

Full Length Research Paper

Role of farmers' organizations to agricultural development in Mezam Division, Cameroon

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Received 11 June, 2019; Accepted 18 July, 2019

This study was carried out from January 2018 to March 2019 in Mezam Division of the North West Region of Cameroon on the role of farmers' organizations to agricultural development, particularly the case of the Program for the Improvement of Competiveness of Family Agro-pastoral Farms and the North West Farmers' Organization (NOWEFOR). The objective of the study was to analyze the role of farmers organizations (FOs) to agricultural development of its members and their rural community in Mezam Division of the North West Region of Cameroon. Two hundred and eighty (280) farmers' members of these farmers' organisations were interviewed using a semi-structured questionnaire and seven (7) leaders were interviewed using an interview guide. In addition, direct observations were made. The data obtained were analyzed using SPSS. The findings show that women generally constitute 52.85% and men constitute 47.14% of the total respondents mean while the fraction of women beneficiaries stands at 27.14%. The contribution of FOs to agricultural development was overall positive as 43.75, 54.2, 41.4, 44.2 and 51.4% of the respondents respectively expressed satisfaction of co-management of projects, involvement in lobbying and advocacy, writing of projects, better follow up, and information and experience sharing to farmers. The contribution of farmers' organizations on the community of farmers and environment was overall positive. This study concluded that FOs are important for farmers and the agricultural development of rural communities of farmers.

Key words: Agricultural development, aid, community, farmers' organizations, role.

INTRODUCTION

In Cameroon like in many other countries in Sub-Saharan Africa, agriculture is the main-stay of the economy employing about 70% of the population (Food and Agricultural Organisation, FAO, 2012:3). Agricultural development requires the embracement of farmer

organisations to facilitate improved access to productive resources (seeds, breeds, insecticides, fungicides, farm tools and equipments), capacity building, marketing, and access to production credit (African Development Bank, AfDB, 2010). Meanwhile it is widely believed that

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farmer organizations play a key role in the development of rural community of farmers through the provision of services such as training, productive resources, access to marketing, credit, information... to farmers thereby facilitating the improvement of their incomes and living conditions (Diagne and Pesche, 1995). Gouët et al. (2009) highlighted that farmer organizations (FOs) contributes in promoting rural development by serving as a framework for sharing information, co-coordinating activities and making collective decisions, and creating opportunities for producers to get more involved in value-added activities such as input supply, credit, processing, marketing and distribution on the one hand and create awareness in view of defending farmers interest on the other hand. According to FAO (2012:7) farmer organizations need support in overcoming the constraints faced by farmers in saving and accumulating assets and in coping with the uncertainty and risk that are intrinsic to farming.

In the North West Region of Cameroon, farmer organizations have as objectives to unite farmers (men, women, youths) of the region into a force that provides concrete services (micro-credits, quality inputs, various trainings in agriculture and health) to members, to sustain their agricultural activities, increase their incomes and enhance them to lead in development initiatives in their communities (Fongang and Fru Mbangari, 2017).

In pursuing this goal, the beneficiary farmers that these FOs targeted in order to improve their living conditions through capacity building, access to productive resources and group marketing, appear not to have been empowered in such a manner that will guarantee the sustainability of the farmers' organisation. Besides, several studies have been carried out on the evaluation of farmers organizations (Benoit, 2006; NOWEFOR, 2012) but it appears no impact assessment has been carried out on farmers organizations (at the individual, organization or community levels) to show whether the contribution provided to farmers by FOs have a positive impact on the farmers. It is for this reason that this study was undertaken to know what types of FOs are involved in the provision of assistance to farmers, what are their activities and what contributions have been brought about by FOs on the target population at the level of agricultural development activities within the framework of poverty alleviation? The objective of the study is to analyze the role of FOs to agricultural development of its members and their rural community in Mezam Division of the North West Region of Cameroon.

MATERIALS AND METHODS

Study area

The study was carried out in Mezam Division of the North West Region. Mezam Division is located between latitudes 5°40' and 7°50' North and longitudes 9°80' and 11°51' east of the Greenwich Meridian (UNDP, 1999); with a total surface area of 1,841.45 km²

with a total population of 524, 127 inhabitants in the 2017 census. The agricultural population is estimated at 258,467 inhabitants representing 43.07% of farm families (Republic of Cameroon, 2015). This population belongs to a large set of Ethnic groups, made up of several tribes such Ngemba (Awings, Mankons, Bafuts, Nkwens, Pignins, Akums, Njongs), Mugahkah (Bali), Bei (Baba IIs, Bafochus) etc (Figure 1).

