



DEVELOPMENT ACTORS AND SOCIO-ECONOMIC DEVELOPMENT: THE CASE OF BASIC INFRASTRUCTURAL PROVISION IN RURAL AGRICULTURAL UPLIFT IN COMMUNITIES OF MEZAM DIVISION.

By

Neba Abednego abeni, Phd

neba.75@yahoo.com

Abstract

The consequences of the economic crisis of the late 1980s and the disengagement of the State from the provision of basic socio economic infrastructures in rural communities in Sub Saharan countries have a significant implication on their rural socio-economic uplift. The economic crisis instigated the state to disengage from the socio-economic sector without any effective measures put in place to boost access to basic socio economic infrastructures in rural communities. The agricultural sector is one of those areas which were highly hit by crisis and the State disengagement. Over 60% of the population of Mezam Division rely on agriculture but the agricultural sector suffer from poor farm to market roads, inadequate marketing infrastructures, low access to agro-pastoral credits, research and innovation and agricultural sensitisation and training opportunities. Using a systematic sampling of 241interviewees complimented by interviews, Focus Group Discussions and secondary data sources, the study sought to examine the contributions made by development actors in the agricultural sector to uplift the socio-economic development of rural communities in Mezam Division. The results of the study show that, through the liberalisation law of the 1990s, many development actors have emerged to foster the provision of basic socio-economic infrastructures in the agricultural sector in many communities in Mezam Division. It was also observed that, through these actors, farmers in rural communities in Mezam now have better access to farm to market roads, agro-pastoral credits, wider marketing opportunities and marketing infrastructures, training and sensitisation facilities and access to high yielding variety of crop and animal species. The study concludes that the government should continue to strengthen the collaboration with these development actors as they have proven to be veritable partners in the development of the agricultural sector in rural communities of Mezam Division.

Key words: Development actors, socio economic development, Rural uplift, Basic infrastructures and Agricultural uplift

1. Introduction

In the phase of persistent socio-economic infrastructural deprivation, most rural communities in Mezam Division have witnessed a dwindling socio-economic growth. Inadequate or low access to basic infrastructures amongst the rural poor in communities in Mezam Division has often had an adverse effect on the population whose main economic

activity is agriculture. Lotsmart (2004), asserted that agriculture remain the bread basket of the Cameroonian economy. It generates the highest number of employment (more than 60% of both skilled and unskilled), ensures food security, contributes enormously to the Cameroon's GDP and foreign earnings, and above all provides raw materials to the industrial sector which is still in its infant stage. The repartition of the population in Cameroon based on the 1998 estimates shows that 63.5% of the population in the North-West resides in rural areas. These facts and figures demonstrate that, the rural population is highly dependent on agriculture and its ancillary infrastructures. Low access to agricultural infrastructures has continued to limit the ability of rural communities to improve on their socio-economic wellbeing. Grippled by this development lapse, the State as a main guarantor to rural socio- economic development has put in place alternative measures to improve on basic infrastructure access in most rural communities in Cameroon.

Many development literatures opined that, the Law of liberalisation of the nineties has led to the emergence of diverse actors to compliments government efforts in the provision of basic infrastructures in various rural communities in Cameroon. The emergence of these actors as partners of rural development has increased the number actors involved in providing infrastructures the agricultural sector. The provision of these infrastructures has uplifted the socio-economic development of rural communities in Mezam Division. It is at the background of this that this paper seeks to examine the contributions of different actors in the development of agriculture in rural communities of Mezam Division. It makes a concrete and reflective analysis on the various interventions carried out in the area of agriculture in the communities of Bafut, Bali, Santa and Tubah Sub-Divisions in Mezam Division.

2. Research Problem

The effects of the global economic recession in the 1980s which affected the economies of most Sub-Saharan States are no longer a development conjecture nowadays. It curtailed the State's ability to provide basic infrastructures for the socio- economic uplift in rural communities in Cameroon. The rural areas of the North-West region of Cameroon and Mezam Division were greatly affected by the preceding structural adjustment policies. This is because it created a socio-economic infrastructural vacuum and left the rural communities without any effective measures put in place for rural socio-economic development Neba, (2012). This phenomenon has negative multi-dimensional impacts on the different facets of socio-economic development in rural communities in Mezam.

The closure of major agricultural infrastructures such as agricultural training schools, research institutions and credit institutions in the 1980s has limited the growth of agricultural

activities in rural communities in Mezam. The lapse in these agricultural training schools and research institutions led to the drastic reduction of agricultural extension workers. The few extension workers sent to the area do not have enabling working environment and concentrate on the rich farmers who can tip them, while neglecting the poor farmers who need their services most. The limited number of agricultural extension infrastructures has hindered the farmer's access to information dissemination and adoption of new innovations in these rural communities.

The closure of major agricultural banks such as Credit Agricole and FONADER, which granted loans to farmers in rural communities of Mezam led to inaccessibility of farmers to credit facilities for necessary investment in agriculture. Inability of most farmers to buy farming tools, seeds, fertilizers, pesticides and other farming inputs have limited their innovative efforts and has engendered paltry harvest. The problem of credit availability is further compounded by land tenure which is a common practice among rural communities in Mezam. Land tenure has restricted the farm sizes and farmers barely left with patches of land which do not give any reasonable returns in agricultural output. The land tenure system is gender bias and coupled with inadequate collateral security and credit facilities, the female folk has been put in a difficult situation as they have only usufruct rights over the parcel of land they cultivate. Culture denies them the right to own animals directly and they are not allowed to control household income. The lack of credit facilities has limited the farmer's capacity to acquire land and agricultural inputs for intensive farming. Worse still, inadequate farm to market roads and poor existing marketing structures and mechanisms have compounded the distribution of farm produce with some areas having abundant food supply while others experience food shortages.

3. Contextual literature review

The development of most rural communities is hampered by numerous problems. Efforts to achieve socio-economic development have been hindered by many factors resulting from physical and human constraints. Even though the development of rural communities is affected by a range of problems, the literatures used have been streamlined to target essentially basic infrastructures in the socio-economic domain with much emphasis on agricultural infrastructures which has hampered the development of rural communities in Mezam. The persistent inadequacies of infrastructures in domain of agriculture in rural communities in Mezam Division has subjected the socio-economic development of these areas in a stalemate; which have

hindered the overall development process in various communities. This assertion is true as the World Bank puts it that, “many rural Africans still suffer from poor access to markets, health, schooling and high transport costs. This has hampered their socio-economic development in most rural communities in Africa” (World Bank, 2000). The World Bank further stipulates that the factors responsible for the underdevelopment of rural areas in Sub-Saharan Africa include low agricultural productivity, poor infrastructure, and lack of access to market and market information and low investment in people, (ibid). In line with inadequate access to basic infrastructures, Amungwa, (2014) citing the Ministry of Agriculture and Rural Development (2006) and the African Development Fund (2003), posits that the productivity of small holders in the North West Region of Cameroon was due to limited use of modern farm inputs, high input prices and low output returns; poor quality of advisory services, seeds, animal feed, limited access to markets; lack of credit facilities; inadequate water supply; poor linkages between research and extension services.

According to Indira, (2014), the rural hinterlands of India are not able to march in terms with the urban areas. Reasons advanced for this variation in the low socio-economic development of the rural communities stems from the fact that, most of the rural communities lack basic infrastructures in the social and economic sector which has stifled their development. He identifies poor access to agricultural infrastructures such as credit facilities as the hindrance to rural development. Writing on similar lines, Esema, (2010) as cited in Bassey, (2011), affirmed that rural communities are usually characterised by poor health, lack of basic nutrition. Nwaeze, (2015), opined that, the challenges of rural communities in Nigeria are linked problems of basic infrastructures such as poor access to roads, educational facilities and potable water. Abumere, (2002); Adeoye *et al.*, (2011), writing on the problems affecting rural development cited that, one of the critical problems facing rural communities is the inadequate provision and maintenance of rural infrastructures. The poor state of infrastructures in rural areas poses a great challenge to rural socio-economic development efforts as it affects the level of productivity, low level of income, fall in the standard of living and high rate of poverty among dwellers. They further explained that the infrastructural facilities that should be a catalyst of encouragement for agricultural production are simply not available and that the inadequacy of these infrastructures that can improve the quality of life of the people is one major factor that impedes rural socio-economic transformation. Oguzor, (2011) while explaining the problems of rural development in Nigeria, points to the fact that, the pattern of distribution of basic infrastructures which exhibits urban bias is a major cause of socio-economic deprivation in rural communities. He remarks that a considerable emphasis is placed on the development of urban infrastructures either directly or indirectly to almost neglect of the rural areas. This has deprived the rural areas with major

infrastructures thereby increasing the rate of rural socio-economic deprivation. In addition to the above factor as raised by Oguzor, rural development in Africa is constrained by urban bias in public and private investments and by unfavourable geographical conditions and social institutions, Ali and Thorbecke, (1997). Furthermore, Aderano and Magaji, (2010) remarked that the sustainability of the provision, operation and maintenance of appropriate rural infrastructures has eluded the hopes and aspirations created in the minds of the rural folks.

