

*Full Length Research Paper*

## Contributions of farmers' organizations to rural development: Case of North West Farmers' Organization in Mezam Division, Cameroon

Guillaume Hensel Fongang Fouepe<sup>1\*</sup> and Kenette Fru Mbangari<sup>2</sup>

<sup>1</sup>Department of Agricultural Extension and Rural Sociology, Faculty of Agronomy and Agricultural Sciences, University of Dschang, P. O. BOX 222 Dschang, Cameroon.

<sup>2</sup>Master of Science in Integrated Rural Development and Agricultural Extension, Department of Agricultural Extension and Rural Sociology, Faculty of Agronomy and Agricultural Sciences, University of Dschang, P. O. BOX 222 Dschang Cameroon.

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This work discusses the contributions of farmers' organizations to rural development, particularly the case of North West Farmers' Organization (NOWEFOR). This study was carried out from January to November, 2014 in Mezam Division of the North West Region of Cameroon. 100 farmer's members of NOWEFOR were interviewed using a semi-structured questionnaire and 20 leaders were interviewed using an interview guide. In addition, direct observations were made. The data obtained were analyzed using SPSS. The findings show that, NOWEFOR plays a vital role in the mobilization of resources from the state and external donors. The amount of external aid increased with time from 868.000 to 216.160.428 FCFA. The contribution of NOWEFOR to the support and reinforcement of certain initiatives of farmers was overall positive as 52% of the beneficiaries had increased income and 55% hired labour for farming. According to the t-test analysis used to determine the contribution of NOWEFOR to members, there is a significant difference between the levels of incomes of beneficiary and non-beneficiary farmers. The contribution of NOWEFOR to the provision of inputs to farmers was overall positive as 74% of the beneficiary respondents had agricultural equipment and inputs in their farms. The strengthening of the organization as a whole was positive, since it permitted NOWEFOR to employ technical staff, boost membership and group marketing, respectively to 9 staff, 2954 members and 950 group sales. The contribution to the development of the community was positive, since 23.53, 19.41, 18.37, 13.02, 12.75 and 12.92% of the respondents, respectively expressed satisfaction of better structuring, improved leaders' capacity, mobilized funds, new strategies in place, improved market access and good governance in the organization. This study concluded that farmers' organizations are important for farmers and their rural communities.

**Key words:** Aid, contribution, farmers' organizations, North West Farmers' Organization (NOWEFOR), rural development.

### INTRODUCTION

In Cameroon like in many other countries in Sub-Saharan Africa, agriculture is the main-stay of the economy.

Agricultural development requires the embracement of external aid to facilitate access to productive resources,

capacity building, marketing, and access to production credit (AfDB, 2010). Aid consisted of food, security, conflict resolution and good governance made life safer and better for the rural population (Koebler et al., 2007). In the past colonial period, external aid has been one of the main vehicles for the rich countries to promote better living conditions in less developed parts of the world, with alleviation of poverty and narrowing income disparities, viewed as its main goals (Calderón et al., 2006).

As the International Monetary Fund (2003) puts it, the incidence of poverty in Cameroon is about 22.1% in the urban and 49.9% in the rural areas. The growth and employment strategy document for Cameroon considers aid as one of the essential pillars used to restart growth. More so, aids as microcredit constitute a form of social intermediation which allows poor and marginalized groups to develop and become autonomous (Fouda, 2002). Peasant organizations play an important role in securing, using and management of aids (Devora, 1997; Mbancele, 2000).

This study will help partners, farmers and NOWEFOR leaders point out the strengths and weaknesses of their projects; it also provides information on the efficiency of the aid assistance to farmers which will help concerned policy makers (SOS Faim Luxembourg and European Union) to take appropriate decisions in formulating aid assistance strategies, that will improve the living conditions of farmers.

In the North West Region of Cameroon, NOWEFOR observed as the strongest farmers' movements with a membership of 2893 farmers has been providing aid to members, to increase their incomes and enhance them to lead in development initiatives in their communities. In pursuing this goal, the beneficiary farmers that NOWEFOR targeted in order to improve their living conditions through capacity building, access to productive resources, micro credit and group marketing, appear not to have been empowered in such a manner that will guarantee the sustainability of the farmer's movement.

Besides, several studies have been carried out on the evaluation of the federation (NOWEFOR-EU project evaluation report, 2010; NOWEFOR Evaluation report, 2012), but it appears that no impact assessment has been carried out to show whether these external aid assistance provided to farmers by NOWEFOR has a positive impact on the farmers. The objective of the study is to analyze the contribution of NOWEFOR to the development of its members and their rural community in Mezam Division of the North West Region of Cameroon; more specifically, to examine the contribution of external aid on the performance of NOWEFOR, and to determine

the contribution of NOWEFOR on its beneficiaries and the rural community.

## 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). Mezam has a total surface area of 1,841.45km<sup>2</sup> with a total population of 524,127 in the 2005 census.

The agricultural population is estimated at 258467 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 as Ngemba (Awings, Mankons, Bafuts, Nkwens, Pignins, Akums, Njongs), Mugahkah (Bali), Bei (Baba IIs, Bafochus), etc. The climate is of the tropical savannah type with two distinct seasons: the rainy and dry seasons. The rainy season starts from mid-March to mid-October. The dry season is characterized by winds and runs from late October to mid-March. Vegetation comprise dotted parches, artificial and natural forest, short and thick grasses, hence its name "Grass-field".