Data collection

A descriptive and cross-sectional research design was used to generate data for this study. Data for the study were obtained from two sources: data from secondary and primary sources. Secondary source data were obtained from relevant literature existing in documents and archives of several structures such as: the central library of the University of Dschang, British Council library in Bamenda, DDARD annual reports, ACEFA activity reports, project reports, evaluation reports and from the internet, etc. In order to characterize these FOs and analyze their activities, secondary source data from DDARD annual reports, ACEFA activity reports, project reports, evaluation reports, baseline studies reports, mission reports and additional information from administrative authorities were used. The information were summarised such as to bring out a clear picture of the type of farmers organisation operating in the region on the one hand and analyses of its partners on the other hand. Primary source data were obtained via observations, interviews (focus group discussions, meetings) and the administration of questionnaires to the beneficiary farmers covered by the farmers' organisations.

Sampling

A stratified random sampling method was used. The population of the study is divided into strata (Table 1). Firstly, out of the five Divisions, Mezam Division was chosen because it has the highest number of FOs constituting 41% of the 16425 FOs in the North West Region. Secondly, 1% of the 6725 FOs in Mezam division of the NWR were obtained to constitute the sample size which gave us 70 FOs. Thirdly, for comparison purposes and following aid intervention, the sample size was also broken down into 40 beneficiary FOs and 30 non beneficiary FOs. Fourthly, Four (04) members belonging to each of the farmers' organisations in the seven Subdivisions' of the aid in Mezam Division were interviewed giving a total of 280 farmers interviewed

THEORETICAL FRAMEWORK AND CONCEPTS

Asante-Addo et al. (2016) reported that farmer organizations in Ghana contributes or play an important role in the granting of credit and its services to farmers, training them in their activities and increasing membership in their organization. Such market smart strategies have the potential to improve farmers' access to timely credit and to reduce rural poverty. For Gouët et al. (2009) farmer organizations are characterized based on their history, reason of existence, objectives, and ambitions of actions, degree of formalization, and their domain of intervention. According to Hornby (2001) characterization is the act of describing distinctive characteristics. According to Fongang and Soko (2017) the characterization of farmers' organizations could only be grasped on the basis of gender, origin, composition, and mode of operation as indicators.

All impact assessments embody three main elements: A model of the impact chain that the study is to examine; the specification of unit(s) or levels, at which impact is assessed and the specification of the type of impact that are to be assessed; and it measure the