4. Study area and method

Mezam-Division is one of the seven administrative Divisions that make up the North West Region of Cameroon. It is located between latitude 5°45¹ and 6°20¹ north of the equator and longitude 9°55¹ and 10°21¹ east of the Greenwich meridian. The Division is situated in the Western highland of Cameroon and is bordered to the North by Boyo and Menchum Division, to the south by Bamboutus and Lebialem Divisions, to the West by Momo Division and to the East by Ngokentunjia Division. It covers a surface area of 1745km² and the population estimated at 524127 inhabitants (Population census 2005). The Division is made of seven Sub-Divisions which include Bafut, Bali, Santa, Tubah and Bamenda central which is sub divided into Bamenda I, Bamenda II and Bamenda III Sub-Divisions. The population of this area has rapidly evolved over the years and is highly depended on agriculture.

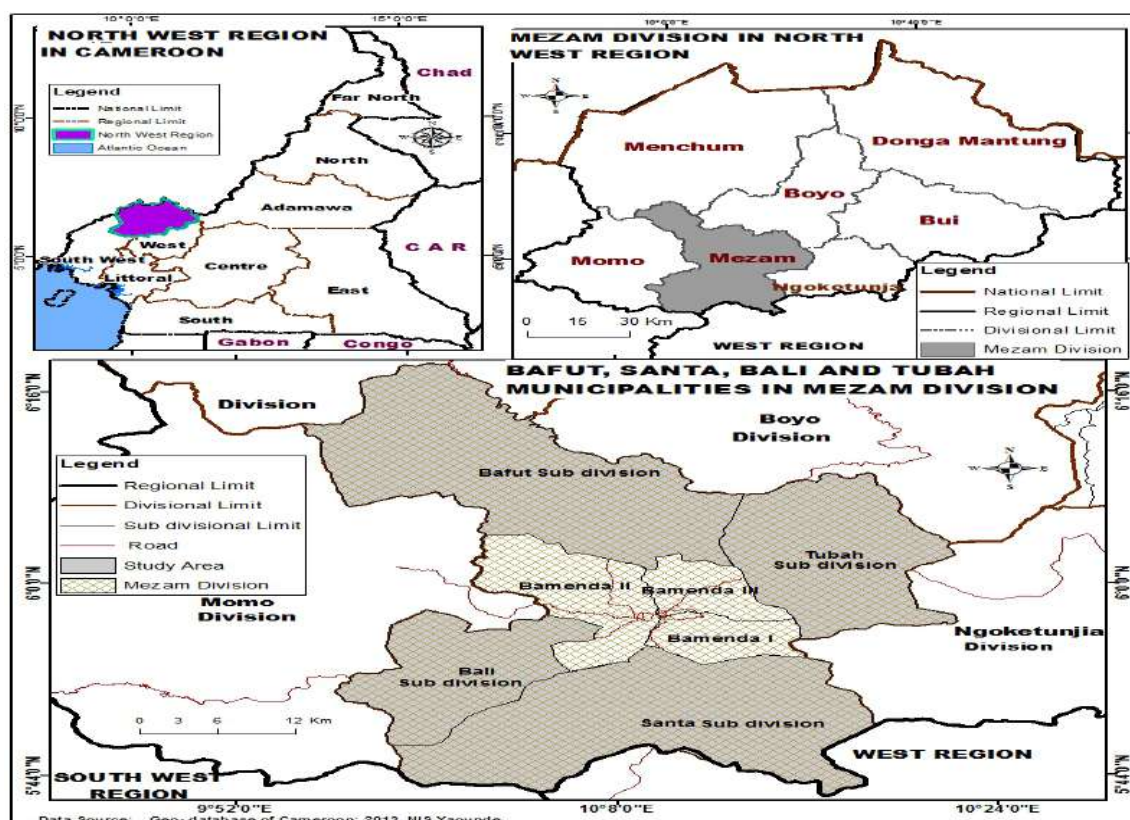
Table 1: Evolution of population in Mezam from 1976-2005.

Sub-Division	1976	1987	1995	2000	2005
	206447	313040	447400	578700	655300
Bamenda central	68504	146021	239150	41700	423400
Santa	52209	57459	60800	63100	672095
Tubah	29192	39228	51150	54000	57326
Bafut	32503	36420	41600	45400	49328
Bali	23778	33915	41700	86600	98647

Source: Regional Service of Statistic (2022)

A sample of 241 questionnaires was administered to the target population made up of heads of households randomly selected from communities in Bali, Bafut, Tubah and Santa Subdivisions. These questionnaires were distributed based on the size of the population of each subdivision with Bali 36, Bafut 70, Tubah 58 and and Santa 77 questionnaires. Furthermore, interviews were conducted with actors identified as key players in the provision of basic infrastructures in the agricultural sector in the study area such as representatives of NGOs (Non Governmental Organisation), Parastatals, CMOs (Church Mission Organisations), Councils, VDAs (Village

Development Associations) and Elites and Individuals. Interviews were reinforced with FGDs (Focus Group Discussions).



Map 1: Location of the study area

Source: Generated from Geo database of Cameroon, 2013, NIS Yaounde.

A total of 13 FGDs were carried out with different agricultural groups to have a clearer view of different actor's participation and their perceptions on the actor's activities to uplift the access to agricultural infrastructures in their communities. This data complimented by field observation and secondary data constituted the data source for this study. The end of the data collection process yielded both statistical and inferential data which was analysed using the SPSS.

5. Results and discussions

5.1 Actors intervention in agricultural uplift

Agriculture constitutes the main occupation of most people of in Sub-Saharan Africa. It remains the bed rock of the Cameroon's economy. Agriculture accounts for 27% of the GDP in 1991 employed 59.3% in 1992 and generate half of the total export earnings according to FAO fact sheet. About 80% of the rural population in communities of Mezam relies on agriculture but the development of this sector still remains traditional as most of the farmers lack access to basic infrastructures which help to improve productivity. The advent of development actors in the agricultural sector in rural communities of Mezam have led to enormous strides in the provision

of basic infrastructures. Fig 1 shows the perception of the sample population on the provision of basic infrastructures in the agricultural domain.

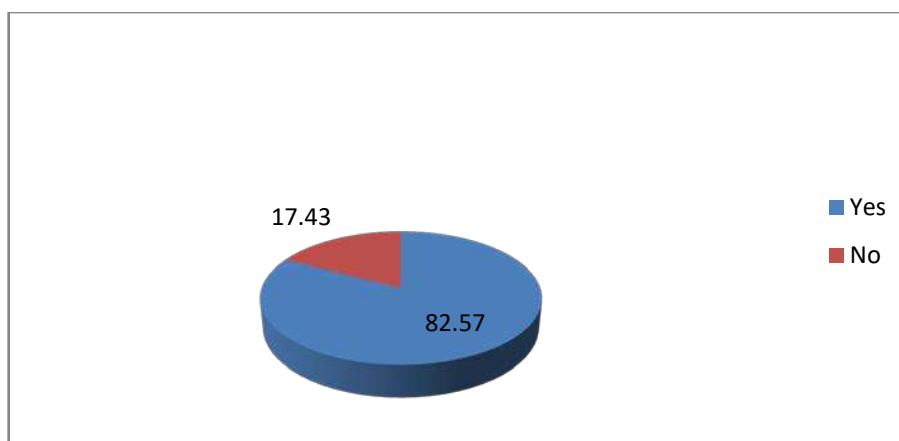


Figure 1: Perception on various actors' intervention in agro-pastoral infrastructures

Source: Field work (2022)

The statistics above revealed that 82.57% of the sample population agreed that diverse actors are involved in the provision of agricultural infrastructures in various communities in Mezam Division. These actors intervene in the areas of rural farm credits, improving market and marketing opportunities, farm to market roads, training and extension services and agro -pastoral research.

