistic regression model to the conventional linear probability regression model in this study is based on the fact that parameter estimates are asymptotically consistent and efficient. The estimation procedure employed also resolves the problem of heteroscedasticity and constrains the probability of having a mechanized or non mechanized farming lie between zero and one.

EMPIRICAL RESULTS AND DISCUSSION

Descriptive Analysis on Sample Respondents

Figure 1 displays the size of farms of the respondents for both the MCA beneficiaries and non-beneficiaries before the financial package.
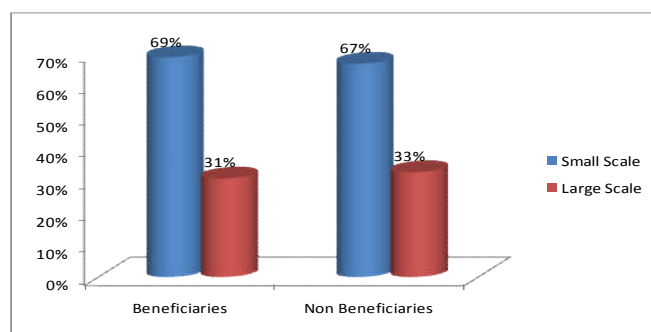
Figure 1. Distribution of scale of farms

It is clear from Figure 1 that 69% out of the 100 beneficiaries engaged in small-scale farming, whilst 31% engaged in large-scale farming, before the facility. This tells that before the facility, only 31% of the beneficiaries were producing on large scale. It can also be seen that as 67% of the non-beneficiaries engaged in small-scale farming, 33% did produce on large-scale. It can be noted that there is no major difference between the beneficiaries and non-beneficiaries in terms of size of farms before the facility.
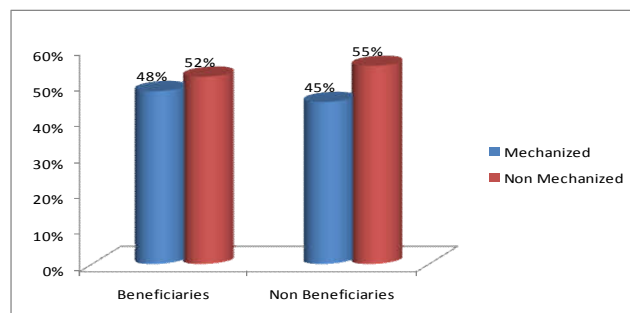
Source: Field Data, February, 2014

Figure 2. Distribution of level of mechanization

As far as mechanization is concerned, the baseline data in the figure show that 52% of the beneficiaries engaged in non-mechanized farming and 48% engaged in mechanized farming. The figure also shows that 55% of the non-beneficiaries had their farms not mechanized and 45% of them engaged in mechanized farming, before the facility.

Table 1. Summary statistics of variables for the beneficiaries and non-beneficiaries

Variable	Beneficiaries				Non-Beneficiaries			
	Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max
Age (in years)	49.96	15.18633	25	79	47.13	12.83198	25	79
Years of Farming	17.59	9.17627	7	51	16.97	8.277333	5	42
Expenditure on Extension services and post harvest (in GH)	743.47	389.9569	105	1560	333.3	469.0568	45	1675
Expenditure on Child Education (in GH)	1050.37	724.0989	100	2800	911.08	872.6067	100	3475
Expenditure on Labour (in GH)	1878.15	815.2225	405	3435	826.2	1056.787	135	3780
Capital (in GH)	3389.35	1814.706	390	7440	1569.75	2201.52	160	8120
Output (in units of bags)	147.98	77.39678	21	312	66.66	93.81135	9	335
Scale (in acreages)	13.65	5.375543	3	24	6.41	7.659542	2	28
Mechanization (categorical)	.84	.3684529	0	1	.52	.5021167	0	1

Source: Field Data, February, 2014

Table 2. Two-sample t-test with equal variance for significance of scale of production

Group	Observation	Mean	Std. Err.	Std. D ev.
Non Beneficiaries	100	1.356798	.0905084	.9050844
Beneficiaries	100	2.504005	.0528293	.528293
Combined	200	1.930402	.662212	.9365098
Difference		-1.147207	.1047984	

Source : Field Data, February, 2014
Diff = mean (0) – mean (1)   t = -10.9468
Ho: diff = 0   degrees of freedom = 198
Ha: diff < 0   Ha: diff = 0 Ha: diff > 0
Pr (T < t) = 0.0000   Pr (1 T 1 > 1 t 1) = 0.0000 Pr (T > t) = 1.0000

Again, the analysis indicates that there is no significant difference between the characteristics of the beneficiaries and non-beneficiaries with respect to level of mechanization before access to the facility.