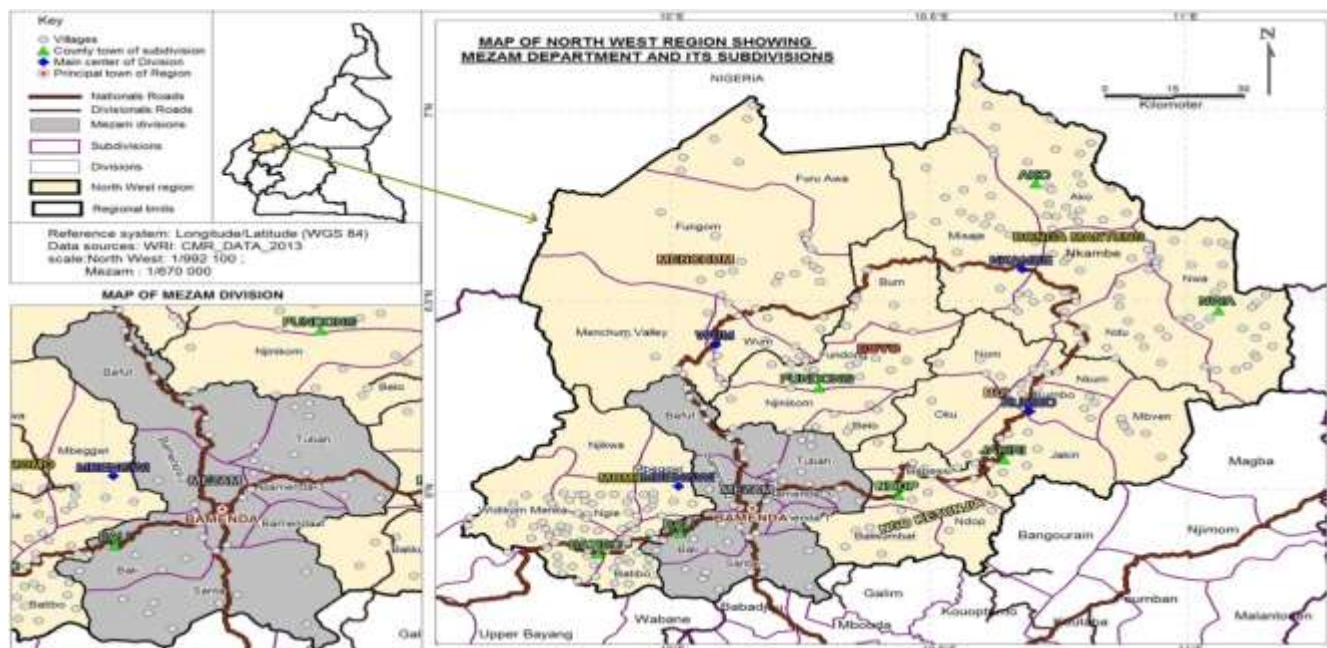


Figure 1. Map of the North West Region showing Mezam Division.
Source: World Research Institute, 2019

Table 1. Distribution of sampled farmers' organisations and farmers per Subdivision.

Subdivision	No. of FOs per subdivision	Targeted FOs	Non beneficiary FOs	Total FOs interviewed	Total Number of farmers interviewed
Bamenda I	12	6	4	10	40
Bamenda II	96	6	4	10	40
Bamenda III	12	6	4	10	40
Bafut	84	6	4	10	40
Bali	60	6	4	10	40
Tubah	43	6	4	10	40
Santa	96	6	4	10	40
Total	403	40	30	70	280

Source: ACEFA Mezam Division, 2018.

difference in the key variables between the outcomes on “agents”, which have experienced an intervention against the values of those variables that would have occurred had there been no intervention aid program (Hulme, 1997). Masud and Yontcheva (2005) measured the impact of external aid on Human Development indicators such as infant mortality and illiteracy using regression and the findings revealed that increased health expenditure per capita reduces infant mortality as does greater NGO aid per capita. In order to conduct a valid impact assessment, researchers first need to define their overall strategy which sets the course for the rest of the research process (Hulme, 1997; Koehler et al. 2007). Another non-experimental methods of impact assessment as agreed upon by the World Bank is the difference-in-differences and this method relies on key assumptions. For instance difference (#)1 compare over time, the situation before and after the program whereas difference (#) 2 compare the treatment and control groups

so as to measure changes between the outcomes on individuals, organizations, communities, etc. He argued that impact assessment is better achieved when the before-after and with-without approaches are combined to an overall treatment effect (Bilal, 2014) as indicated in Table 2.

Alternatively the study sought the indications of role of FOs to agricultural development in the North West Region through an impact assessment of the observable and measurable changes between the outcomes on “agent” (individuals, organization and community) that have experienced aid interventions against the values of those variables that would have occurred had there been no aid intervention. Figure 2 illustrates the operational model of impact chain adapted for this study. The findings will help concerned policy makers (ACEFA, SOS Faim Luxembourg and European Union) to take appropriate decisions in formulating aid assistance strategies that will help improve the living conditions of

Table 2. Treatment, control and differences before and after impact assessment.

	Treatment	Control	Difference
Before	6	8	-2
After	12	10	2
Difference	6	2	4

Source: Bilal (2014).

farmers.

RESULTS AND DISCUSSION

Socio economic characteristics of respondents

The main characteristics concerned here were sex, age, marital status, education and main income generating activities.

As revealed by Table 3, women generally constitute 52.85% and men constitute 47.14% of the total respondents mean while the fraction of women beneficiaries stands at 27.14%. The percentage of women beneficiaries (27.14%) could be explained by the fact that one of the priorities of FOs was for their contribution to reach out to more women who were considered as the marginalized group in the Division. The predominance of men in crop and livestock production as observed in this study is in agreement with the findings of Defang et al. (2014) who report that pig production is dominated by men in the urban and peri urban zones in Dschang-West region Cameroon.