5.2 Provision of farm to market roads

Rural transport is double facet, first it is a transport chain with one end in the agricultural fields and the other on the local market. Actors who intervene in the improvement of rural roads in Mezam are committed in the improvement of tracks and roads linking the farms and market or vice versa. Small holder farms are homes to many of our country's rural poor. The issue of improving rural roads is not new in the development community. It has been at the centre of development policies, supported by the popular assumption among the development theories that remote areas disadvantageous position in relation to economic opportunity and social welfare could be remedied with roads building, Bryceson *et al.*,(2008). Roads are thought to be the catalyser in the process of economic development, Rostow, (1962) and are a particular important factor to the growth of rural areas. The poor and inadequate state of transport facilities in rural communities in Mezam has greatly reduced the effectiveness of agricultural production. It has limited the amount of farm inputs and outputs of most farmers. To remedy the problem of poor and inadequate state of farm to market roads, diverse actors have intervened to improve on the mobility to and fro the farms and markets. From field investigations, it shows that diverse actors are involved in the development of farm to market roads in rural communities in Mezam

Division. Table 2 below shows the actors involved in the improvement of farm to market roads in rural communities of Mezam Division.

Table 2: Perceptions on actor’s involvement in improving farm to Market Roads

Provision of farm to market roads									Freq of Actors	% of various actors
Actors	Bafut		Bali		Santa		Tubah			
	Freq	%	Freq	%	Freq	%	Freq	%		
VDA	21	30	10	27.8	21	27.3	18	31.0	70	29.05
Gov’t	10	14.3	04	11.1	09	11.7	07	12.1	30	12.45
Council	20	28.6	12	33.3	21	27.3	17	29.3	70	29.05
Elites	03	04.3	04	11.1	06	07.8	05	08.6	18	07.47
Parasatals	07	10	06	16.6	21	27.3	10	17.2	43	17.84
CMOs	07	10	00	0.0	00	00	02	03.4	9	03.73
Total	70		36		77		58		241	100

Source: Field work (2022)

According to field investigation, the government as the main actor of rural development contributes 12.45% to the development of farm to market roads. Based on Focus Group Discussion, the government is involved mostly in the development of primary roads linking farms and markets within different Sub-Divisions. From the interviewee’s perception, it shows that the council and VDA contribute enormously in the provision of farm to market roads in rural communities in Mezam Division with 29.05% respectively. The statistics also revealed that, Para statals contribute 17.43%, CMOs 03.73%, and elites 07.47% of the available farm to market road infrastructures in rural communities in Mezam Division.

In order to enhance farm to market roads, the actors do not work in isolation but rather in a synergy to realise various infrastructures with the municipal councils at the centre of each development effort to ease the mobility of farmers. The involvement of various actors in enhancing farm to market roads is done in two principal ways. That is by direct participation and indirect participation. Directly the councils are involve in constructing roads linking the major agricultural hubs of their communities. It involves digging of new roads, construction of bridges, building of culverts and grading of existing roads. Following the first approach, the municipal councils in rural communities in Mezam usually integrate the rural communities in developing minor roads linking their farms and the communities. From field investigation, it was found out that each year, the councils organised yearly best farm road competition, which aimed at rehabilitating major tracks linking the farms and the communities. This is usually done with the Village Development Associations (VDAs) and private individuals. Through these competitions prizes are awarded to the communities according to their participation and effectiveness in maintaining the farm to market roads. The second approach involves working with major development partners such as Para Statals and NGOs who are involved in the development process in those communities. Based on this approach, major or priority roads are identified by

the municipal councils which are then handed to their development partners to execute. Table 3 shows some identified farm to market roads realised by development actors in various communities in Mezam Division.

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Table 3: Identified farm to market roads realised in various communities in Mezam Division

Sub-Division/ community	Nature of activities	Road distances	Actors involved
Bafut Sub-Division	Rehabilitation of farm to market road from Akufunguba to Ntaya	07km	Bafut council/GP DERUDEP
Mundum	opening of farm to market road Ntaya, Otang and Nibeba	11km	
Ayenneson/Njikwo	Rehabilitation of farm to market road from Ayennesong to Njikwo	04km	Bafut council
Tingoh/Buwi	Rehabilitation of farm to market road from Tingoh to Buwi	02km	Bafut council/ PNDP
Okwala/Mantaa	Opening of farm to market road from Okwala to Mantaa	06km	Bafut council/PNDP
Mughom/Okwala	Rehabilitation of farm to market road from Mughom to Okwala	03km	Bafut council /PNDP
	Rehabilitation of farm to market road from Achieni to Buwe	04km	Bafut council
Bali Sub-Division	Rehabilitation of the Baform-Formunjuh farm to market road	-	PNDP/Council, community
Bawock	Grading of farm to market road from Nkwat Bawock-Pinyin	-	contribution
Boh Etoma- Mbufung-Gungong	Grading of the Boh Etoma-Mbufung-Gungong road	10km	
Boh Etoma	Rehabilitation of farm to market road and construction of a bridge linking the farming communities	06.5km	PNDP/ Council Community
KutaChi/Bossa	Rehabilitation of the KutaChi-Bossa road	-	PNDP/Council Community
Koppin	Rehabilitation and construction of a bridge linking the farming communities of Koppin Fulani and Koppin native	10km	PNDP/Council, Community
Mbatmandet	Rehabilitation of farm to market road in Mbatmandet community	07km	Council
Bossa	Construction of a bridge at Tim linking the farming communities of Bossa and Tim	05km	PNDP/Council, Community
Santa Sub-Division			
Pinyin	-Rehabilitation of farm to market from Ntoh Pinyin to Mesaw -Rehabilitation of farm to market road from Kwindeli-Mbeken through Mesaw to Ndapang - Rehabilitation of a farm to market road from Ntali junction through Nituid to Ngong - Opening of farm to market road from GHS Menka to Kishwi community forest	08km 12km 07km	GP DERUDEP/PIB KWADA GP DERUDEP GP DERUDEP
Mbei	-Rehabilitation of farm to market road from mile 12 through rock farm to Ngwassa -Rehabilitation of farm to market road from Mubaku to upper Ntaw	05km 06km	GP DERUDEP/Santa council GP DERUDEP

Santa	-Construction of farm to market road from Baba II through Ntare to mile 12	08km	Santa council
Akum	-Rehabilitation of farm to market road from mile 5 through Acha valley to mile 8 Akum	04km	GP DERUDEP
Santa central	-Rehabilitation of farm to market road from Nindem to Muyene Quarters	02km	GP DERUDEP
Njong-Awing-Baligham	-Rehabilitaion of the road from mile 12 through coffee estate to Baligham -	15km	GP DERUDEP
Awing	-Rehabilitation of farm to market road from Ntinelah to Messang	09km	GP DERUDEP
	-Rehabilitation of farm to market road from Alahbong to Nibarah	05km	GP DERUDEP
Mbu	-Construction of farm to market road from Laka I to LakaII to the boundary with Bamenda II Sub-Division	04km	GP DERUDEP
	-Rehabilitation of farm to market road from New layout junction through to Mukuku farming area	04km	GP DERUDEP
Buchi	-Rehabilitation of farm to market road from Kongsal through Nkure to kongkimbat to Mbei Santa	12km	GP DERUDEP
Tubah Sub-Division	-Rehabilitation of the Madzemban-Fingi farm to market road	22km	PNDP/Council, Community
Madzembang/Fingi			
Three corners Bambili/Wando	-Grading of road from 3 corners Bambili to Palace via wando and the Construction of 4 bridges linking farming communities	06km	PNDP/Council, Community
Chubali/Chutonki	-Rehabilitation of farm to market road from the community of Chubali to Chutonki	04km	Council/ community
Kedjom Ketinguh	Construction of farm to market in linking various communities	10km	PNDP/Council, Community

Source: Fieldwork (2022)

5.3 Provision of marketing infrastructures and opportunities

The rural communities in Mezam Division harbours majority of the poor who make their living as small holder farmers. Ensuring the rural poor with marketing opportunities and improving the terms on which they interact with them is a powerful tool to enhance socio economic development. Selling of agricultural produce is an important income earner for the rural masses and adds a significant dimension in their livelihood strategies. The provision of markets do not only acts as selling locations but as points of information acquisition, exchange of economic information and areas to buy agricultural inputs and food. Low access to marketing infrastructures really impedes the rural dwellers of important avenues of securing their livelihoods and improving on their socio economic situations. Figure 2 shows the perceptions of marketing avenues available to famers in rural communities in Mezam Division with the intervention of diverse actors to improve marketing infrastructures and mechanisms.

