

**ATTESTATION OF FARMING COMMUNITIES WITH REGARDS TO  
AGRICULTURAL DEVELOPMENT PROGRAMME (ADP) INTERVENTION  
IN DAMATURU**

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**ABSTRACT:** *The study attests the impacts of Agricultural Development Programme (ADP) on farmers at Dikumari in Damaturu, Yobe State. That is, if the programme had alleviated poverty and increased food stuff production. A reconnaissance survey was carried out to assess their existing Farm sites. Key Informant Interview (KII) and 310 self-administered questionnaires were issued to the respondents and analysed using simple statistics. The analysis reveals that; accessibility to farm input including number of times for training by extension worker to the farmers/beneficiaries has significant effect on the level of satisfaction, and only access to improve seeds and animals has no significance. The study could be adopted and used by relevant authorities on how to train farmers/beneficiaries, monitoring and investment in farm inputs, on-time ploughing and establishment of farm centres. There are a lot of publications on ADPs, but none was conducted on the impact of intervention at the study area.*

**KEYWORDS:** agricultural development programme, Damaturu, farming, farming communities, intervention, Yobe State

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## **INTRODUCTION**

Agricultural Development Programme is design in response to a fall in agricultural productivity and hence a concern to sustain domestic food supply (Inegbedion et al., 2018), as there is obstacle often faced by farmers to undertake farming process, usually are because of limited Capital of causing relatively stagnant farm productivity among others (Teddu at al., 2018). ADP's approach to agricultural development was based on collaborative efforts and tripartite arrangement of Federal, State Government and World Bank. The objectives of the programme are to bring about solution to the decrease found in agricultural productivity by sustaining domestic food supply through massive infusion of World Bank funds, provision of extension services, technical input support and rural infrastructure to farmers and rural dweller (Bello at al., 2015). Therefore, for a nation to attain food security, it only "...exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (Peng et al., 2019). However, this can only be achieved through agricultural mechanization

which perform different farm operation in the farming process which has the advantage of higher productivity, less time of operation, increase income generation and stable development of food system among other (Amadi and Ekezie, 2016). As ADP was conceived in the early 1970 to increase food production and raise income level of small scale farmers in the rural areas, (Ammani et al., 2010). As such getting the agricultural system back to its best will speed up the reduction of poverty and rapidly improve economy. Agricultural production remains the main source of livelihood for most rural communities in developing countries, and Nigeria in particular (Maikasuwa and Ango, (2013). But, Nigeria's agricultural policies were for a long time opportunistic and not coordinated among each other. Critics regret the absence of continuity in policy, and the fact that the successes, failures and lessons learned in preceding programmes have not been analysed. Strategies have not always been transposed into action in the field. The absence of indicators makes it hard to track and evaluate policy implementation. In terms of cross-sector policy coherence, little has been done to link agricultural policy with rural development policy, support for small and medium sized enterprises, and management of water and natural resources (Barry, 2020). The study intends to discover if the existence of ADP has actually made an impact at the study area in terms of; food production, infrastructural facilities and whether it had alleviated poverty or not.

## METHODOLOGY

### Population of the Study Area and Sample Size

The population of Dikumari represents the population of this study, it has 1616 families (Household). Out of the population of Dikumari 310 respondent were purposively selected for the study from the farmers and beneficiaries. The purposive sampling method is preferred because it combine both features of randomness and practicability of application (Babbie, 2015), as well as stratified. Purposive sampling is also well suited for the study in the sense that; the community is clearly defined as farming community with finite list of beneficiaries contained in a sample frame. Before the selection of the respondents, a reconnaissance survey was carried out, using purposive procedure to identify wards within the community (Dikumari) farming community. Six wards were grouped, refer to Table 1.

**Table 1: Dikumari Farming Communities**

S/No.	Names of Wards	Percentages	Number of Respondents
1	Dikumari Mai Anguwa	20	62
2	Dikumari Kwata	18	59
3	Dikumari Sangey	15	47
4	Dikumari Tsallake	20	62
5	Dikumari Fulata	15	47
6	Dikumari	13	40

Source: field Survey, 2019.