As the International Monetary Fund (2003) puts it, the incidence of poverty in Cameroon is about 22.1% in the urban areas and 49.9% in the rural areas. According to the Growth and Employment Strategy Paper for Cameroon (GESp, 2010) the income poverty rate situation of study zone stands at 39.9% in 2007 and the Government strove to reduce the income poverty rate from 39.9 % in 2007 to 28.7% in 2020. This makes a marked difference from the millennium development goal (Figure 1).

### Data collection

Two sets of data were collected for the study: primary and secondary. Secondary 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, NOWEFOR annual reports, project reports, evaluation reports and from the internet. Primary data were obtained via observations, interviews (focus group discussions, meetings) and the administration of questionnaires to the beneficiary groups covered by the NOWEFOR aid programme. Also narratives were recorded using a jotter and a recorder.

The before- after design was measured in terms of number of better access to skills and practical knowledge in farm business areas (production, record keeping, backstopping of farmers, and organization of meetings, group sales and leadership), better market outlet, structuring, governance, funds mobilised and sustainability were obtained.

### 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

\* Corresponding author. E-mail: guillaumefongang@yahoo.fr. Tel: (00 237) 696 20 62 04.

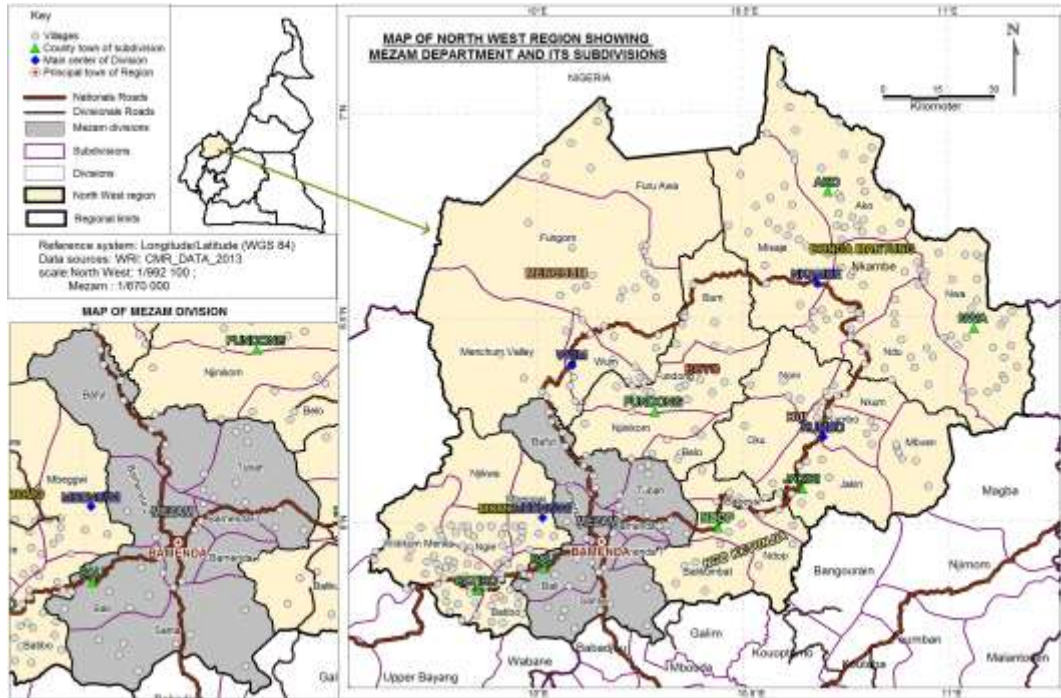


Figure 1: Map of the North West Region Showing Mezam Division. Source: WRI: CMR\_DATA\_2013.

Table 1. Distribution of Sampled Farmers per Unions.

Unions	No. of members per union	Targeted Union members	Non beneficiary members	Total
NDZOFU	195	12	7	19
BASSUG	224	13	8	21
MIFU	224	15	10	25
BUFAG	200	13	10	23
MUFU	157	7	5	12
Total	1000	60	40	100

Nchum Zone Farmers Union (NDZOFU); Bambui Union of Sustainable Self Help Groups (BASSUG); Mforyah Integrated Farmers' Union (MIFU); Bafut Union of Farming Groups (BUFAG); Mundum Farmers' Union (MUFU).

number of beneficiaries constituting 46.25% of the 2162 beneficiaries in the North west Region. Secondly, 10% of the 1000 beneficiary farmers in Mezam Division of the NWR were obtained to constitute the sample size which gave us 100 farmers. Thirdly, for comparison purposes and following external aid intervention, the sample size was also broken down into 60 external aid beneficiary farmers and 40 non beneficiary farmers. Fourthly, all members belonging to the five beneficiary unions of the external aid in Mezam division were interviewed.

These data obtained were analysed using Statistical Package for Social Sciences (SPSS). The non-parametric student (t) test particularly the Mann Whitney test was used to compare the mean annual gross margins of beneficiaries and non-beneficiaries. Descriptive and inferential statistical tools were used to analyze the findings. These findings are presented in form of simple cross-tables, frequencies distributions, percentages, bar chart and student test.