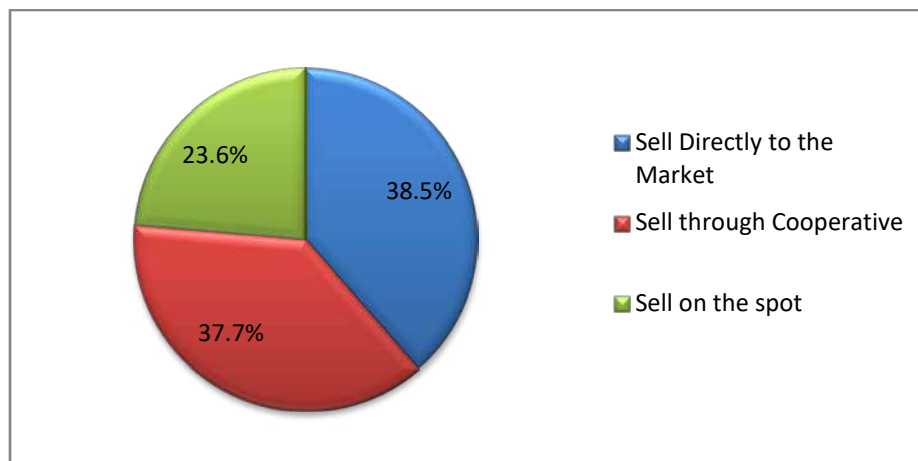


Figure 2: Perception of interviewees on where they sell their produce

Source: Field data (2022)

Figure 26 above indicates that, 38.5% of farmers in rural communities in Mezam Division indicated that, they sell their produce directly to the market, 37.7% through cooperative societies while 23.6% sell on the spot. The mechanisms available to farmers in rural communities of Mezam to sell their produce have resulted from the actions of various development actors. Their actions have resulted in the construction of markets, formation of farmer's cooperative and the creation of marketing avenues which have linked buyers and farmers together. Table 4 shows the

perception of interviewees on the contribution of these actors in the provision of marketing infrastructures in various communities in Mezam Division.

Table 4: Interviewee’s perception on various actors’ contributions to marketing infrastructures

Actors	Provision of marketing infrastructures								Freq of Actors	% of various actors
	Bafut		Bali		Santa		Tubah			
	Freq	%	Freq	%	Freq	%	Freq	%		
VDA	20	28.57	9	25	22	28.57	15	25.86	57	27.38
Council	31	44.25	15	41.66	30	38.96	27	46.55	103	42.73
Parasatals	8	11.42	6	16.66	18	23.37	6	10.34	38	15.76
NGOs	11	15.71	6	16.66	7	9.09	10	17.24	34	14.10
Total	70	100	36	100	77	100	58	100	241	100.0

Source: Field work (2022)

The statistics on table 4 indicates that, the councils and the VDA are more involved in the provision of marketing infrastructures in rural communities in Mezam. The perceptions of various interviewees show that, the councils contribute 42.73% while the VDA contribute 27.38% various marketing infrastructures. Even though field statistics reveals that, councils and VDAs are highly active in the provision of marketing infrastructures; it was also observed that, the activities of Para-statals and NGOs have also boosted immensely the amount of marketing infrastructures and avenues found within the rural communities of Mezam. Field statistics show that, Para-statals and NGOs also contribute 15.76% and 14.10% respectively in the provision of marketing infrastructures to enhance agricultural activities in various communities. G.P DERUDEP (Grassroots Participatory and Rural Development Program), PNDP (National Community Driven Program Protection) and FEICOM (Fonds d’Equipement Inter Communal) are the major Para-statals working in synergy with the rural councils and VDA to realise these marketing infrastructures. Table 5 shows; list various marketing infrastructures which have been realised by various actors in rural communities in Mezam.

Table 5: Marketing infrastructures realised by various actors

Bafut Sub-Division			
Type of infrastructures	locations	Total	Actors involved
Daily or lock up markets	Njinteh,	01	Bafut council and FEICOM
Temporal or feeder markets	Spread all over Bafut	26	Bafut council and VDA
Slaughtering slaps	Ayati, Nforya, Agip	03	Bafut council/ FEICOM
Cattle markets	Abagoh	01	Bafut council/FEICOM
Bali Sub-Division			
Daily or lock up markets		01	Bali council, PNDP
Temporal or feeder markets	Wosing	01	VDA
Slaughtering slaps	Koppin, Bossa, Nakah	03	Bali council
Cattle markets	Koppin Fulani, nakah	02	Bali council
Santa Sub-Division			
Daily or lock up markets	Santa, Mbei, Mile 12, Mile 7 Akum and Matazem	05	Santa council and FEICOM
Temporal or feeder markets	Ndapang, Menka, Buchi, Baligham and Awing	05	Santa council, VDA and G.P DERUDEP
Slaughtering slaps	Ntoh –Pinyin	09	Santa council/ GP DERUDEP
Cattle markets	Mile 9 Akum	01	Santa council / FEICOM
Tubah Sub-Division			
Daily or lock up markets	Nfontah, Bambili and Bambui	03	Tubah council, FEICOM and PNDP
Temporal or feeder markets	Kedjom Keku, (Yuroba) Kedjom ketiguh, Sabga	03	Tubah council and VDA
Slaughtering slaps	Lih, Bambili, sabga Yoruba	04	Tubah council
Cattle markets	Lih, Yoruba, sabga	03	Tubah council
Total		40	

Source, Field work (2022)

Considering the importance of markets in the socio-economic uplift of rural communities, diverse actors now intervene in the provision marketing infrastructures in rural communities of Mezam Division. These marketing infrastructures include the construction of temporal or feeder markets, daily or locks up markets, slaughtering slaps and cattle markets.

Based on field statistics, a total of nine (09) daily or lock up markets have been constructed by various actors. The construction of daily markets with lockup stores by various actors has to an extent solved the problem of marketing and storage. Secondly, with the presence of a daily markets, farmers are guarantee of better marketing opportunities as they do not necessarily have to wait for the next marketing week to sell their produce. This is because the construction of the markets has encouraged the presence of ready buyers or consumers.

The development of temporal or feeder markets has been one of the measures used to solve the problems of marketing in rural communities in Mezam Division. These feeder or temporal markets have been constructed in most villages of the Sub-Divisions. They mostly operate on weekly basis and attract buyers from neighbouring urban areas. Apart from weekly operations, some of the temporal markets operate on daily basis with limited volume of marketing activities as compared to the daily markets. Plate 6 below illustrates some marketing infrastructures realised in different communities in the study area by development actors.



Plate 1: Marketing infrastructures realised by various actors in the study area



Photo 1: Lockup sheds constructed in the Bali market by PNDP



Photo 2: The Bafut main market cons- by the council and with FEICOM funds



Photo 3: Modern lockup sheds provided By GP DERUDEP by in Ndapang-Pinyin



Photo 4: Meat selling slap constructed at Lih- Babanki by Tubah Council

Source: Neba AA (2022)

Plate 1, shows an improved state of marketing infrastructures by diverse actors in different communities in Mezam Division. The improvement of marketing infrastructures has solved the problems of inadequate and dilapidated state of marketing infrastructures in various communities.