Summary statistics of variables for the beneficiaries and non-beneficiaries

This section presents analysis of the summary statistics of the variables used for the study. They include age, numbers of years the respondents have engaged in farming, their output levels, expenditure they incur on employment of the services of extension officers and post harvest treatment, expenditure on their children's education, units of labour employed, capital, scale of farming and level of mechanization. These are shown in Table 1. It is clear from the table that the minimum age of the respondents, both the beneficiaries and non-beneficiaries is 25, whilst the maximum age is 79. The researcher considered the same age range for the two categories of respondents so as to make the analysis unbiased. The mean age of the beneficiaries, nonetheless, is bigger than the mean age of the non-beneficiaries (49.96 as against 47.13). The degree at which an observation is likely to depart or deviate from the mean age is 15.18633 for the beneficiaries as against 12.83198, for the non-beneficiaries. This explains that there are more outliers in terms of the ages of the respondents among the beneficiaries than the non-beneficiaries. The table 1 shows that the average number of years the beneficiaries have engaged in farming is 17.59, which is slightly greater than 16.97 for the non-beneficiaries; whilst the minimum years of experience for the beneficiaries and non-beneficiaries are respectively given as 7 and 5, and the maximum ones are 51 and 42. Here, test statistic confirmed that there is no significant statistical difference between the ages. As far as outputs and their averages are concerned, the beneficiaries are better off than the non-beneficiaries as reported by the table. The least output of maize produced by the beneficiaries in a year is 21 bags and 9 bags for the non-beneficiaries.

The mean output for the beneficiaries is also greater than the non-beneficiaries' case (147.98 as against 66.66). The maximum output for the non-beneficiaries is however greater than that of the beneficiaries (335 as against 312). In the case of output levels, test of significance indicated that there is significant statistical difference between the beneficiaries and non-beneficiaries. Additionally, the table reports that overall expenditure on extension services and post harvest treatment by the beneficiaries is greater than the non-beneficiaries' case. This is indicated by the fact that the average expenditure on extension services and post harvest treatment of the beneficiaries is GH¢743.47 compared with GH¢333.3 for the non-beneficiaries. In addition, the rate at which the beneficiaries' expenditure on extension services and post harvest treatment is likely to deviate from the average is less than the non-beneficiaries' case (GH¢389.9569 as against GH¢469.0568). The test of significance proved that indeed there is significant difference between the expenditure on extension services and post harvest treatment levels of beneficiaries and non-beneficiaries.

The amount of capital employed by the beneficiaries was more than the non-beneficiaries' case as reported by the table. The table shows that the minimum amount spent on capital in the beneficiaries' case is GH¢390 as against GH¢160 by the non-beneficiaries. The mean money value of capital for the beneficiaries is GH¢3389.35, compared with GH¢1569.75 for the non-beneficiaries. The tendency for an observation to deviate from this mean value is also smaller for the beneficiaries than for the non-beneficiaries (GH¢1814.706: GH¢2201.52). This analysis was also confirmed by test of significance, which showed a significant difference between the beneficiaries and non-beneficiaries. As far as the scale of production is concerned, the table reports that the mean value for scale of production under the beneficiaries' case is 13.65, which is greater than 6.41 for the non-beneficiaries' case. This implies that the beneficiaries engage in large-scale farming more than the non-beneficiaries.

The likelihood for an observation to deviate from the mean is smaller for the beneficiaries than for the non-beneficiaries (5.375543: 7.659542). As indicated, 3 and 24 are respectively reported by the table as minimum and maximum values of scale in terms of acreages for the beneficiaries, and 2 and 28 for the non beneficiaries. Here also, student't' test indicated a significant statistical difference between the scale of farms between beneficiaries and non-beneficiaries.

With regard to mechanization, the table further shows that most of the beneficiaries' farms are more mechanized than the non-beneficiaries' farms. The mean rate of mechanization is given as .84 for the beneficiaries and .52 for the non-beneficiaries. The extent of deviation is also given as .3684529 for the beneficiaries, which is less than .5021167, for the non-beneficiaries. The difference was proved to be statistically significant from student't' test.