### Survey Instrument

Structured interview questionnaire and focus group discussion/ Key informant will be employed, the member of the targeted group of the study were farmers and the beneficiaries in Dikumari, Damaturu town Yobe state. Yobe state has two zones according to ADP classification (I & II), and Damaturu fall within the ADP Zone I. A farming community Was selected which is Dikumari. In the Community, a group of Six wards was chosen.

### Validation and Reliability of the Survey Instrument

This study uses experts in the field of study to validate the questions used. For this reason, copies of the questionnaires was sent to four experts. Their suggestions and comments were used to adjust the instruments before distributing to the targeted population. In respect of its reliability, this study used Cronbach' Alpha to test its reliability of responses gathered from the respondent, refer to Table 2. From the result estimated study model of the Cronbach' Alpha (0.81) for the study indicates a highly reliable result.

**Table 2: Cronbach's Alpha reliability test**

Reliability statistics		
Cronbach's Alpha	Cronbach's Alpha based on standardized items	No. of items
Cronbach's Alpha reliability test 0.809	0.715	6

### Data Collection

the selected farmers in wards were based on the highest number of farming families. Three hundred and ten (310) Structured Interview Questionnaire was designed and distributed to the farmers and beneficiaries. The questionnaire consists of two sections, that is, section I which contains Farmer's Demographic Information, and section II which contains the general questions. Likert scale type of questions which are close-ended with five options indicated as: Strongly Dissatisfied, Partially Satisfied, Undecided, Fully Satisfied and Very Satisfied. They include questions 8, 9, 11 and 14 where the respondents were asked to select the best options as applicable to each questions. Successively, FGD and KII was also conducted.

### Sampling Techniques

The stratified and multistage purposive random technique was used to select respondent for the study. It is based on this that Dikumari was divided in to six wards. Another factor is the population characteristics (mostly active workers) and the difficulty in obtaining information therefore personal survey was used to develop the questionnaire for the research.

### Distribution of the Survey Instrument and Data Analysis

Questionnaires were distributed based on the percentage of 66% and 34% for the farmers and beneficiaries respectable. In each of sampled ward within in the community, 20%, 18%, 15%, 20%, 15%, and 13% questionnaires were distributed in Dikumari Mai Anguwa, Dikumari Kwata, Dikumari Sangey, Dikumari Tsallake,

Dikumari Fulata and Dikumari wards respectively. And each ward farmers and beneficiaries were interviewed giving us the ration of 2:1 respondent, Table 1 Damaturu showing the sampled wards in the community. Focus group discussions were later conducted with the ward heads and leaders of the associations to validate the information collected through interview questionnaires.

## RESULTS/FINDINGS

The socio-demographic variables of the respondent identified are: gender, age group, level of education, household head, ownership of land, membership of cooperative society, fertilizer used and welfare of the farming community. The descriptive analyses of the respondent are shown in Tables.

### Socio-Demographic Variables of the Farmers/Beneficiaries

**Table 3: Gender of the respondents**

Gender of the respondents	Frequency	Percentage (%)
Male	175	56.5
Female	135	43.5
Total	310	100

Source: Field Survey, 2019.

The Table 3 reveals that male farmers/beneficiaries constitute 56.5% while the female constitute 43.5%. This shows that male farmers/beneficiaries slightly outnumber the female farmers/beneficiaries which entails that women also are adequately presented in the participation in agricultural practice in the study area, with little differences of which it may be cultural barriers that prevent women in some activities freely.

**Table 4: Age group of the respondents**

Age Group	Frequency	Percentage (%)
18-27 years	79	25.5
28-37 years	83	26.8
38-47 years	59	19.0
48-57 years	45	14.5
58 years and above	30	9.7
Missing	14	4.5
Total	310	100

Source: Field Survey, 2019.

Age group of the respondent shows that the highest among the age group is 28-37 years The with 26.8% followed by 18-27 years 25.5%, 38-47 years with 19.0% then 48-57 years with 14.5% while the least age group respondent with only 30 respondents which constitutes 9.7%. This entails that the age group of the respondents is between 18-57years with average age of 35 years, which means that the respondents are at their middle age and still active that can participate adequately in farming activities or they are within the age of active labour force.