In order to promote the marketing and distribution of livestock, the councils have developed and constructed cattle markets and slaughtering slaps. These cattle markets often acts

as collecting point for cattle coming from nearby villages. For example, In Bafut Sub-Division, the cattle market at Abagoh acts as a collecting point for cattle coming from Akofunguba, Ntaya, Mambu and Mfonta-Mforya –Akosia areas which are sold to buyers from nearby towns like Nkwen and Mankon. The construction of the cattle markets is associated with the construction of vaccination pools which help to ensure the health of the cattle before marketing. With the increasing demand of protein and meat from the ever increasing population, the development of cattle markets are accompanied with the construction of cattle slaughtering slaps in many communities where meat can be sold directly to the public. The construction of these slaughtering slaps and cattle markets have diversify the marketing opportunities for the livestock breeders, thereby fostering the socio-economic development of the area.

The development of marketing infrastructure by NGOs in rural communities in Mezam-Division does not usually take the form of putting in place hard infrastructures. It was found out that, most of the NGOs have created mechanisms which act as intermediaries between the farmers and consumers who reside in urban or semi urban areas to sell their produce. Most of these NGOs work with cooperatives societies which help as marketing avenues for farmers in rural communities in Mezam Division. Through the development of agricultural shops some NGOs help to market the product of farmers found within communities in Mezam Division. Amongst these NGO include CAMIFUCOS, NOWEFOR and NOWEBA. These NGOs have developed agricultural shops in the urban centres which act as their marketing avenue. Farmers who belong to these associations usually sell their produce to them, which are marketed in the urban areas. For example between 1997 and 1998, the NOWEFOR shop bought and sold from farmers in Bafut twenty three (23) tons of Irish potatoes, fourteen (14) tons of maize and five (05) tons of beans. Some NGOs also intervene in the marketing process in rural communities of Mezam Division by providing the farmers with vehicles which help to transport farmer's produce to the market.

VDAs are very instrumental in the provision of marketing infrastructures in various communities Mezam-Division. According to field report, their participation in the provision of marketing infrastructures is as a result of the municipalities' inability to provide daily markets to all the quarters in the Sub-Division especially those which are away from the main markets. In order to meet the marketing needs farmers, VDA, s construct temporal markets in various

quarters. These temporal or feeder market acts as venues where farmers sell their produce on a weekly base. Even though the feeder markets are constructed by the VDAs, their activities are regulated by the councils.

5.4 Provision of agro pastoral credit infrastructures

According to the statistics from the field, among the 241 sample carried out, 201 farmers (83.40%) accepted they that have acquired at least one form of credits from the different actors in their communities to improve on their agro-pastoral activities. The credits received by farmers were either in the form of grants or loan as represented in table 6.

Table 6: Sources of rural farm credit

Sources of rural farm credit	Frequency	Percent	Valid Percent	Cumulative Percent
Loans	151	62.7	62.7	62.7
Grants	90	37.3	37.3	100.0
Total	241	100.0	100.0	

Source: Field work (2022)

Based on field evidence, loans constituted 62.7% of the credit type found among farmers within rural communities in Mezam while grants constitute only 37.3%. Loans are acquired by farmers through micro finance institutions or Njangi houses as individuals or group of farmers (under leverage of Common Initiative Groups, (CIGs) at a given interest rate. Grants are offered mostly to farming groups by donor institution and are interest free. Diverse actors have been involved in promoting farmers access to agro –pastoral credits in rural communities in Mezam Division. Table 7, shows the degree of intervention by various actors in the provision of agro pastoral credits from the sample population.

Table 7: Actors involved in the provision of agro-pastoral credits

Provision of rural farm credits									Freq of Actors	% of various actors
Actors	Bafut		Bali		Santa		Tubah			
	Freq	%	Freq	%	Freq	%	Freq	%		
Gov't	03	4.3	01	02.8	05	6.5	00	0.0	09	03.7
Council	12	17.1	05	13.9	14	18.2	09	15.5	40	16.6
Parasatals	00	00	03	8.3	12	15.6	02	03.4	17	07.1
MFI	17	25.7	12	33.3	17	22.1	14	24.1	60	24.9
Church	05	07.1	00	00	00	00	04	06.9	09	03.7
NGOs	17	24.3	05	13.9	14	18.2	16	27.6	52	21.6
Njangi	16	22.8	10	27.8	15	01.9	13	22.4	54	22.4
Total	70		36		77		58		241	100.0

Source: Field work (2022)

From field investigation and key informant sources it was observed that, different actors are involved in the provision of agro-pastoral credits among farmers in rural communities in Mezam Division. The major actors involved in the provision of agro-pastoral credits involved the government, the municipalities, Para- statals, micro finance institutions, Church Mission Organisations, NonGovernmental Organisations and Njangi groups.

From table 7, NGOs/ Para -Statals, microfinance establishments, farmer's credit houses, Njangi groups and Church Mission Organisations have contributed immensely in the provision of agro pastoral credits to farmers in rural communities in Mezam Division. Their contributions in the generation of agro pastoral credits have improved the local population's access to farm credits. These actors, acting as new avenues of credit infrastructures have put in place different mechanisms to foster the availability of credit to farmers.

The growth of microfinance institutions in various communities in Mezam -Division has been a major source of agro pastoral credits to farmers. Field statistics shows that, 24.9% of farmers credits are generated from microfinance institutions. In rural communities of Mezam-Division, Credit Unions are the most common form of micro finance infrastructures which have cropped up to solve the problem of inadequate access to credit facilities. Credit Unions have developed in almost all the villages of Mezam-Division. Table 8, shows the list of some of the micro financial institutions intervening in the provision of agro-pastoral credits in various communities in Mezam Division.

Table 8: Micro finance infrastructures indentified in various communities of Mezam-Division

Name of micro financial institution	Location
Nsanimunwi Cooperative Credit Union	Bujong - Bafut
Mambu Cooperative Credit Union	Mambu
Unity Cooperative Credit Union	Njinteh
Bawum Cooperative Credit Union	Bawum
Agyati Cooperative Credit Union	Agyati
Swie Cooperative Credit Union	Swie
Nforya Credit Union	Nforya
Njimuyah farmers Credit Union	Njimuyah
Bafut Cooperative Credit Union	Spread in almost all the villages in Bafut Sub-Division
NOWEFOR credit house	Bafut, Bambili, Bambui, Babanki
Mbamba Credit Union	Baforchu-Santa
Mitayen Credit Union	Pinyin
Akum Credit Union	Akum
Santa Credit Union	Santa
Santa Mc ²	Santa
Bali community barn	Bali
Tinguh Credit Union	Kedjom Ketinguh
Bambui crdit union	Bambui, Kedjom Ketinguh
Bambili Credit Union	Bambili

Source: Field work (2022).

The growth of these credit infrastructures in various communities in Mezam-Division has helped to improve the farmer's access to agro-pastoral credit. It has generated the spirit of savings amongst farmers which act as collateral for credit acquisition. Credits can be acquired by the farmers by applying directly for an agricultural loan. Through the Credit Unions, farmers acquire loans at very cheap rates of 01% as compared to when borrowing from money lenders at very exorbitant rates. Some of these Credit Unions are used as avenues by the World Food Program (WFP) to offer agricultural grants to farmers. It was found out that the WFP offers four million yearly to the Cooperative Credit Union which is offered as agricultural grants to farmers each year. More so from field observation, it was observed that, in all the Credit Unions a special funds has been set aside only for the promotion of agricultural activities. The emergence of these micro financial institutions have solved to a greater extent the problem of low access to agro pastoral credits which results from inadequate agro pastoral credit infrastructures.

Apart from Credit Unions, it was also found out that some farmers acquired credit through farmer's credits schemes in Bafut and Tubah Sub-Divisions. The presence of the

NOWEFOR agricultural credit scheme has opened new avenues for credit creation for farmers in their zones of intervention. The NOWEFOR credit house is a credit institution which has been developed to mobilise the financial resources of farmers in the NorthWest region. Created in 1997, its share saving stood at 63500 FCFA while the registration amounted to 93,000. Members of the credit house are made up of individuals, farming unions or group of farmers. The activities of NOWEFOR in Mezam-Division are carved out according to zones. In Bafut, the zones include: the centre which constitutes Mumelah, Mambu and Tingoh, the Nforya zone made up of Akossia, Asanje, Nfonta Mbie communities and the Njimuya zone. In Tubah, the Zones of intervention by NOWEFOR have been carved out following the villages found within the Sub-Division. That is, the Bambui, Bambili, Kedjom Ketinguh and Kedjom Keku zones. In these zones, NOWEFOR have constructed credit houses to meet the financial needs of the farmers. In 1998, SOS Faim Association, a co – sponsor of NOWEFOR granted the credit house 26.5 million. Part of the money was used as credit to farmers. Loans from the credit house are granted to individuals or group members who must be duly registered with the credit house. The credit house operates basically on a small interest rate of 01% and usually given with a six months period of grace. By the elapse of the six month, the farmers can now start to repay the loan. Table 9 indicates farm credits received by farming groups from the NOWEFOR credit house in Mezam.