Overall, 71.42% of the total respondents were between the age group 25 and 45 years. The mean age of the respondents was 40 years (± 5) indicating that a high proportion of the middle age respondents were involved in production. This is in line with the findings of Defang et al. (2014) who signal that majority of the adult (middle age) population of the society are involved in livestock production. A fraction of the active rural population of this Division found between 25 and 45 years is therefore looked upon as the initiators of the development of crop and livestock production. Thirty percent (20.00%) of the respondents are aged 55 years. This increased in number of the old population could be explained by the fact that, they were already based in the rural areas. Eleven percent (11.42%) of the respondents are between the age group 45-55 years.

As revealed by Table 3, 72.85% of the respondents were married and among them 45.71% were aid beneficiaries. Eighteen percent (18.57%) of the respondents are single and only 5.71% of them are beneficiaries. This 18% of the respondents who were single appears to be those who were found between the age group 15-35 years. This could be explained by the fact that they do not have responsibilities and access to land for farming. The high percentage of married

respondents in the study zone agree with the results of Defang et al. (2014) and Fotso (2014) in the West Region of Cameroon who highlighted that majority of the adult population of a society consist of married people. The implication of this is that housewives were still predominantly used as family labour for light farm operations.

As shown on Table 3, 100% of the respondents have a level of education comprise between primary, secondary and higher schools and 42.85% of them are beneficiaries. The high rate of the respondents in this study who had formal education agrees with the findings of Defang et al. (2014) who reported that a higher percentage of pig farmers in the urban and peri - urban zone of Dschang - West Region of Cameroon had formal education. Education may be of assistance to extension and FOs staff for easy communication and understanding of extension message, especially for application of new technology in swine production and management. The fact that 100% of them are literate could facilitate trainings, extension, advice, monitoring and evaluation. The implication is that literate farmers might be more likely to adopt good farming and health-management practices.

As revealed by Table 3, 18.57% of the respondents are involved in market gardening as their main source of income. They are mostly youths who are single and found between the age group 15-35 years. This could be explained by the fact gardening requires much physical efforts and adequate technical know-how. Thirty seven percent (37.14%) of the respondents who are involved in broilers production are found between the age group 35-55 years. This could be explained by the fact that broiler production requires little physical efforts and is very profitable and also one of the conditions for farmers to received support in poultry was for them to have a poultry house. Forty four percent (44.28%) of the respondents who are aged 55 years and above and are mostly involved in piggery. It is observed that the old are mostly in involved in piggery because it requires little technical knowledge and physical efforts though not very profitable compared to poultry.

Presentation of the characterization of FOs in Mezam division

As revealed by Table 4, a large majority of the FOs in the

Table 3. Distribution of respondents by demographic characteristics.

Parameter	Category of beneficiaries		
	Beneficiaries (%)	Non beneficiaries (%)	Total (280)
Sex			
Male	84 (30%)	64 (22.85%)	148(52.85%)
Female	76(27.14%)	56 (20%)	132(47.14%)
Age groups			
25-35	56(20%)	96(34.28%)	152(54.28%)
36-45	32(11.42%)	16(5.71%)	48(17.14%)
46-55	20(7.14%)	12(4.28%)	32(11.42%)
>55	52(18.57%)	4(1.42%)	56(20%)
Marital status			
Single	16 (5.71%)	36(12.85%)	52(18.57%)
Married	128(45.71%)	76(27.14%)	204(72.85%)
Widow(er)	16(5.71%)	0(0%)	16(5.71%)
Divorced	0(0%)	8(2.85%)	8(2.85%)
Level of education			
Primary	28(10%)	24(8.57%)	52(18.57%)
Secondary	8(2.85%)	24(8.57%)	34(12.14%)
2 nd cycle secondary	52(18.57%)	72(25.71%)	124(44.28%)
Higher	32(11.42%)	0(0%)	32(11.42%)
Main income generating activity			
Market gardening	32(11.42%)	20(7.14%)	52(18.57%)
Broilers	64(22.85%)	40(14.28%)	104(37.14%)
Piggery	72(25.71%)	52(18.57%)	124(44.28%)

Source: Survey, 2019.