### Theoretical framework and concepts

Non-Governmental Organizations (NGOs) play an increasingly prominent role in the development scene and channel a growing share of development assistance to the needy farmers at the grass root level (Masud and Yontcheva, 2005). Cheston et al. (1999) reported that impact is any change positive or negative that results from an intervention. Impact refers to broad economic and social changes, brought about by a project or a programme (Zanoli et al., 2007). Contribution is the part played by a person or something in bringing about a result or helping something to advance (William, 2012).

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 is to be assessed. Impact Assessment (IAs) measure the difference in the key variables between the

outcomes on “agents” (individuals, enterprises, household, community, etc.), which have experienced an intervention against the values of those variables that would have occurred, and there had 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 these findings revealed that increased health expenditure per capita reduces infant mortality as those greater NGO aid per capita.

In order to conduct a valid impact assessment, researchers 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 compared over time, the situation before and after the program and difference #2 compared to 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 on contributions of NOWEFOR to rural 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 external aid interventions against the values of those variables that would have occurred and there had been no external aid intervention. In this study, impact assessment is achieved by combining the before-after and with-without approaches to an overall treatment effect.

## RESULTS AND DISCUSSION

### Socio- economic characteristics of NOWEFOR respondents

It was observed that women generally constituted 48% and men 52% of the total respondents, meanwhile the fraction of women beneficiaries stood at 54%. This 52% agrees with those found in the urban and peri urban zones in Dschang (Defang et al., 2014). Overall, 56% of the respondents are between the age group of 35 to 55 years. The mean age of the respondents was 40 years ( $\pm 5$ ) indicating that a high proportion of the middle age respondents were involved in production as in agreement with the findings in the locality of Dschang (Defang et al., 2014).

The respondents are almost all married (72%) and among them 61% are aid beneficiaries. Our findings are similar to those found in the locality of Dschang (Defang et al., 2014) and in the West Region of Cameroon (Fotso et al., 2014). The implication of this is that, housewives were still predominantly used as family labour for light farm operations. The farmers have varied levels of education. In the study, 92% of farmers have at least attended formal primary education among which 52% are beneficiaries. These findings are close to those of Defang et al. (2014) and Fotso et al. (2014) in the west region of Cameroon. Education may be of assistance to extension.

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

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

Source: Bilal (2014).

The fact that 92% 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.

It stems from the survey sample that, youths are mostly involved in gardening (16%), adults in poultry (28%) and old (aged) in piggery (56%) as their main sources of income. The youths are those found between the age group of 15 to 35 years and could be explained by the fact gardening, which requires much physical efforts and adequate technical know-how. The adults are those found between the age group of 35 to 55 years and this could be explained by the fact that broiler production requires little physical efforts, adequate time, follow up which is very profitable. Also, one of the conditions for farmers to receive aid in poultry was for them to have a poultry house. The observed majority of old people (55+) in piggery could be inferred from the fact that, it requires little technical knowledge and physical efforts though not very profitable compared to poultry (Table 3).

### Genesis and growth of NOWEFOR

The Federation today known as North West Farmers' Organization (NOWEFOR) was founded in October 1995. It is a farmers' representation/movement in the North West Region of Cameroon registered under the registry of Common Initiative Groups and Co-operatives and guided by law No. 92/006 of 14 August 1992 and its Decree of Implementation No.92/455/PM of 25 November 1992. It has both internal and external partners including MINADER, MINEPIA, EC, American Peace Corps, VSO with SAILD and SOS Faim as founding partners. The North West Farmers' Organization is a network of 11 unions of Common Initiative Groups with a current membership of 2893 (1454 women and 1439 men) in 140 Common Initiative Groups.

Member unions are located in Bafut, Nchum, Mforyah, Bambui and Mundum I in Mezam Division; Nseh in Bui Division, Babungo and Ibal-Oku in Ngoketungia Division; Kai, Nyen and Batibo in Momo Division; and Mbowiyah in Donga Mantung Division. Its activities were realized mainly with the technical assistance of SAILD. After a series of reflection workshops starting late 2002,

**Table 3.** Distribution of respondents by sex, age group, marital status, level of education and main income generating activity.

Parameters and characteristics	Category of beneficiaries		
	Beneficiaries (Frequencies)	Non beneficiaries (frequencies)	Total (100)
Sex			
Male	34	18	(52)
Female	26	22	(48)
Age groups			
15-25	2	0	2
25-35	6	6	12
35-45	8	16	24
45-55	16	16	32
55 <sup>+</sup>	28	2	30
Marital status			
Single	4	8	12
Married	44	28	72
Widow(er)	12	4	16
Level of Education			
Illiteracy	8	0	8
Primary	24	16	40
Secondary	20	12	32
2 <sup>nd</sup> cycle secondary	4	8	12
Higher	4	4	8
Main income generating activity			
Gardening	6	10	16
Broilers	12	16	28
Piggery	44	12	56

(): Frequency (Authors surveys).

NOWEFOR and SAILD decided to engage in a process of autonomisation of the producers' organization with the objective to build the economic and institutional capacities of NOWEFOR so that it can assume by itself, its roles and service provision to its members. This objective was reason behind a project that was financed by the EU for SAILD in 2004 to 2005 (NOWEFOR, 2014). Today NOWEFOR is an autonomous federation in the North West Region with board of directors, executive committee and a technical crew of 9 staff.

### Resources mobilized by NOWEFOR

Our findings revealed that NOWEFOR mobilized both internal and external resources as follows.