Table 9: Credits received from NOWEFOR credit house by farming groups in Mezam-Division

Farming groups	Amounts of credit (F CFA)	Purpose of loan
Nforya II Agro farmers	500,000	Farm inputs
Trinity Mixed Farming Group	75,000	Farm inputs
Osogho Mixed Farming Group	250,0000	Farm inputs
Mulue Manjong Farming Group	189,000	Farm inputs
Swaa Farming Group	350,000	Farm inputs
Tingoh Rice Union	1,200,000	Farm inputs
Ayunihie Farming Group Nchum	275,000	Farm inputs
Akongne Farming Group Swie	450,000	Farm inputs
Niko mixed Farming Group	200,000	Farm inputs
Young Farmers Nchum	620,000	Farm inputs
Unity Farming Group Bukari	125,000	Farm inputs
New Model Farming Group Nforya	1,105,000	Farm inputs
Oxen Farming Group Nibe	319,000	Farm inputs
AgyatiLowland mixed Farming Group	421,000	Farm inputs
Mankaha livestock Group	800,000	Farm inputs
Dynamic Farming Group Njimbee	578,000	Farm inputs
Alenwi Group Swie	350,000	Farm inputs
Diary project Group Nforya	435,800	Farm inputs
We are together farmers	750,000	Farm inputs
Njimsisung Farming Group	50,000	Farm inputs
Young Farmers CIG Mambu - Bafut	125,000	Farm inputs
Social Farming Group	256,000	Farm inputs
Evergreen Farming Group Bujong	650,000	Farm inputs
Total amount	445,713,000	

Source: Field work (2022)

From field statistics, it shows that between 2004 and 2009, NOWEFOR gave out 445,713000FCFA as loan to farming groups in Mezam-Division (See table 41). These loans are used by farmers to buy farm inputs such as fertiliser, cutlasses, hoes, pesticides and spray cans. The loans were either borrowed by the farming group or by an individual farmer in the farming group which are usually pay back to NOWEFOR through their farming groups after harvesting and selling. The presence of many credit infrastructures in different communities in Mezam Division has widened the farmer's access to diverse credit opportunities. The perceptions of farmers carried out during FGDs shows that, the development of credit infrastructures by development actors has fostered the development of agriculture. This has improved the level of socio-economic development in rural communities in Mezam -Division.

According to field sample, Non Governmental Organisations and donor institutions contribute 21.6% of the credit available to farmers in Mezam-Division. The credit infrastructure mechanism which has been developed by these NGOs and Donor institutions is carried out either through the grants or loan schemes. Table 10 show some credits which have been granted to various farming groups in Mezam Division.

Table 10: Agro pastoral credits to farming groups in Mezam Sub-Division

NGO/Donor Institutions	Credit specification	Amount of credit (F CFA)	Total Interest (F CFA)	Beneficiary Group
SAILD	Loan	300,000	30000	-Fishing group Nforya,
	Loan	200,000	300000	-Women Groups Nforya
Canadian Revolving Fund	Grant	100,000	-	-Self Reliance farming group
	Grants	100,000	-	-Pioneer Farmers
	Grants	100,000	-	-Chwichwi Farming Group
	Grants	100,000	-	- We Are Together Farmers Unity Women
Heifer Project International	Grants	20,000,000	-	13 Groups and individuals farmers
UNDP	Grants	2,500,000	-	Aturu Women in Developmnt
SIRDEP	Grants	520,000	-	Self Reliance Group AChieni
MBOSCUDA	Loan	800,000	-	MBOSCUDA women group Awing
	Loan	1,500,000	-	MBOSCUDA women Group Baba II
	Grants	250,000	-	MBOSCUDA Women Group Mundum (Bafut)

Source: Compiled from field work, (2022)

Non Governmental Organisations have offered loans and grants to different farming groups and individual farmers as seen on table 42. These credits are used by the farmers to buy seeds, hoes, buckets and rearing of livestock. Their contribution to agro pastoral credits has fostered the socio-economic development in rural communities in Mezam-Division. Plate 2 shows some credit infrastructures identified within the study area.

Plate 2: Credit infrastructures identified within some communities in Mezam Division



Photo 5: Nsanimunwi Credit Union Bujong-Bafut



Photo 6: Unity Cooperative Credit Union, Njinteh-Bafut



Photo 7: Mitayen Cooperative Credit Union – Atualah Pinyin



Photo 8: Bali Community barn

Source: Neba AA (2022)

Plate 2; indicate the photo of credit infrastructures constructed in different communities in Mezam Division. The construction of these credit infrastructures have helped to bring closer credit opportunities to majority of the population who usually complained of inadequate credit opportunities in their communities.

5.5 Provision of agro-pastoral training sensitisation

Technological change, the adoption of inputs, new agricultural and resource management practices, and the adoption of improved seeds can sustainably increase agricultural productivity. Technological change therefore plays a pivotal role in rural socio-economic development. The provision of agricultural extension services allows farmers to be informed of new agricultural technologies, obtain advices on best agricultural practices, and obtain assistance with dealing with adverse shocks such as insect infestation or plant disease, Dercon *et al* (2006). Okoboi and Barungi, (2012) look at the constraints on fertilizer used in Uganda, where declining soil fertility

is an important factor of low productivity in agricultural production. Their analysis shows that, in addition to credit constraints and distance to the market, the lack of knowledge about the use of inputs and market information due to limited access to fertilizers-specific extension services are the most limiting constraints to the adoption of both organic and inorganic fertilizers.

Based on the above literature, it shows that agro-pastoral development in rural communities of Mezam Division entails the development of a strong base for training and sensitisation which can only be achieved through the provision adequate rural extension infrastructures. Statistics gathered from the field shows that diverse actors are involved in the training and sensitisation of farmers in rural communities in Mezam and 90% of the interviewees have at least received training and sensitisation from various actors. Table 11 shows the perception of interviewees and the actors involved in the provision of training and sensitisation in rural communities in Mezam.

Table 11: Agro pastoral training and sensitisation

Provision of agro pastoral training and sensitisation									Frequency of Actors	% of various actors
Actors	Bafut		Bali		Santa		Tubah			
	Freq	%	Freq	%	Freq	%	Freq	%		
Gov't	20	28.6	14	38.9	24	31.2	17	29.3	75	31.1
Council	12	17.1	02	05.6	19	24.7	03	05.2	36	14.9
Parasatals	14	20.0	07	19.4	14	18.2	07	12.1	42	17.4
CMO	12	17.1	00	00	00	00	14	24.1	26	10.8
NGOs	12	17.1	13	36.1	20	26.0	17	29.3	62	25.7
Total	70		36		77		58		241	100.0

Source: Field work (2022)

The statistics obtained from field work revealed that diverse actors are involved in the training and sensitisation of agro-pastoral farmers in rural communities in Mezam Division. Based on the results, the government contributed 31.1% of training and sensitisation activities to farmers. Municipal councils contribute 14.9%, CMO 10.8% while NGOs and Para-statals contributed 25.7% and 17.4% respectively.

Table 12: Principal actors and areas of intervention in training and sensitisation in rural communities of Mezam

Principal actors	Activities
PRTC NFONTAH	Livestock farming, soil conservation, tree planting, apis culture, seed multiplication, accounting and saving techniques, marketing strategies, food processing
NOWEFOR	Marketing and saving strategies , book keeping
GP DERUDEP	Soil management , marketing, accounting and saving
SAILD	Storage techniques, marketing strategies for crops and livestock, train leaders of farmers organisations, seed multiplication
IDF	Book keeping, organisation and structuring, agricultural development, financial management and marketing.
HPI	Training on how to increase the nutritional level of animals especially in the dry season, rear livestock, feed ,care and manage livestock
MBOSCUDA	Training on pasture improvement and ownership , bee keeping farming, business management, gender and women empowerment Marketing strategies for livestock, group and leadership dynamics
ACEFA	Training on pasture management, marketing strategies, value chain management,
PACA	Training on pasture management, marketing strategies, value chain management,

Source: Field work (2022)

From table 12, diverse actors are involved in the training and sensitisation of farmers in rural communities in Mezam Division. Training and sensitisation is done in areas of marketing, savings, livestock management, seed multiplication, soil conservation and food processing. In the process of training and sensitisation, it was also noticed that the actors intervene either by on the spot training or through centre based training. Fig 3 illustrates a hypothetical diagram on how various actors sensitised and train farmers in rural communities in Mezam.