Division were CIGs constituting 67.1% while a slight proportion of them were unions of CIGs constituting 30%. Only 2.9% of these FOs are federations. The increased in the number of CIGs in the Division could be explained by the fact that the procedure for the creation of CIGs was not as difficult as compared to the creation of unions of CIGs and federations. This easy creation of CIGs in the Division could be explained by presence of law No. 92/006/PM of 14th August 1992 relating to freedom of cooperative societies and CIGs with guardianship ensured by the Ministry of agriculture and rural development sensitized and educated farmers to unit themselves into a concrete force in order to protect their common interest by improving their economic and social conditions (Ministry of Agriculture, 1992). This high proportion of CIGs in the Division might also have been favoured by Prime decree No. 92/455/PM of 23rd November 1992 to lay down the procedure for implementing the law No. 92/006/PM of 14th August 1992 relating to cooperative societies and CIGs. Most often some of these FOs were created based on external or internal influence. Internal influence could be based on a group's limited individuals usually in solving a common problem in favour of the initiators whereas FOs created

by external influence could be initiators such as Government and other NGOs with the opportunity and motivation of external support (inputs, financial assistance, technical) received by these groups in the villages. These results agree with Ndoum (2005) who reports that FOs are characterized based on their legal status into three groups viz: (i) Associations, (ii) CIGs, unions, federations and confederations and (iii) economic interest groups (EIGs)

Our results showed that 51% of the FOs in the Division were composed of mixed men and women FOs meanwhile 40% were only women FOs. This could be explained by the fact FOs in the rural community are usually comprised of a single category of members with adherence being selective only women, only men... on the one hand and several categories of members (all members in the community can adhered to the organization) on the other hand.

It also stemmed from Table 4 that 42.9% of the majority of FOs had at least 7-founding members while 40% had only 2-founding members. Only 17% of these FOs had 5-founding members. This was due to the fact most often some of these FOs were created based on external or internal pressure. Internal pressure could be linked on a

Table 4. Distribution of respondents by legal status, gender, founding members, and group common activity.

Parameter/characteristics	Frequency	Percentage (%)
FOs legal status		
CIGs	188	67.14
Unions of CIGs	84	30.00
Federations of unions of CIGs	8	2.85
FOs gender		
Only women	112	40.00
Mixed men and women	144	51.42
FOs founding members		
7 members	120	42.85
5 members	48	17.14
2 members	40	14.28
FOs common activity		
Input supply	68	24.28
Production	140	50.00
Group sales	8	2.85
Financing	24	8.57
Group work	24	8.57
Advice to producers	8	2.85
Lobbying & advocacy	8	2.85

Source: Survey, 2019.

group's limited founding members usually in solving a common interest in favour of this founding members whereas those created by external pressure could be Government and other NGOs with the motivation of external support (inputs, financial assistance, technical) to be received by these groups in the villages.

Our results revealed that the most important common activity or mode of operation of the FOs in Mezam Division were in production (50%) and input supply (23.3). This large majority (50%) of the FOs involved in production activities could be explained by the fact that farmers had identified viable and profitable speculations (market gardening, poultry, and pig) which could easily raised their farm income, easy market access and ensured food security for families. Usually majority of their capacities (skills and abilities) were built in these commodity chain areas by FOs so that they could managed their exploitations profitably. As such farmers only acquired capacities in areas that would enable them handled their exploitations from creation to harvesting of their products and also keep accounts of their actions. The least common activities of FOs such providing advices to producers (2.9%), Group sales (2.9%) and lobbying and advocacy (2.9%) recorded low percentages reasoning being that this activities were performed by a limited numbers of FOs. This was so because most FOs did not have the adequate skills and man-power to carry out these functions. These results on the characterization

of FOs agree with Fongang and Soko (2017) who reports that the characterization of farmers' organizations could only be grasped on the basis of gender, origin, composition, and common activity as indicators. This results also ties with Gouët et al. (2009) who reports that farmer organizations are characterized based on their history, reason of existence, objectives, and ambits of actions, degree of formalization, and their domain of intervention or common activities.

To conclude, interviews with FOs revealed that the common activity or mode of operation of the FOs in Mezam Division in order of magnitude and importance as follows: Production, input supply, financing, group work, advices to producers, group sales, and lastly lobbying and advocacy.

Contribution of FOs to agricultural development

As revealed by Table 5, 40% of the beneficiary FOs interviewed co-managed projects with other development agencies and programs against 5.71% of non beneficiaries. This could be explained by the fact that FOs serve as a corridor of transmission between the development agents and the farmers, thus making them to appear as argents and partners contributing enormously to rural development. This findings agree with Ndoum (2005) who reported that FOs co-manage

Table 5. Distribution of respondents by agricultural development activities.