**Table 5: Level of Education**

Level of Education	Frequency	Percentage (%)
Primary	90	29.0
Secondary	66	21.3
Tertiary	33	10.6
Others (Qur'anic and Non-formal)	75	24.2
Missing	46	14.8
Total	310	100

Source: Field Survey, 2019.

The level of education of the respondents reveals that the educational background of the respondents in which primary education dominates with highest percentage of 29.0% and it is about 90 respondents, followed by 75 respondents and constitutes 24.2% of non-formal education. For those that have attended secondary and tertiary education have 66 and 33 responded with 21.3% and 10.5% respectively. About 47 respondents couldn't fill in the educational background which constitutes 15% of the educational column was not ticked.

**Table 6: Household heads status of the respondent**

Are you a household head?	Frequency	Percentage (%)
Yes	228	73.5
No	74	23.9
Missing	8	2.6
Total	310	100

Source: Field Survey, 2019.

The respondents based on Table 6 on household head are mostly head of household with 228 respondents which constitutes 73.5% and only 74 respondents constituting 23.9% and 8 respondents constituting 2.6% couldn't tick the column. This indicate that the majority of the respondents have family in the community.

**Table 7: Nature of ownership of farmland**

What is the nature of the ownership of your farmland?	Frequency	Percentage (%)
Renting	165	53.2
Leasing	37	11.9
Inheritance	18	5.8
Purchase	58	18.7
Others	12	3.8
Missing	20	6.5
Total	310	100

Source: Field Survey, 2019.

On the nature of ownership of the farm, the Table 7 reveals that most of the respondents are renting the farmland which has the highest percentage of 53.2% and constitutes 165 respondents, followed by 58 respondents constituting 18.7%, 37 respondents which

constitutes 11.9% were given the farmland to work on it. Only 5.8% constituting 18 respondents inherited their farmlands.

**Table 8: Type of farming system engaged by the respondents**

<b>What type of farming system do you engage in?</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Crop production	102	32.9
Animal keeping/ Rearing	40	12.9
Animal and crop production	87	28.1
Irrigation farming	61	19.7
Bee keeping	1	0.3
Fish farming	5	1.6
Gardening	9	2.9
Missing	5	1.6
Total	310	100

Source: Field Survey, 2019.

The type of farming system engaged by the respondents reveals that Crop Production, Animal Keeping/Rearing and Animal and Crop Production constitutes 75% with total respondents of 229 and are the majority which indicates that Dikumari is the nearby community which supplies most crops and animals as reported by FADAMA III (2011) 60% of agricultural production (crops and vegetables).

**Table 9: Number of hectares of land currently cultivated**

<b>How many hectares of land are currently cultivated (including the land you are renting, leasing or borrowing)?</b>	<b>Frequency</b>	<b>Percentage (%)</b>
1 hectare	46	14.8
1-2 hectares	105	33.9
3-4 hectares	77	24.8
5 hectares and above	64	20.6
Missing	18	5.8
Total	310	100

Source: Field Survey, 2019.

The number of hectares currently cultivated by the respondents, the size of farm holdings, varies from 1 and above 5 hectares. Table 9 reveals that majority of the respondents have between 1-2 hectares of land which constitutes 105 respondents and represent 36% followed by 77 respondents whom are having between 3-4 hectares while those with 1 hectare and above 5 hectares constitute only 37.7%. With such hectares of farmlands.

**Table 10: The problem encountered in managing farmlands**

<b>What are the problems encountered in managing your farm?</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Physical	71	22.9
Financial	149	48.1
Socio-cultural	38	12.3
Insecurity	30	9.7
Government policy	2	0.6
Others	2	0.6
*Missing	18	5.8
Total	310	100

Source: Field Survey, 2019.

The distribution of farmers/beneficiaries according to the problem encountered in managing the farm indicates that the financial problem has 149 respondents which constitutes 51% is the highest barrier among other barriers. Followed by physical with 22%, socio-cultural has 12.3% and insecurity 9.7%.

**Table 11: Farmer/beneficiary's membership of any farmers group**

<b>Are you a member of any farmer's group?</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Yes	121	39
No	176	56.8
Missing	13	4.2
Total	310	100

Source: Field Survey, 2019.