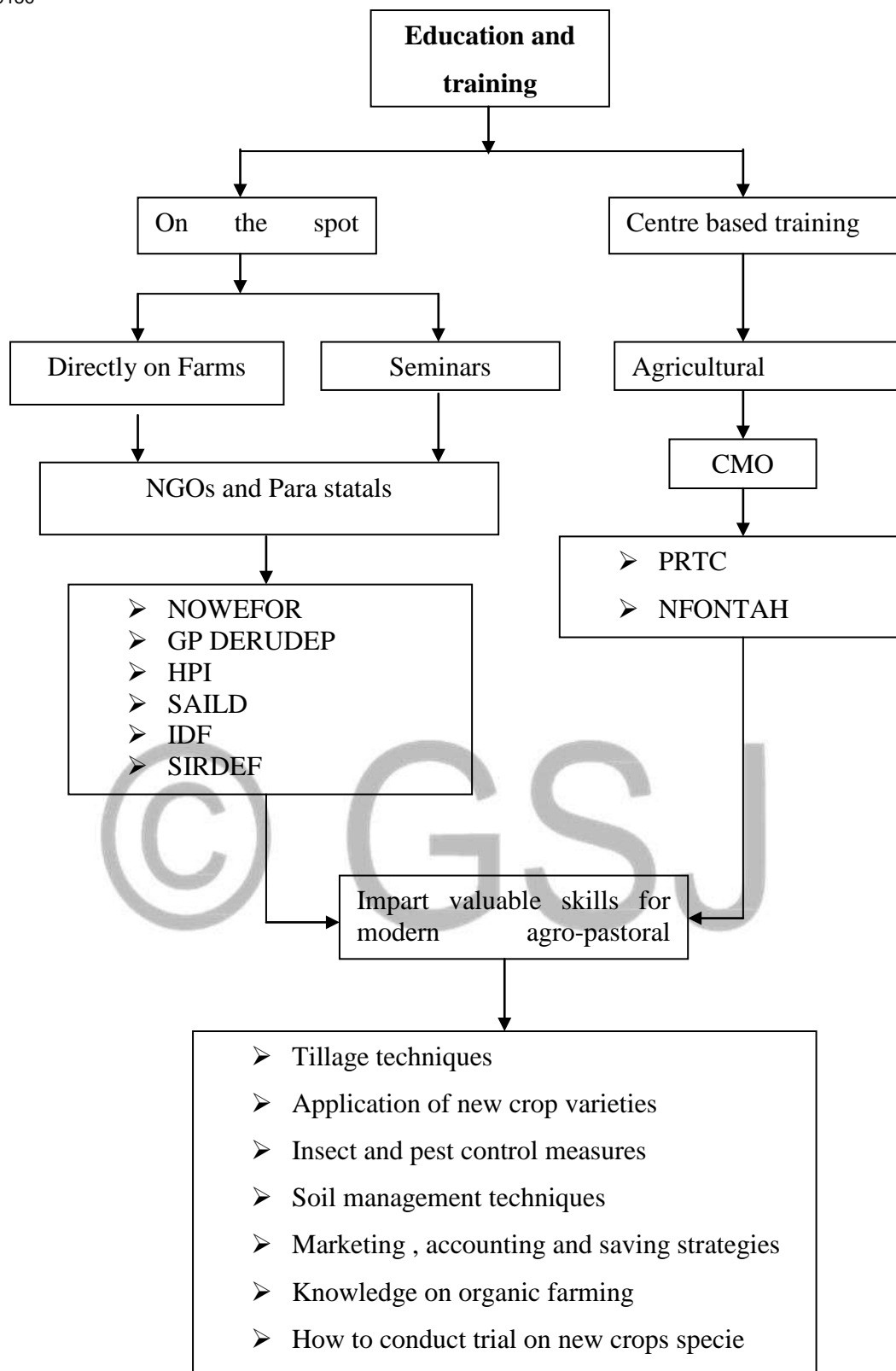


Figure 3: A hypothetical diagram of education and training by various actors in rural communities in Mezam.

Source: Author’s conception, Master work (2009).

On the spot training is carried out by NGOs and Para statals such as NOWEFOR, GP DERUDEP, IDF, HPI and SAILD International. Farmers are trained directly on the farms or through seminars where valuable skills are passed on to them. In the case of centre based training, it was identified that, P.R.T.C. Nfonta offered block course in different agricultural domain. From Focus Group Discussion it was found out that PRTC Nfonta offers centre based courses in agro-pastoral activities which range from three to nine months. At the end of each course the trainees are encouraged to open their own farms which are monitored by extension workers sent from PRTC.

The emergence of diverse actors to foster the training and sensitisation in rural communities in Mezam has contributed in the development of agro-pastoral activities among farmers. Through training and sensitisation, farmers have been able to gain knowledge in marketing strategies, savings, soil management and conservation, seed multiplication and selection, pest and weed control. This has resulted in an increase in output and income of the farmer, which is a positive indicator of socio-economic development. It ties with Dercon *et al.*,(2006) empirical findings which shows that, increase access to extension services led to faster consumption growth and lower rates of poverty in 15 rural villages in Ethiopia with increase in consumption by 07.1% and reduction of poverty incidence by 10% with at least one extension visit.

5.6 Improvement of agro pastoral research and innovation

Low level of agro pastoral productivity has led to an improvement in agro pastoral research activities in various communities by diverse actors. Field observation shows that diverse actors have made major strive in three principal domains to foster the development of agro pastoral activities in rural communities in Mezam Division. Fig 4 shows that with the intervention of various actors, 78.5% of the sample population now have access to agro pastoral infrastructures.

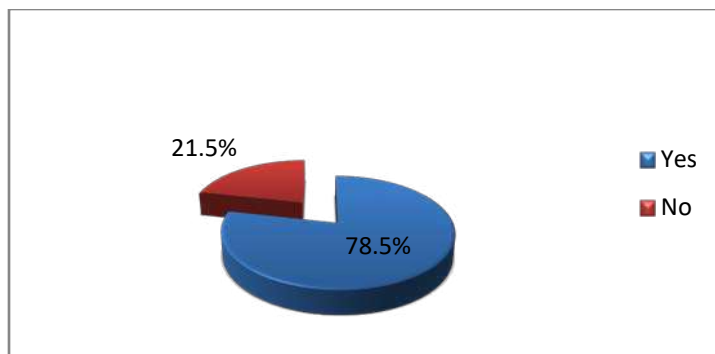


Figure 4: Interviewees Perception on the availability of agro pastoral research

Source: Field work (2022)

The improvement of agro-pastoral infrastructures in rural communities in Mezam is as a result of the efforts of diverse actors. These actors include: the government, municipal councils, private individuals, para statals and Church Mission Organisations.

Table 13: Provision of agricultural research and innovation

Provision of agricultural research training and innovation									Freq of Actors	% of various actors
Actors	Bafut		Bali		Santa		Tubah			
	Freq	%	Freq	%	Freq	%	Freq	%		
Gov't	23	32.9	18	50	39	50.6	17	29.3	97	40.2
Council	00	00	08	22.2	15	19.5	12	20.7	35	14.5
Private	00	00	02	05.6	00	00	00	00	02	0.8
Parasatals	00	00	06	16.7	23	29.9	12	20.7	41	17.0
Church	47	67.1	02	05.6	00	00	17	29.3	66	27.4
Total	70		36		77		58		241	100.0

Source: Field work (2022)

The statistics on table 13 revealed that, in the development of agriculture and research infrastructures in rural communities in Mezam, the government contributes 40.2%, municipalities 14.5%, private individuals 0.8%, Para statals 17.0% and Church Mission Organisations 27.4%. The presence of these actors in rural communities of Mezam have improved the know-how of farmers and also improved on the stock of highbred species of plant and animals available to the farmers. Concerning the respondents know how on high yielding animals or seed varieties, the respondents indicated that diverse actors have improved their knowledge on the type of seed and animal varieties available to them for agriculture as presented on fig 5.