#### Internal resources

The internal resources of NOWEFOR are mobilized at

the beginning of each year as member unions from all the 12 unions affiliated to NOWEFOR pay a minimum annual due of 100,000 FCFA for participation, and strengthening of its associative life. Those unions who do not meet up with their annual contributions are immediately suspended from NOWEFOR services like any field follow up, refinancing projects or any form of support from NOWEFOR (Table 4).

Table 4 reveals that NOWEFOR realizes annually on average as annual dues, the sum of 1,363,000FCFA which is far beyond the targeted amount of 1,200,000FCA making an overall percentage increase of 113.5%.

From our interview with leaders, NOWEFOR usually realize annually 45 000-50 000 FCFA as income from the sales of plantain plantlets. About 200000 to 300000 FCFA is usually realized annually as interest from re-financing of farmers. Our findings showed that the federation is run and managed day to day a team of nine technical staff (1 coordinator, 1 production officer, 1

**Table 4.** Situation of annual dues contribution in 2010.

Unions	Sectors	Annual dues				
		2010	2011	2012	2013	2014
Mforyah Integrated Farmers' Union	Poultry, pig, yam, ginger Market gardening	159 000	152000	150000	94000	100000
Bafut Union of Farming Groups	Poultry, pig, ginger	143000	121000	124000	85000	100000
Bambui Union of Sustainable Self Help Groups	Poultry, pig, market gardening	172 000	150000	116000	29000	54000
Livestock and Crop Farmers' Union kai	Pig, palms	102 000	136000	96000	100000	100000
Mundum Farmers' Union	Cassava, Pigs , Market gardening	100 000	100000	100000	100000	69000
Nchum Zone Farmers Union	Pigs, ginger	100000	100000	35000	100000	80000
Nseh Group of Farmers' Organizations	Irish potatoes, Pigs	100 000	100000	100000	41000	100000
Babungo Farmers Union	Market gardening, Pigs	100 000	100000	104000	110000	100000
Moghamo Union of Farming groups	Pigs, Market gardening	102 000	100000	100000	105500	100000
Union of Momo Farming Groups	Yam, pig	100 000	100000	100000	100000	100000
IBAL-OKU Union	Tomatoes, pig	150 000	120000	142000	104000	100000
Ngongdzen Farmers Union	Irish potatoes, Pigs	100 000	100000	100000	100000	100000
Din farmers union***	-	-	-	-	372000	256000
Total	-	1,369,500	1, 379,000	1,267,000	1,440,500	1,359,000

\*\*\* Newly registered union (Source: Authors survey).

marketing officer, 1 microfinance controller, 1 accountant, 1 receptionist, 1 office aide, 3 credit house cashiers) and elected leaders (3 executive bureau members: executive chair person, financial secretary and secretary). The material resources of the organization building is used as office and, 3.5 ton van to facilitate marketing of farmers produce, Toyota Hilux vehicle to facilitate field movement, 2 motor bikes Yamaha AG 125 to facilitate field movement, 6 computers and 3 printers.

### External resources

The amount of external resources mobilized by

NOWEFOR increases with time as seen in Figure 2.

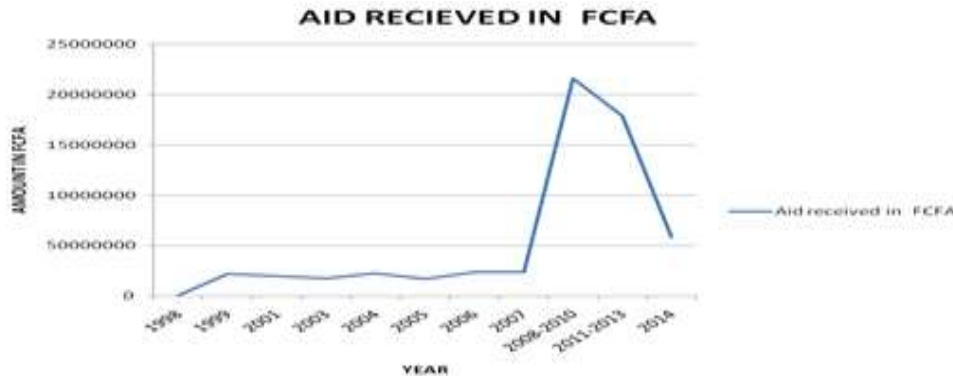
Overall, from 1998 to 2014 NOWEFOR has received a total of 543, 862, 670 FCFA as external aid mainly from SOS Faim and European Union. In fact, before the support of SOS Faim and European, NOWEFOR farmers live on less than 1 dollar per day (UNDP report, 1999). This is because they are unable to generate adequate income from their farming activities.

### Partners of NOWEFOR

Our findings showed that NOWEFOR mobilizes her external resources from a multiplicity of

partners. On the level of involvement, we could distinguish three categories of partners: Primary partners that are international organizations or agencies involved actively in the provision of material, financial and technical assistance to NOWEFOR. The main primary partner is Save Our Souls from Hunger (SOS Faim) and the European Commission (EC).

Secondary partners are national and/or international organizations or agencies involved in the provision of both material and financial or material and technical, or financial and technical assistance to NOWEFOR. The secondary partners include: Voluntary Services Overseas (VSO), The American Peace Corps and Support Services to Grassroots Initiatives for



**Figure 2.** External aid to NOWEFOR (Source: Authors survey).

Development (SAILD). Tertiary partners are national institutions or ministries involved in the provision of technical assistance to NOWEFOR. The tertiary partners include: Ministry of Agriculture and Rural Development (MINADER), and Ministry of Livestock, Fisheries and Animal Industries (MINEPIA).