On whether farmer/beneficiaries are member of any farmers group or association, Table 11 reveals that majority of the respondents in the farming community are not members of the agricultural association or group with 40.7% and about 121 respondents who are not members of association.

**Table 12: Types of associations/group that household participate in**

<b>If yes, which of the following types of group does your household participate in?</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Farmer's cooperative	104	33.5
Community association	30	9.7
Market women association	4	1.3
Missing	172	55.5
Total	310	100

Source: Field Survey, 2019.

Among the few respondents who are members of the farmer's cooperative with 104 respondents are in farmer's cooperation, only 30 respondents are members of community association and 4 respondents are market women association of which they are insignificant.

**Table 13: Type of fertilizer used on farmland**

<b>What type of fertilize do you use on your farm?</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Organic	159	51.2
Synthetic	103	33.2
Missing	38	12.3
Total	310	100

Source: Field Survey, 2019.

The type of fertilizer used on the farm by the farmers/beneficiaries is organic fertilizer application with 159 respondents and 60.7% and synthetic fertilizer application is 103 respondents which constitutes 39.3%. Here 48 respondents couldn't tick in the space which constitutes 15.5% of the respondents.

**Table 14: Whether farmers/beneficiaries receive free or subsidized pesticides**

<b>Have you ever received free or subsidized pesticides?</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Yes	71	24.7
No	217	70
Missing	22	5.3
Total	310	100

Source: Field Survey, 2019.

Very few of about 71 respondents have ever received subsidized pesticides and about 217 respondents which constitutes 75.3% have never received subsidized or free pesticides with 22 respondents missing representing 7.1% of the respondents.

**Table15: Farmers/beneficiaries access to credit**

<b>Do you have access to credit that you can use to invest on your farm?</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Yes	122	39.4
No	172	55.5
Missing	16	5.1
Total	310	100

Source: Field Survey, 2019.

Table 15 also reveals that about 41.5% which constitute 122 respondents that have access to credit to invest in their farmlands and about 172 respondents which constitutes 58.5% have no access to credit to invest on their farmlands with 16 respondents unable to fill or tick the column.



**Table:16 Whether farmers/beneficiaries have received free or subsidized agronomy training/advice from extension workers**

<b>Have you ever received free or subsidized agronomy training or advice from extension worker/agronomist?</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Yes	162	52.3
No	136	43.9
Missing	12	3.8
Total	310	100

Source: Field Survey, 2019.

On subsidized agronomy training or advice from an extension worker or agronomist to the farmers/beneficiaries 162 respondents which constitute 54.4% responded positive while 136 respondents responded negatively which is equal to 45.6%, 12 respondents couldn't tick the column which is equal to 3.9% of the respondents.

**Table17: Whether farmers/beneficiaries have received free water pump**

<b>Have you ever received free water pump?</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Yes	65	21
No	227	73.2
Missing	18	5.8
Total	310	100

Source: Field Survey, 2019.

Very few of about 65 respondents received free water pump which is 22.3% and 227 respondents which constitute 77.7% have not received free water pump and 18 respondents couldn't tick.

**Table18: Whether farmers/beneficiaries were asked to give "something"**

<b>If yes, were you asked to give "something" so as to receive it with complete accessories?</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Yes	79	25.5
No	84	27.1
Missing	147	47.4
Total	310	100

Source: Field Survey, 2019.

When asked "were you asked to give something so as to receive it with complete accessories?" most or almost all of them were asked to give something before they could get the accessories. And this may be the reason why most of them have not received water pump with about 227 respondents which constitutes 77.7% have not receive free water pump and 18 respondents couldn't tick.

**Table19: Responsibility for improving the welfare of Dikumari farming community**

<b>Who do you think should be responsible for improving the welfare of Dikumari farming community?</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Government	228	73.4
Non-governmental organization	16	5.2
Government and Non-governmental organization	62	20.3
Missing	4	1.3
Total	310	100

Source: Field Survey, 2019.

The responsibility of improving the welfare of Dikumari farming community according to the table solely lies with the government with highest respondents of 228 which constitutes 74.3% followed by Government and Non-Governmental Organization with 63 respondents constituting 20.5%. Only 16 respondents constituting 5.2% lies with Non-Governmental Organization.