Comparative Analysis of Financial Facility from the Millennium Challenge Accounts and the Scale of Production

This sub-section looked at how the financial facility accessed by the 100 beneficiary farmers had influenced their scale of production. Scale of production as used in this study refers to the size of acreages the farmers cultivated. For purposes of qualitative analysis, if the size of acreages a farmer cultivated was less than five acres, the farmer was seen to engage in small-scale farming. Similarly, if the size of farm was either five acres or more, the farmer concerned was noted to engage in large-scale farming. Percentages of the farmers were calculated and represented in a group bar graph to show the number of beneficiaries and non beneficiaries engaged in both small scale and large scale farming. The analysis followed that if the financial facility had made it possible for a large number of the beneficiaries to engage in large-scale farming, then the financial facility was considered a good policy on the surface, which should be encouraged or be made to continue and be replicated in other areas and sectors of the economy, if the parametric results also revealed similar effect. The reverse also holds. Figure 3 provides the pictorial view of the size of farming of both the beneficiary and non-beneficiary farmers.
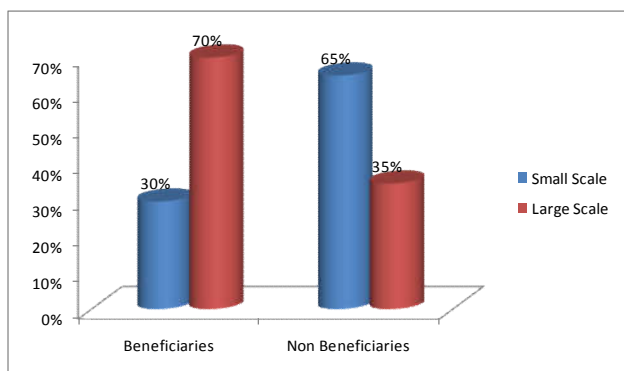
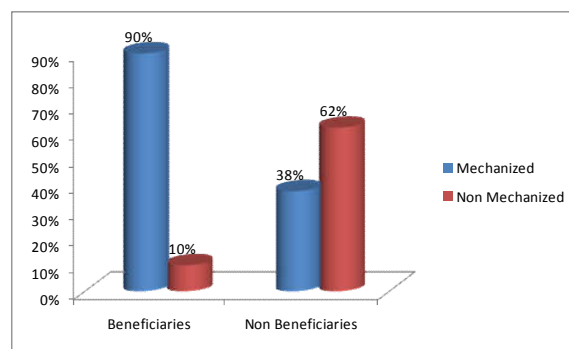Source: Field Data, February, 2014

Figure 3. Group bar graph of the size of farming by the farmers

It is clear from the group bar graph that out of 100 beneficiary farmers, 70% of them were engaged in large-scale farming (by the definition of this study) whereas only 30% of the beneficiaries still engaged in small-scale farming.

In contrast, the figure displays that 65% of the 100 non-beneficiary farmers engaged in small-scale farming, whereas only 35% of them engaged in large-scale farming. Following the picture painted in the figure, it can therefore be said that the financial facility made it possible for a greater number of the beneficiaries to engage in large-scale production on the surface than the non-beneficiaries' case. As to whether the net impact is significant or not would be confirmed by the regression results. Going by this simple analysis, one can say that the financial facility from the MCA has had positive impact on the scale of farmers and hence the policy is a good one. To make the analysis more accurate, t-test statistics of significance was performed by the researcher. Table 2 shows the results of the test of significance of the scale of production of the farmers. The test statistic shows the difference between the means of the beneficiaries and non-beneficiaries. The mean difference is statistically less than zero. This means that the mean difference is not zero but a value statistically different from zero. This implies that the beneficiaries' scale of production is statistically different from the non-beneficiaries' case.

Financial Facility from the MCA and Level of Mechanization

This section of the chapter deals with the degree of mechanization of the farms of the respondents. Mechanization as used in the study refers to the ease with which the respondents had access to extension services; the degree with which the respondents applied chemical fertilizers to their crops; whether the respondents used tractors to plough their farmland, and whether they used planters to plant their crops. If the respondent had access to at least two of the factors mentioned, the said respondent was deemed to have engaged in mechanized form of farming. But if the respondent could access at most one of the factors mentioned, the respondent was tagged to have engaged in non-mechanized farming. The extent of mechanization of the farming activities by both the beneficiaries and non-beneficiaries of the financial facility is shown in Figure 4.

Source: Field Data, February, 2014

Figure 4. Rate of mechanization by both beneficiaries and non-beneficiaries of the facility

From Figure 4, it is clear that 10% of the 100 beneficiaries have their farms not mechanized; 90% of them have their farms mechanized. This could be said that the financial facility accessed by the beneficiaries made it possible for greater percentage of them to engage in mechanized farming. The facility by all standard invigorated the beneficiaries with adequate capital to enable them have access to at least two of the factors mentioned in the study for mechanization.