The analyses of the roles and strategies of each partners involved in the mobilization of NOWEFOR external resources are shown in Table 5. The findings show that, since 1995 till date NOWEFOR had received aid from SAILD, MINADER, MINEPIA, SOS Faim, EC, American Peace Corps and VSO. SOS Faim has been the best aid donor to NOWEFOR since its creation. Also, NOWEFOR has received aid from EC three (3) times.

### **Contribution of NOWEFOR to the support and reinforcement of certain farmers' initiatives**

The contribution of NOWEFOR is in the possession of agricultural equipment. In Table 6, both the beneficiaries and non-beneficiaries have agricultural equipment in their farms. However, the proportion of aid beneficiaries possessing agricultural equipment in their farms outweighs those of the non-beneficiaries. 74% of the respondents who possessed agricultural equipment in their farms got it from the support of SOS Faim/EC, 38% as a result of MINADER support and 17% coming from the farmers' own capital. These findings agree with Hulme (1997) and Fouda (2002) who reported that aid in the form of micro credit contributes to the possession of agricultural equipment by farmers in their farm. The life of respondents on their annual farm incomes from January to December is illustrated in Table 7.

Table 7 indicated that, majority (52%) of the respondents targeted by the aid in Mezam Division have a general increase in farm income with the women beneficiaries constituting 30. These findings agree with Aryeetey (1998); Nshom (2002); Calderón et al. (2006) who reported that external aid helps farmers to have a

positive change in their incomes. Testimonies of a farmer from Mforyah help to have a feel of the impact. *"A farmer in Mforyah Bafut has increased his production from about 10 baskets of tomatoes per week to about 20 each week; he has a turnover of at least 150,000FCFA. He has changed the roofing of his house, all his children go to school and he now employs more than two youths in his farms daily. He is an active member of the Mforyah Union"*.

The contribution of NOWEFOR to the use of more and more non-family, paid and skilled labour is illustrated in Table 8a.

The findings showed that majority of the respondents employed workers in their farms for farming; however beneficiaries of aid hired 55% of labourers in their farms against 2% for non-beneficiaries. These findings agree with Aryeetey (1998) and Masud and Yontcheva (2005) who reported that aid plays a significant role in reducing household vulnerability to a number of risks such as creation of employment.

The contribution of NOWEFOR to the evolution of the average or means of farm income and gross margins of respondents from the non-parametric t-test is illustrated in Tables 8b, 9 and 10. The findings illustrate that the beneficiaries mean annual farm gross margins for market gardening value chain (206,666) is higher than that of non-beneficiaries (35,300). The Independent-Samples Mann-Whitney U test showed a statistically significant difference (i.e  $P=0.000$  which is far less than 0.05) at 5% level in the improved annual mean gross margins of beneficiaries for market gardening. This indicates that beneficiary respondents of market gardening have a significantly higher annual gross margins compared to the non-beneficiary respondents. This could be explained by their access to external aid which has improved access to productive resources, training and market outlet.

The findings showed that the beneficiaries mean of annual farm gross margins for broilers value chain (416,833) is higher than that of non-beneficiaries

Table 5. Roles and strategies of partners.

Partner	Analyses of roles and strategies			
	Nature of collaboration (assistance)	Achievements	Lessons learnt	Threats
SOS Faim	Financial, technical	<ul style="list-style-type: none"> <li>-Creation of NOWEFOR</li> <li>-Sector funds place</li> <li>-Profitable value chains</li> <li>-Multi-purpose shops</li> <li>-New breeds and seed varieties</li> <li>-End of autonomisation</li> <li>-3 –years action plan in production &amp; micro finance</li> </ul>	<ul style="list-style-type: none"> <li>-Farmers interest protected</li> <li>-Improved access to loans</li> <li>-Multipurpose shops failed</li> <li>-Goat value chain failed</li> <li>-potatoes, ginger, poultry and gardening profitable</li> <li>-Increased membership, size of farm and farm income.</li> <li>-NOWEFOR more recognized by donor. Should not depend but rather be independent</li> <li>-Credit funding stopped</li> </ul>	<ul style="list-style-type: none"> <li>-Disaster,</li> <li>-Misappropriation</li> <li>-Leaders manage the organization independently</li> <li>-Inflation &amp; theft,</li> <li>-Decline of funds</li> </ul>
SAILD	Technical	<ul style="list-style-type: none"> <li>-Protocol agreements</li> <li>-Leaders and farmers trained</li> <li>-Credit Houses in place</li> <li>-Autonomization</li> <li>-Tripartite agreements</li> <li>-Leaders and farmers trained</li> <li>-Placement of a microfinance staff at NOWEFOR</li> <li>-information sharing through the farmers voice</li> </ul>	<ul style="list-style-type: none"> <li>-Leaders assumed roles and responsibilities</li> <li>-Money saved for future use</li> <li>-Organization &amp; economic capacities of farmers built</li> <li>-Protocol agreements signed</li> <li>-Recruit of technical staff</li> <li>-Effective &amp; efficient follow up and control of the credit houses</li> <li>-Information sharing through the farmers voice</li> </ul>	<ul style="list-style-type: none"> <li>-theft,</li> <li>-Funds not disbursed on-time</li> <li>-Loss of confidence</li> </ul>
EC	Financial	<ul style="list-style-type: none"> <li>-Multipurpose structures</li> <li>-3 years project financed</li> </ul>	<ul style="list-style-type: none"> <li>-Financed multipurpose structures and shops</li> <li>-Grants mobilization is an opportunity to boost membership and farm income of farmers</li> </ul>	<ul style="list-style-type: none"> <li>Misappropriation</li> </ul>
MINEDER/MINEPIA	Technical	<ul style="list-style-type: none"> <li>-Farmers trained and backstopped</li> <li>-Rapid plantain multiplication techniques</li> </ul>	<ul style="list-style-type: none"> <li>- Involved only in the training and follow up of farmers</li> <li>-NOWEFOR sold plantlets to MINADER and farmers</li> <li>-Internal come increased</li> </ul>	<ul style="list-style-type: none"> <li>political instability</li> </ul>
American Peace Corps	Technical (placement of peace corps volunteers)	<ul style="list-style-type: none"> <li>-Trainings in bee keeping</li> <li>-Placement of peace corps volunteers,</li> <li>-Trainings in cane rat keeping</li> <li>-Provision cane rat to farmers</li> </ul>	<ul style="list-style-type: none"> <li>-3-years agreement signed</li> <li>-Sources of income diversified</li> <li>-Cane rat sector is a source for income diversification</li> <li>-Good governance and accountability is obligatory</li> <li>-Cane rat could fetch more money</li> </ul>	<ul style="list-style-type: none"> <li>-</li> </ul>
VSO	Technical	<ul style="list-style-type: none"> <li>Placement of a short term volunteer</li> </ul>	<ul style="list-style-type: none"> <li>Policies have to be in place for the functioning</li> <li>-Organizational development plans in place</li> </ul>	<ul style="list-style-type: none"> <li>-</li> </ul>