**Table20: Level of satisfaction with access to free seed**

<b>How satisfied are you with access to free seed?</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Not satisfied	162	52.3
Partially satisfied	37	11.9
Undecided	8	2.3
Fully satisfied	17	5.5
Very satisfied	64	20.6
Missing	22	7.1
Total	310	100

Source: Field Survey, 2019.

The table shows that majority are dissatisfied with regard to access to free seeds with the highest frequency of 162 respondents equivalent to 52.3%, followed by 37 respondents who are partially satisfied with 12.8%. Only 81 respondents are fully and very satisfied with about 28.1% and 22 respondents are missing which is equal to 7.1%.

**Table21: Level of satisfaction with free or subsidized ploughing**

<b>How satisfied are you with assistance with free or subsidized ploughing?</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Not satisfied	162	52.3
Partially satisfied	38	12.3
Undecided	9	2.9
Fully satisfied	41	13.2
Very satisfied	39	12.6
Missing	21	6.8
Total	310	100

Source: Field Survey, 2019.

The level of satisfaction by the farmers/beneficiaries in terms of free or subsidized ploughing is presented in Table 21. The table reveals that 162 responded which is about 52.3% are not satisfied with the assistance of free or subsidized ploughing in the study area, followed by 38 respondents representing 13.1% are partially satisfied. Only 80 respondents constituting 25.1% are fully and very satisfied with assistance of free or subsidized ploughing.

**Table22: Level of satisfaction for accessing subsidized fertilizer**

Level of satisfaction	Frequency	Percentage (%)
Not satisfied	95	30.6
Partially satisfied	45	14.5
Undecided	7	2.3
Fully satisfied	39	12.6
Very satisfied	52	16.8
Missing	72	23.2
Total	310	100

Source: Field Survey, 2019.

On the level of satisfaction for those that uses synthetic fertilizer, how is the level of satisfaction towards accessing subsidized fertilizer? The result is presented on Table 22. Only 12.6% and 16.8% are fully and very satisfied. But 30.6% and 14.5% are not and partially satisfied.

**Table23: The level of satisfaction with the access to credit**

Are you satisfied with access to credit?	Frequency	Percentage (%)
Not satisfied	90	29.0
Partially satisfied	45	14.5
Undecided	5	1.6
Fully satisfied	27	8.7
Very satisfied	49	15.8
Missing	94	30.3
Total	310	100

Source: Field Survey, 2019.

On the distribution of level of satisfaction with access to credit about 135 respondents constituting 43.5% are not and partially satisfied. Only 76 respondents constituting 24.5% are fully and very satisfied and about 94 respondents couldn't fill in the column constituting 30% of respondents.

**Table24: Number of times farmers/beneficiaries received agronomical training**

Number of times	Frequency	Percentage (%)
Once	96	31
Twice	31	10
Thrice	22	7.1
More than three times	34	11
Missing	127	41
Total	310	100

Source: Field Survey, 2019.

Agronomy training is a very important tool in agricultural or farming activities by the extension workers. Then, how often do the farmers/beneficiaries receive the training, the result is shown in Table 24. The table reveals that farmers/beneficiaries have benefited from agronomical training at least once which constitutes 31% with 96 respondents, followed by 11% of the respondents which is equivalent to 34 respondents that have attended more than three times. In addition, about 127 respondents constituting 41% are missing, meaning they could not tick.

**Table25: Whether an incentive received from Government/NGO is a right or privilege**

Incentive	Frequency	Percentage
Right	27	8.7
Privilege	275	88.7
Missing	8	2.5
Total	310	100

Source: Field Survey, 2019.

On the incentive from government or non-governmental (NGOs) whether it is a right or privilege, the result is presented in Table 25, which reveals only 27 respondents which constitute 8.7% realized that the incentives in terms agricultural inputs is a right, while 88.7% which constitutes 275 respondents are of the opinion as being privilege.

## DISCUSSION

Table 3 reveals that male farmers/beneficiaries slightly outnumber the female farmers/beneficiaries which entails that women also are adequately presented in the participation in agricultural practice in the study area, with little differences of which it may be cultural barriers that prevent women in some activities freely. But still there is adequate representation of women in the occupation. This implies that agricultural is not only male occupation and that the age group of the respondents is between 18-57years with average age of 35 years, which means that the respondents are at their middle age and still active that can participate adequately in farming activities or they are within the age of active labour force.