Parameter	Category of responses		
	Yes (%)	No (%)	Total (%)
Co management of projects			
Beneficiaries	112(40.00%)	48(17.14%)	160(57.14%)
Non beneficiaries	16(5.71%)	80(28.57%)	96(34.28%)
Lobbying and advocacy			
Beneficiaries	152(54.28%)	8(2.85%)	160(57.14%)
Non beneficiaries	32(11.42%)	88(31.42%)	120(42.85%)
Writing of projects			
Beneficiaries	116(41.42%)	44(15.71%)	160(57.14%)
Non beneficiaries	24(8.57%)	96(34.28%)	120(42.85%)
Follow up			
Beneficiaries	124(44.28%)	36(12.85%)	160(57.14%)
Non beneficiaries	24(8.57%)	16(5.71%)	120(42.85%)
Information and experiences sharing			
Beneficiaries	144(51.42%)	16(5.71%)	160(57.14%)
Non beneficiaries	24(8.57%)	96(34.28%)	120(42.85%)

Source: Survey, 2019.

activities with development partners. Also it results from Table 5, 54.28% of the beneficiary FOs interviewed carry out lobbying and advocacy for the protection of the interest and well being of farmers against 11.42% of non beneficiaries. It stemmed from Table 5, 41.42% of the beneficiary FOs interviewed wrote projects for farmers for them to raise income and boost production against 8.57% of non beneficiaries. This could be explained by the fact that FOs usually raised internal resources via project writing to farmers. These findings agree with Ndoum (2005) who reports that FOs facilitate project writing at low cost between the diverse parties (farmers, extensionists, researchers, politicians, NGOs) involved in rural development.

As revealed in Table 5, 44.28% of the beneficiary FOs interviewed carried out proximity advisory follow up and counseling in farmers farms against 8.57% of non beneficiaries. Lastly as revealed by Table 5, 51.42% of the beneficiary FOs interviewed carried out information and experience sharing in farmers farms within and out of the Division against 8.57% of non beneficiaries. This could be explained by the fact that effective farming dynamics required information, proximity advisory follow up and counseling and experiences sharing amongst farmers for development. These findings agree with those of Pertev (1994), Tsafack and Degrande (2015) who both report that FOs contributes in the provision of information and extension services to farmers through farmers' field schools, and extension by training-and-visit, as well as

community-based extension approaches such as rural resource centers and the farmer-to-farmer extension approach.

Contribution of FOs to the development of the rural community

According to our survey with members, the opinion of members on the community is seen on the changes brought about by aid within the community at large as shown in Figure 3. As illustrated by Figure 3, the respondents revealed that FOs have brought changes within the community in order of relative importance: Improve governance (43.8%), new strategies in place (18.8%), improved leader's capacities (15.6%), and improved market outlet (10.9%), funds mobilized (6.3%) and better structuring (4.7%). The respondents revealed that FOs have helped in solving the problem of improved governance, new strategies in place, improved leader's capacities, improved market outlet, funds mobilized and better structuring in the community as a whole. Improved governance, better structuring and improved leader's skills were achieved through the organization of training workshops on thematic areas such as organization and holding of effective statutory meetings, record keeping, input needs assessments, governance, monitoring and evaluation. Improve market for farmers produce, new strategies in place to mobilize funds and funds mobilized