(Source: Authors survey).



**Table 6.** Main equipment possessed by respondents in their farm.

Category	Source of aid	Sprayer	Truck	Engine pump	Wheel barrow	Total
Beneficiaries	SOS Faim/EC	7	9	4	16	36
	MINADER	2	3	0	10	15
	Own capital	1	1	0	4	6
	Total	10	13	4	30	57
Non Beneficiary	MINADER	2	1	0	13	16
	Own capital	0	1	0	7	8
	Total	2	2	0	20	24

(Source: Authors survey).

**Table 7.** Opinion of respondents on their incomes from January-December.

Category of beneficiary	Sex	Increased (%)	Constant (%)	Decreased (%)
Beneficiary	Male	30	2	2
	Female	22	2	0
	Total	52	4	2
Non beneficiary	Male	2	14	2
	Female	0	14	8
	Total	2	28	10

(Source: Authors survey).

**Table 8a.** Source of labour.

Category of beneficiary	Hired labour (%)	Family relatives (%)	Alone (%)	Total
Beneficiary	32	22	2	60
Non-beneficiary	2	30	8	40
Total	34	52	14	100

(Source: Authors survey).

**Table 8b.** Distribution of t-test group statistics for gardening.

Parameter	Category of beneficiary	N	Mean	Std. Deviation	Std. Error Mean
Annual revenue for market Gardening	Beneficiaries	6	400000.00	154919.334	63245.553
	Non Beneficiaries	10	174900.00	106427.022	33655.180
Annual gross margin for gardening	Beneficiaries	6	206666.67	87787.623	35839.147
	Non Beneficiaries	10	35300.00	10942.273	3460.250

(Source: Authors survey).

(100,687). The Independent-Samples Mann-Whitney U test showed a statistically significant difference (that is,  $P=0.000$  which is far less than 0.05) at 5% level in the improved annual mean gross margins of beneficiaries for

broiler production. This indicates that beneficiary respondents of broilers value chain have a significantly higher annual gross margins compared to that of non-beneficiary respondents. The contribution of NOWEFOR

**Table 9.** Distribution of t-test group statistics for broilers.

Parameter	Category of beneficiary	N**	Mean	Std. Deviation	Std. Error Mean
Annual revenue for broilers	Beneficiaries	12	983333.33	500642.012	144522.900
	Non Beneficiaries	16	285937.50	204914.362	51228.591
Annual gross margin for broilers	Beneficiaries	12	416833.33	176202.793	50865.365
	Non Beneficiaries	16	100687.50	106762.333	26690.583

(Source: Authors survey), N\*\*= Sample population.

**Table 10.** Distribution of t-test group statistics for piggery.

Parameters	Category of beneficiary	N**	Mean	Std. Deviation	Std. Error Mean
Annual revenue for piggery	Beneficiaries	44	554772.73	352797.713	53186.256
	Non Beneficiaries	14	362857.14	245871.404	65711.897
Annual gross margin for piggery	Beneficiaries	44	289681.8182	179790.15840	27104.38620
	Non Beneficiaries	14	94285.7143	51472.81369	13756.68811

(Source: Authors survey), N\*\*=Sampled population.

to the evolution of the average or means of farm income and a gross margin of respondents for piggery is as shown in Table 10.

In Table 10, the beneficiaries' mean of annual farm gross margins for piggery value chain (289,681) is higher than that of non-beneficiaries (94,285). The independent-Samples Mann-Whitney U test showed a statistically significant difference (i.e.  $P=0.000$  which is far less than 0.05) at 5% level in the improved annual mean gross margins of beneficiaries for piggery value chain.