The respondents based on Table 6 on household head are mostly head of households. Which indicate that the majority of the respondents have family in the community. This shows that most of the respondents will have responsibility which may encourage the respondents to be committed towards their participation in farming activities to provide food for the family, as one of the concern of ADP to sustain domestic food supply as a result of response to a fall agricultural productivity, (Inegbedion et al., 2018).

On the nature of ownership of the farm, the Table 7 reveals that most of the respondents are renting the farmland which has the highest percentage of 53.2%. This research did not tally with the findings of 3<sup>rd</sup> National Fadama Development Project (FADAMA III), World Bank Assisted (2008) on the nature of land acquisition that greater percentage of land own by farmers is by inheritance in Dikumari. The type of response by the farmers and beneficiaries with regards to land acquisition will confuse the ADP

and other supporting agency to the farmers and beneficiaries to support the farming system engaged by the respondents.

Crop and Animal production practice in the area led to the location of Animal market and Abattoir in the area have become possible for easy access to supply of animal feeds. Other farming practice were practiced in smaller scale such as fish farming, gardening which constitute 20% and is the same as 61 respondents and that is why supply of vegetables at Kasuwan Gwari became possible along Kano-Maiduguri road.

The number of hectares currently cultivated by the respondents, the size of farm holdings, varies from 1 and above 5 hectares. From the Table 7 reveals that, with such hectares of farmlands, if properly managed and assisted the community will supply the food requirement of Damaturu town and its environs. But unless the right technology is available as pointed by Omobolanle (2008).

The distribution of farmers/beneficiaries according to the problem encountered in managing the farm indicates that the financial problem has 149 respondents which constitutes 51% is the highest barrier among other barriers. This study shows that there is a need by ADP to provide enough credit facilities to farmers/beneficiaries in the study areas as was the case in Edo & Osun states where farmers acknowledged assistance of ADP (Ogunsumi et al., 2010).

In order to increase agricultural production and improve the living standard of the farming communities as it is one of its objectives. Physical and socio-cultural problems constitute 37% of the respondents which may be due to climate change and attitude of community which prevents women from participatory activities in some agricultural activities like ox-ploughing or harrowing. Insecurity, government policy and others constitute only 11.7% with about 34 respondents, by implication there is less/no credit facility among farmers and beneficiaries as they lack credit facility to boost their agricultural activities, physical or natural problems which also affect the pattern of farming system. This study corresponds with that of Abba et al. (2015) that "a highly correlation exist between farmers and beneficiaries level of education and ability to meaningfully utilize the credit facility".

On whether farmer/beneficiaries are member of any farmers group or association, Table 8 reveals that majority of the respondents in the farming community are not members of the agricultural association or group with 40.7% and about 121 respondents who are not members of association. This may be the reason why famers/beneficiaries in the community couldn't access the credit facility and other information which can facilitates understanding of agricultural information due to interaction among its members. Among the few respondents who are members of the farmer's cooperative with 104 respondents, only 17 respondents are members of community association and market women association of which they are insignificant.

The type of fertilizer used on the farm by the farmers/beneficiaries is organic fertilizer application with 159 respondents and 60.7%. By implication, the farmers use manure on their farms as fertilizer which means little or few can afford the synthetic fertilizer

or agro-chemical fertilizer. Majority have never received subsidized or free pesticides. The Table also reveals that Majority of respondents had no access to credit facility which reduced the level of production just as stressed by Ekong (2003) that credit is a very strong factor that is needed to acquire or develop any business, its availability can improve the extent of production capacity. On subsidized agronomy training or advice from an extension worker or agronomist to the farmers/beneficiaries 162 respondents which constitute 54.4% responded positive while 136 respondents responded negatively which is equal to 45.6%. Very few of about 65 respondents received free water pump which is 22.3% and 227 respondents which constitute 77.7% have not received free water pump and 18 respondents couldn't tick and when asked "where you asked to give something so as to receive it with complete accessories?" most or almost all of them were asked to give something before they could get the accessories. And this may be the reason why most of them have not received water pump with about 227 respondents which constitutes 77.7%.