Table 3. Two-sample t-test with equal variances for significance of mechanization

Group	Observation	Mean	Std. Err.	Std. Dev.
Non-Beneficiaries	100	.52	.0502117	.5021167
Beneficiaries	100	.84	.0368453	.3684529
Combined	200	.68	.0330676	.4676467
Difference		-.32	.0622799	

Source: Field Data, February, 2014

Diff = mean (0) – mean (1)   t = -5.1381
Ho: diff = 0 degrees of freedom = 198
Ha: diff < 0 Ha: diff = 0 Ha: diff > 0
Pr (T < t) = 0.0000 Pr (l T l > l t l) = 0.0000 Pr (T > t) = 1.0000

Table 4. Logit regression results of the level of mechanization of the respondents

Mechanization	Coef.	Std. Err.	Z	P>lZl	Marginal effects
GOV	1.396382	.4202466	3.32	0.001	.2701581
ESP	-.0008054	.0022198	-0.36	0.717	-.0001582
K	.0006374	.0003604	1.77	0.077	.0001252
L	-.0006223	.0007777	-0.80	0.424	-.0001222
SCH	.0006881	.0003184	2.16	0.031	.0001352
_Cons	-.6761856	.3110161	-2.17	0.030	

Source: Field Data, February, 2014

Though 10% of the beneficiary farmers still had their farms not mechanized, the greater chunk of them has their farms mechanized. It was revealed through the administration of the questionnaire and interviews carried out by the research that the number of the beneficiaries that still engaged in non-mechanized farming used a greater percentage of the facility made available to them on non-farming activities, which greatly reduced the amount meant for their farming business.The figure also presents the level of mechanization of the farms of the non-beneficiaries. The figure shows that 62% of the non-beneficiaries had their farms not mechanized. This value is far greater than the case of the beneficiaries. In addition, the figure displays that 38% of the non-beneficiaries had their farms mechanized. The possible explanation is that only few of them had the resources to procure the necessary materials needed to ensure mechanization. All said and done, on the average, as reported in the figure, the degree of mechanization in the beneficiaries' case is higher than the non-beneficiaries' case. That is, mechanization is more practised under the beneficiaries' case than the non-beneficiaries' case. The test statistic shows the difference between the means of the beneficiaries and non-beneficiaries. The mean difference is statistically less than zero.

This means that the mean difference is not zero but a value statistically different from zero. This implies that the beneficiaries' rate of mechanization is statistically different from the non-beneficiaries' case. To address the question whether indeed the level of mechanization could be attributed to the facility, the study conducted a regression analysis with level of mechanization as a function of all the explanatory variables of the study. Table 4 presents the parametric results of the level of mechanization by both the beneficiary respondents and non-beneficiary respondents, by logit regression. With regard to the relationship between the level of mechanization and the financial facility, the regression results depict that there is a positive and a significant relationship. This implies that as the farmers have access to the facility, there is the greater probability that mechanization of their farms will increase.

This sign met the expectation of the study because if the respondents could access the facility from the government, it should enable them to solicit for the assistance and guidelines by extension officers, apply chemical fertilizers to their crops, use tractor to plough their farmland and planters to plant the crops. The marginal effect revealed that a percentage increase in the government loan facility to the farmers would increase the likelihood of mechanized farming by 27%.

Conclusion and Policy Recommendation

Based on the findings, the study strongly recommends the following;

- Since there exist a positive and significant impact of the expenditure on extension services/post harvest treatment on both output and scale of production. Policymakers should therefore ensure that assistance given by government to farmers in the Ejura Municipality would largely be technical in nature. Again, storage facilities and other methods of preserving output after harvest should be made easily accessible to farmers in the area.
- The study further showed a significant positive relationship between the level of mechanization and government assistance. As the amount of the government facility made available to the farmers increased, it spurred the rate of mechanization of the activities of the farmers. This therefore denotes that policymakers should ensure that government assistance to farmers should be increased and be made to cover more farmers. This would lead to high mechanization, which would subsequently lead to increased output.
- Having established that government financial assistance has no significant impact on the output of farmers invariably implies that there is the need for government to always give assistance with low interest and flexible mode of payment to farmers, if only the government wants it to have a significant impact on output of the farmers in the Ejura Municipality. That is, financial facility to farmers in the area should be very monumental, such that it will have a significant impact on the output of the farmers.

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