This indicates that beneficiary respondents of piggery value chain have a significantly higher annual gross margins compared to that of non-beneficiary respondents. These findings agree with Aryeetey (1998), Nshom (2002) and Calderón et al. (2006) who reported that external aid helps farmers to have a positive change in their incomes.

In the same light, Calderón et al. (2006) examined the effect of foreign aid on income inequality and poverty reduction for a period 1971 to 2002 using the dynamic panel data techniques and found out external aid is conducive to the improvement of the distribution of income when the quality of the institutions is taken into account. This could be explained by their access to external aid through NOWEFOR which has helped them to improve access to productive resources, training and market outlet. As stipulated by Devora (1997), capital is very important for agricultural production because in its absence, creativity drive and innovations cannot be transformed into practice. The creations of new activities, timely application of fertilizers, good agricultural season,

and support from external aid are some of the reasons for the positive change in income.

### **Contribution of NOWEFOR to inputs supply**

#### ***Eligibility for inputs/equipment/building materials***

For a farmer to be eligible for inputs (insecticides, fungicides, manure, sprayers, animal feed, drugs, piglets, day old chicks and vegetable seeds), equipment (motor pumps) and building materials (Cement, and Zinc) one:

- Must have received adequate training
- Must have been active in the production sector
- Must not be a delinquent member or up to date with his/her financial contributions in union and credit house
- Must have been saving at least once a month in the credit house
- Must have been in the union for at least 1 year
- Must not be on a permanent salary
- Must have provided his/her quota of the contribution (labour, local construction materials, financial contribution to the inputs in question)

To crown it all, the commitment and contribution of the farmers were major criteria for assistance and farmers benefited from the project strictly on performance, which no one is like a limitation to small and average farmers. The fact that a farmer must have been in the union for at least one year before benefiting from the grants was a

**Table 11.** Inputs distributed to farmers from 2008- 2010.

Inputs	Units	Quantity
Cement	Per bag of 50kgs	450
Zinc	Per sheet	2000
Chick	Per chick	27000
Vegetable seeds	Per tin	500
Improved piglets	Per piglet	1000
Grower marsh for pigs	Per bag of 50 kgs	3000
Starter marsh for chicks	Per bag of 50 kgs	810
Finisher marsh for chicks	Per bag of 50 kgs	810
Fungicides	Per packet	6000
Insecticide	Per litre	1000
Manure	Per bag of 50 kgs	2600

(Source: Authors survey).

**Table 12.** Evolution of human resource strength of NOWEFOR (2007-2010).

Parameters	Before the EU project		After the EU project	
	2007	2008	2009	2010
Membership	923	1450	1820	2162
Trained leaders	25	40	65	100
Technical staff	2	5	6	8

(Source: Authors Survey).

limiting factor for new members to join the unions on one hand, and on the other hand, it was also means to shifter active and non-active members of the group. The inputs distributed to farmers are illustrated in Table 11.

### Contribution of NOWEFOR to the development of the rural community

The contribution of NOWEFOR to the development of the human resources of federation is shown in Table 12.

Our findings showed that NOWEFOR membership rose/increased from 923 members in 2007 to 2162 in 2010 giving an overall increase of 42% reason being that the huge sum received by NOWEFOR from the European Commission and SOS Faim during this period boosted the dynamism of existing member unions and improved the general well-being of the farmers at large. The number of trained leaders rose/increased from 25 members in 2007 to 100 members giving an overall increase of 75%. This could be explained by the fact that the EU Project empowered NOWEFOR leaders in terms skills, competencies and abilities that enable them to fully assume their roles and pilot their organization. The same trend holds for the number of technical staff increasing from 2 to 5 permanent staff making an overall increase of

75%. These findings agree with the Community Development Exchange (CDX, 2008) and Horton et al. (2004) who reported that technical skills would enable more people to play an active role in the decision making that affect their organizations. This implies that the impact of external aid on the increased in membership of NOWEFOR, trained leaders and technical personnel is overall positive.

It stems from Table 13 that NOWEFOR membership rose/increased from 2162 members in 2010 to 2954 in 2013 giving an overall increase of 73%. The same trend holds for the number of trained leaders and technical staff. This implies that the external aid from partners facilitated the increased in membership of NOWEFOR, number of trained leaders and the number of technical personnel of the federation. It could be concluded from Table 10 and 13 that, the impact of the external aid is overall positive due to increased membership of NOWEFOR, trained leaders and technical personnel of the federation. These findings are in line with Czuba (1999) who reported that empowerment is a multi-dimensional social process that helps people gain control over their own lives. The contribution of NOWEFOR on the organization of group sales is presented in Table 14.

Our findings showed the number of group's sales or marketing of pigs, assorted gardening crops and broilers

**Table 13.** Evolution of human resource strength of NOWEFOR (2011-2013).

Parameters	Before the SOS Faim's aid		After the SOS Faim's aid	
	2010	2011	2012	2013
Membership	2162	2493	2560	2954
Trained leaders	100	120	138	150
Technical staff	8	9	9	9

(Source: Authors Survey).