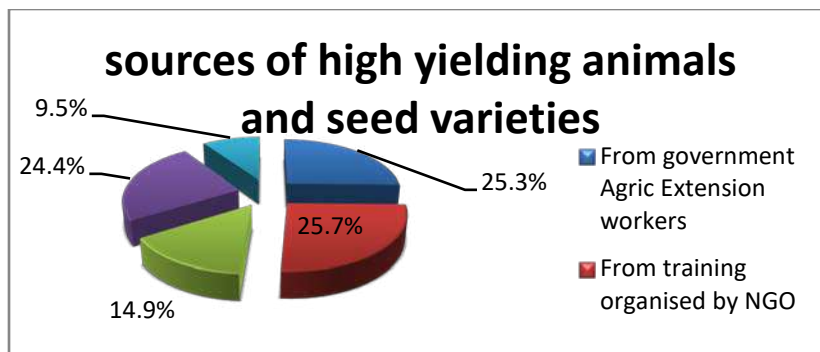


Figure 5: Sources of the high yielding animals and seeds varieties

Source: Field work (2022)

From field work the respondents indicated that 25.7% of their knowledge on animals and seeds of High Yielding Varieties (HYV) came from NGOs, 25.3% from government agric extension workers, 24.4 from the council while 14.9 from training acquired from mission training schools in their communities. The sample also revealed that 9.5% of respondents got their knowledge from all the actors involved.

Apart from introducing farmers on the knowledge of hybrid seeds and animal species, the actors involved also promoted farmers directly with the supply of hybrid species of plants and animals which have boosted agricultural productivity in the area. Table 46 shows the interviewees perceptions on the contribution made by development actors in the provision of hybrid plants and animals in rural communities of Mezam Division.

Table 14: Distribution of respondents according to the type of activities research institutions do offer

Activities of research institutions	Responses	
	Yes	%
Supply farmers with improved seeds	83	34.43
Offers improved species of cattle to rearers	61	25.31
Introduce farmers to improved species of animal fodder	97	40.24
Total	241	100

Source: Field work (2022)

Statistics from table 14 revealed that, 34.43% of the respondents indicated that various actors have supplied farmers with improved seeds, 25.31% offers improve species of cattle to rearers while 40.24% Of the actors have introduced improved species of animal fodder. The contributions made by these actors in various communities in Mezam Division have led to a

proliferation of diverse hybrid species of plants and animals. The introduction of this hybrid species has improved on the farmer’s productivity which is an indicator for rural socio-economic development. Table 15 shows the areas of intervention by various actors in the development of research and innovations in various communities in Mezam Division.

Table 15: Areas of intervention by local actors in agro pastoral research in rural communities of Mezam Division

Areas of intervention	Varieties introduced	Actors involved
Introduction of hybrid species of livestock	Boran, Holstein, Short horn, Durrock, Berkshire, Boer	HPI, PRTC Nfonta, ACEFA, and PACA
Introduction of hybrid seeds	Beans, Irish potatoes, Yams, Groundnuts, Palm, Maize, Cocoyam, Sweet potatoes, Casava and Vegetables	SAILD, NOWEFOR, GP DERUDEP, Municipal councils, ACEFA, PACA
Improvement of pasture	<i>Bracharia</i> , <i>Desdemodium</i> , <i>Stylozanthes</i> , <i>Tripsacuum</i> , <i>Laxum</i> , <i>Pennisetum</i> and <i>Clandestinum</i>	HPI, PRTC Nfonta, MBOSCUA

Source: Field data (2022)

According to field investigation and as reflected on table 15, through research development actors have introduced hybrid species of livestock, seeds and new varieties of pastures. The actors involved in the promotion of these agro pastoral research activities include HPI, PRTC Nfonta, SAILD International, NOWEFOR and GP DERUDEP. In the promotion of livestock it was found out that, PRTC Nfonta and HPI have helped to replace the traditional specie with new hybrid species which is resistant and more productive. Through HPI, many farmers have benefitted from improved breed of livestock in communities in Bafut, Bali, Santa and Tubah Sub-Divisions. This has been achieved by the HPI philosophy of passing on the gift. Unlike HPI, PRTC Nfonta runs an adaptive research centre where new breed of livestock are crossbreed. The presence of HPI and PRTC Nfonta in various communities has increased the stock of livestock for farmers. Among the new breed of cows introduced by HPI and PRTC Nfonta are Boran, Holstein, Long and short horn Zebu. In the promotion of small livestock, new species such as Berkshire, Boer and Durrock have been introduced. From Focus Group Discussion, it was found out that the hybrid livestock takes a shorter time to mature as compared to the traditional species.

The introduction of hybrid livestock in rural communities in Mezam Division has been accompanied with the introduction of much exotic pasture. Through NGOs such HPI and PRTC, graziers have been exposed to exotic species of pastures such as *Bracharia*, *Stylozanthos*, *Tripsacuum Laxum* and *Pennisetum Cladestinum*. From field interviews, it was found out that, this specie of pasture has been very helpful in animal grazing. It was also found out that with the introduction of these exotic pastures, livestock rearing have mostly taken the paddock system in most cattle rearing zones in rural communities in Mezam. This has reduced the rate of transhumance amongst graziers and the risks associated to it.

Field investigation also revealed that, local actors through agro pastoral research have increased the amount of new varieties of seeds used among farmers in various communities in the study area. Table 16 shows the type of improved seeds varieties identified amongst farmers in Bafut, Bali Santa and Tubah Sub-Divisions.

Table 16: Improved seed varieties identified amongst farmers

Types of crops	Scientific names	Varieties cultivated
Maize	<i>Zea mais</i>	Kasia corn, PANNAR, Cassai, CHC, CHH
Groundnuts	<i>Aracis hypogea</i>	Country groundnuts, white Ngoundere, Essimbi, Red Ngoundere, Bande creeping
Irish potatoes	<i>Solanum tuberosum</i>	Cipira , Tubira
Cassava	<i>Manihot esculentus</i>	Sang Nfor, Coco leaf, Red cassava , Madam casava
vegetables	<i>Brassica rapa</i> , <i>Capsicum annuum</i> .	Celery, tomatoes, okra, njinger, cabbage, onion, leeks, parsley, lettuce Pepper, beet root.
coco yams	<i>Colocasia</i> <i>Xanthosoma</i>	Ibo, Tarro, Tannia
Sweet potatoes	<i>Ipomoea batatas</i>	Bambui yellow, Nfonta and white potatoes
Beans	<i>Phaseolus vulgaris</i>	Mideno , samba, black , white
Palms	<i>Elaeis guineensis</i> and <i>Elaeis oleifera</i>	CDC Palms, Meta palms, American palms
Rice	<i>Oryza Sativa</i>	Chinese, Pakistan ,

Source: Field work (2022).

From results obtained from table 16, four major actors are involved in the distribution of improved seeds to farmers in rural communities in Mezam Division. These actors are NOWEFOR, SAILD International, municipal councils and GP DERUDEP. The availability of

improved variety of seed has boosted the output of many farmers in various communities in Mezam.

6. Conclusion

Corroborating the perceptions of various interviewees based on their past and present state of access to basic infrastructures in the agricultural sector in rural communities of Mezam Division, it can be concluded that there has been an accumulation of more basic infrastructures as a result of the presence of many development actors. The accumulation of these infrastructures has not only improved on the farmer access rate but has generally increased productivity through better access to research and innovation, training and sensitisation, agro-pastoral credit, marketing infrastructures and marketing opportunities, and farm to market roads. From FGDs it was found out that, the intervention of other development actors in the agriculture sector has triggered a snow ball effect which has led to the socio-economic uplift in rural communities in Mezam Division. Recommending from the findings, the government should continue to strengthen the collaboration with these development actors as they have proven to be veritable partners in the development of the agricultural sector in rural communities of Mezam Division.

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