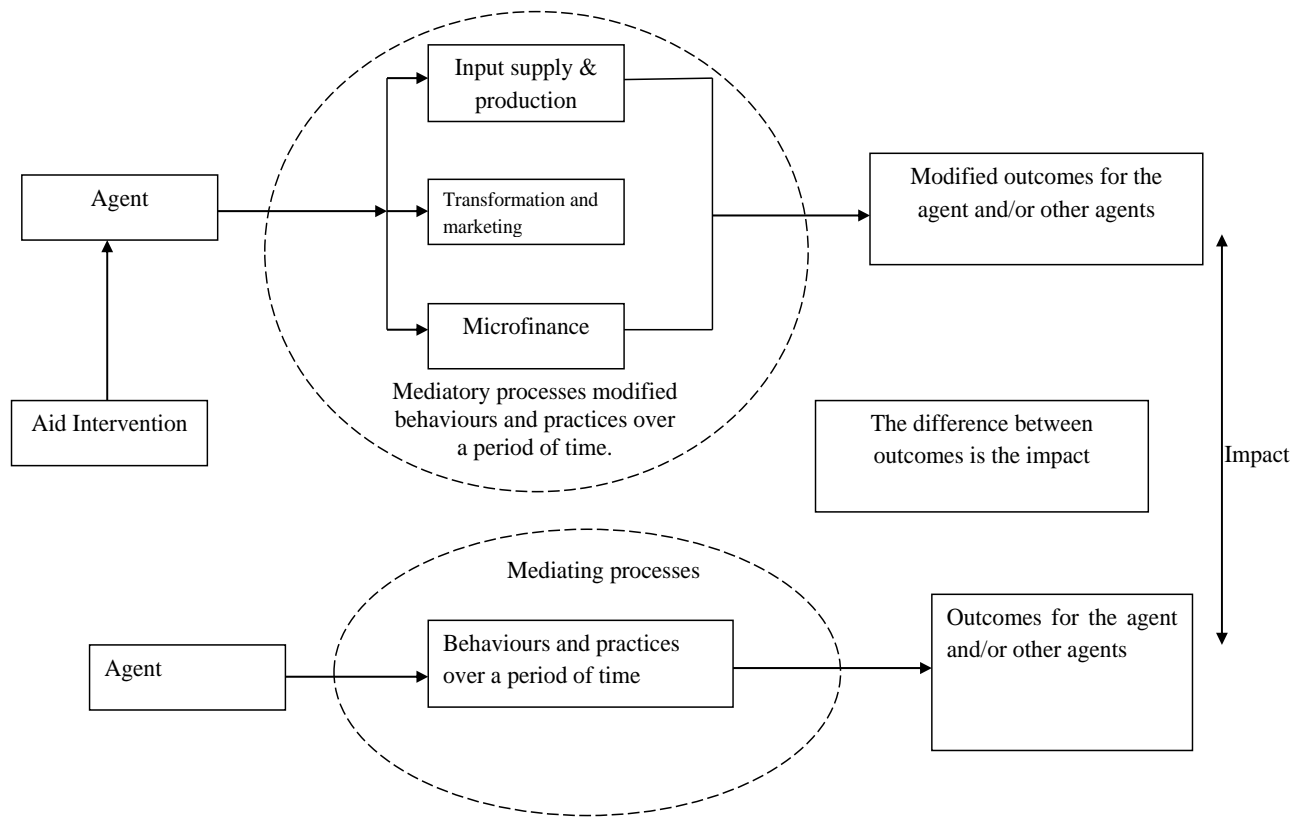


Figure 2. The operational model of the impact chain for the study
 Source: Adapted from Hulme (1997).

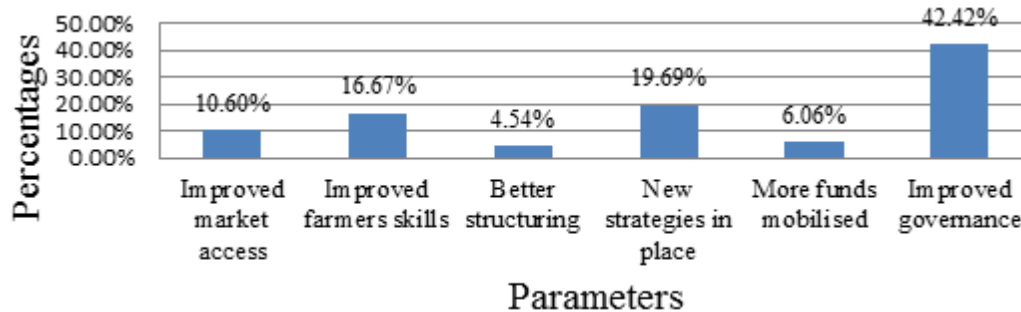


Figure 3. Contribution of FOs contribution on the community of members
 Source: Survey, 2019.

were achieved through the training of leaders on improved marketing techniques and organization of a unique sales place in the market, a rotation of sellers in the market (division by quarters), and a market day fixed for each quarter in the community. These findings agree with the Community Development Exchange (CDX, 2008) who reports that an empowered and structured organization is one which is confident, inclusive, organized/structured, co-operative and influential. It could be inferred from this that the contribution of the FOs on

the community of its members is overall positive.