**Table 14.** Group marketing of produce (Gardening, Broilers and Piggery) in NOWEFOR.

Period	Speculation	No. of group sales	Quantities sold	Average prices per unit (in FCFA)
2007	Gardening	40	2010 tons	140 per kilogram
	Broilers		50000 birds	3200 per chicken
	Pigs		800 pigs	65000 per average pig
2008	Gardening	76	2600 tons	150 per Kilogram
	Broilers		70000 birds	3500 per chicken
	Pigs		1000 pigs	72000 per average pig
2009	Gardening	114	3500 tons	175 per Kilogram
	Broilers		95000 birds	3700 per chicken
	Pigs		2000 pigs	76000 per average pig
2010	Gardening	225	4700 tons	200 per kilogram
	Broilers		110000 birds	3800 per chicken
	Pigs		2100 pigs	82000 per average pig
2011-2013	Gardening	950	5500 tons	333 per kilogram
	Broilers		150000 birds	4000 per chicken
	Pigs		4000 pigs	85000 per average pig

(Source: Authors Survey).

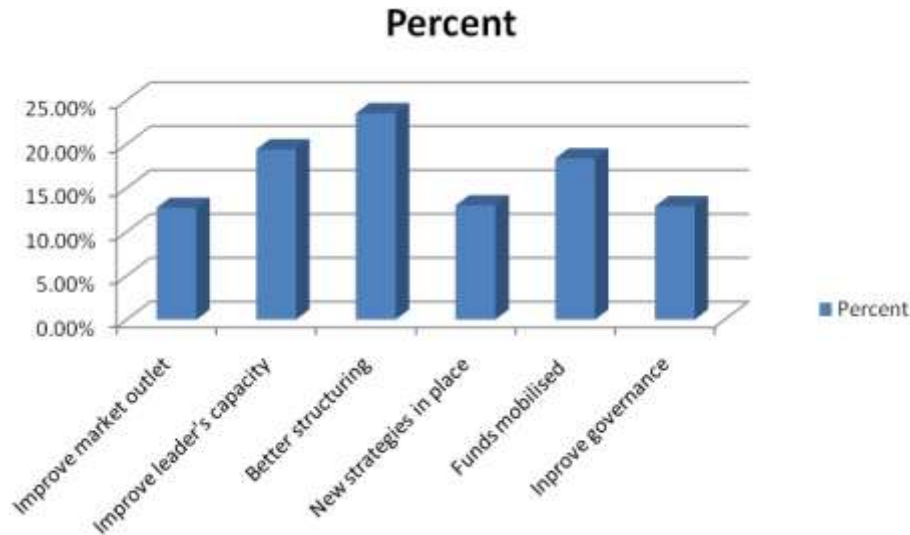
rose/increased from 40 in 2007 to 225 in 2010 making an overall increase of 82%. This increment could be explained by the fact there was easier access to information and trainings, harmonization of marketing strategies and the existence of marketing network that strived for better prices for farmers' produce. As a result of this a large number of new producers joined the NOWEFOR unions, based in Bafut, Mforyah, Nchum, Mundum 1 and Bambui. According to the Community Development Exchange (CDX, 2008) an empowered organization is one which is confident, inclusive, organized, co-operative and influential. Testimonies of farmers from Bafut Union on the local mastery of the market and organized group marketing include:

*"...With SAILD, we realized that the Bafut market was poorly organized. We invited the traditional authorities in*

*order to put different strategies in place such as: a unique sales place in the market, a rotation of sellers in the market (division by quarters), a market day fixed for each quarter...and the end results was on every day of the weekly market, about 200-250kg of fresh ginger is sold within a few hours at better prices. In this light, 20 new producers joined the NOWEFOR union of BUFAG, based in Bafut..."*

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 in Figure 3, the respondents revealed that aid has brought changes within the community in order of relative importance: better structuring (23.53%), improved leaders' capacities (19.41%), funds mobilized (18.37%),



**Figure 3.** Impact of aid on members' communities.

new strategies in place (13.02), improved market outlet (12.75%) and improved governance (12.88%). Better structuring and improved leaders' 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.

Better market access, new strategies in place to mobilize funds and funds mobilized 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 reported 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 impact of the external aid on the community of its members is overall positive.

## Conclusion

The study carried out in Mezam Division of the North West Region of Cameroon tried to assess the contribution of a farmers' organization to rural development. The findings revealed that since 1995 till date NOWEFOR had received external aid from SAILD, MINADER, MINEPIA, SOS Faim, EC, American Peace Corps and VSO. SOS Faim has been the best aid donor to NOWEFOR since its creation. Also, NOWEFOR had received aid from EC three times. The amount of external aid increased with time. The contribution to the development of the financial capacities of members was

overall positive as 74% of the beneficiary respondents had equipment in their farms, 52% of the beneficiaries realised an increased income, and hence 55% of beneficiaries hired labour for farming.

The contribution on the strengthening of the organization as a whole was overall positive since it had permitted NOWEFOR to employ technical staff, boosted membership and group marketing respectively to 9 staff, 2954 members and 950 group sales. The contribution to the development of the community was positively, since 23.53, 19.41, 18.37, 13.02, 12.75 and 12.92% of the respondents expressed satisfaction of better structuring, improved leader's capacity, mobilized funds, new strategies in place, improved market access and good governance respectively in the community of members. Conclusively the contribution of NOWEFOR to the development of the rural community was overall positive in spite of the setback such as untimely available funds.

Following our interview with members in the field, the study recommended that aid donors and NOWEFOR should provide aid on-time and in accordance with farming calendar and income generating activities for the federation. NOWEFOR should put in place an animal feed production unit, a cocoa farm and a multipurpose input shop for sustainability.

## CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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