This implies that farmers and beneficiaries lack access to free improve seed which will improve their agricultural activity and consequently led to low output. As most farmers and beneficiaries suffer lack of improved seeds, they depend on local or traditional variety which will not cope with the current climate change. This result shows high cost of input is a problem affecting the farmer's involvement in agricultural production. Therefore, farmers and beneficiaries in farming activities suffer this since most of them lack access to ploughing for them to expand their farmlands as most them resort to manual labour (Kaptu) using family members that are around. About 7% did not tick this question which is equal to 21 respondents. This was also noted in the works of Tijjani and Tijjani (2019). As lack of access to land, capital, credit facility is some of the major problems affecting the involvement in agricultural productivity in the study area.

The study reveals that farmers/beneficiaries are not satisfied with access to chemical fertilizers with the highest respondents constituting 45.1%. About 91 respondents whom constitute 29.4% of the total respondents are fully and very satisfied. This may be the reason why most of the farmers/beneficiaries resort to organic manure for the farming activities in the study area. When asked on why such percentage during the oral interview, the response is that *"anything with finance is not for all, ai sha'anin kudi ba kowa ne zai samu ba"*. This implies that without financial support, the small scale farmers cannot boost their agricultural activities to fight food insecurity. By implication, one of the objective of establishing the ADP is not achieved. This could be partly on the side of the farmers, where most of them have low educational level for them to utilize and access most of the agricultural input to support the agricultural business as pointed by Omonijo et al. (2014). For ADP to be realized, it has to be through a re-organized and revitalized agriculture extension system that integrate extension worker training and farm visit to ensure two-way communication between farmers and researcher (Auta and Dafwang, 2010). Probably, this may be the main reason why the farmers/beneficiaries couldn't have accessed the agricultural input and are not satisfied with the way and manner at which the input is being distributed. As such the responsibility of improving the welfare of Damaturu (Dikumari) farming

community according to the table solely lies with the government with highest respondents of 228 which constitutes 74.3%.

## CONCLUSION

Based on the number of small scale farmers/ beneficiaries, there is need to encourage them to form or expand the existing cooperative society in order to have quick access to information, credit and other farm inputs. This is because in any business, information is very important. Provision/acquiring adequate information as at when due will leads to high level of satisfaction among farmer's and beneficiaries. Despite the effort by the farmer's and beneficiaries in terms of productivity, there is need by the ADP/Government to increase its establishment of new infrastructure, improved farm input to farmers and beneficiaries. This will further significantly increase food stuff production particularly to Dikumari and Damaturu at large. Re-organized and revitalized extension system to ensure two-way communication between farmers and beneficiaries and research by integrating extension workers training and farm visit. This will reduce the negative link/responses between level of satisfaction of farmers and beneficiaries with regards to farm inputs and ADP. There is need for the awareness campaign by ADP worker on how to obtain and how to utilize the loan. This is because farmers and beneficiaries level of education is mostly at lower level. The study suggests proper supervision/ attention of Government/ADP and the input given to the farmers/ beneficiaries to ensure adequate/ appropriate utilization of it. Through the creation of experimental farms by the ADP/Extension worker, this will encourage the farmers/ beneficiaries as they see the officers mingling with them on agricultural activities. There is the need by the ADP/Government to provide accessible road network within the community and farm location for easy transportation of farm produce to market area and other services. Media awareness among the community including viewing centre on the farm practice in other places particularly the drier environments outside the country (such as Jerusalem, Sewa in Egypt) and within the country (such as Jigawa, Katsina and Kebbi state) will also help. There is need for construction of reservoir/ Dam such that rain water will be harvested and stored for maximum utilization even after the rainy season farming. This will increase the number or percentage of irrigation farmers and further create a sort of micro scale climate to supplement changing pattern of rainfall due to climate change, makes the farmers engage themselves throughout the year with different farming activities and will increase agricultural production/ yield. By so doing farmers and beneficiaries income status will rise, healthy family through adequate food supply and marketing system. As it is said a healthy family leads to a healthy community and will further reduce urban influx in search for greener pasture/white colour jobs which are not available. As such, the youth will engage in other social vices.

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