Contribution of FOs to the environment

The measures put in place by FOs put to preserving and protecting the environment vis à vis their activities are illustrated in Figure 4. As revealed in Figure 4 the measures put in place by FOs to preserving and protecting the environment vis à vis their activities in

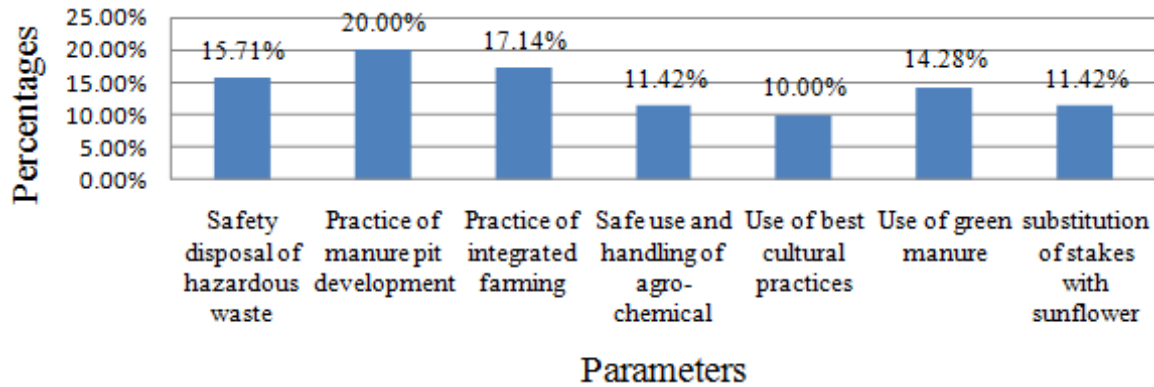


Figure 4. Distribution of respondents by farming practices preserving the environment.
Source: Survey, 2019

order of importance were: Practice of manure pit development (20.0%), practice of integrated farming (17.1%), safety disposal of hazardous waste (15.7%), use of green manure (14.3%), safe use and handling of agrochemicals (11.4%), used of best cultural practices (10.0%), planting of sunflowers (7.1%) and substituting stakes with sunflower (4.3%). The respondents revealed that FOs have helped in employment environmental mitigation measures like practice of manure pit development, practice of integrated farming, safety disposal of hazardous waste, used of green manure, safe use and handling of agrochemicals, used of best cultural practices, and substituting stakes with sunflower. Testimonies of a farmer from Mile 8 Mankon help us to have a feel of the impact:

A farmer in Mile 8 Mankon has received training in pig manure management to reduce the hazardous ordure emitted by his pen. In effect he created a manure pit where he dumps all the waste from the pigsty. His pigsty now does not longer sting and his neighbours are very happy with him. He has sold manure for close about 10 bags of 5okg per bag for 15000 FCFA . This 15000FCFA has helped fetch him 5 bags wheat brand which he will compound his subsequent feed and he now serve as an elite farmer in pit development and solicited by other farmers.. He is active member of the Mforyah union...

These findings agrees with NOWEFOR (2012) who signaled that farmer organizations play a vital role in providing training and sharing of experiences on production and marketing techniques; organization of wholesale purchases of inputs and group sales of farm produce; and the implementation of awareness practices that preserve the environment.

Conclusion

Farmers organisations play a vital role in agricultural

development. This study carried out from January 2018 to March 2019 in Mezam Division of the North West Region of Cameroon is therefore aimed at assessing the role of farmers organizations (FOs) to agricultural development of its members and their rural community. Following the findings from the study, it can be concluded that beneficiary FOs members access more than is the case with non beneficiary members as a result, this enable them to co-manage projects, involvement in lobbying and advocacy, writing of projects, better follow up, and information and experience sharing to farmers. It can also be concluded that the practice of manure pit development, integrated farming, safety disposal of hazardous waste, used of green manure, safe use and handling of agrochemicals, used of best cultural practices, and substituting stakes with sunflower contributed in protecting the environment. Lastly, it is concluded that improved governance, new strategies in place, improved leader's capacities, improved market outlet, funds mobilized and better structuring brought positive changes in the community as a whole

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

ACKNOWLEDGMENTS

The following are acknowledge: ACEFA facilitated data collection, Prof. TSI Evaristus ANGWAFO III and Prof. DEFANG Henry FOLEFACK helped with advices on the methodology.

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