



FROM A FIELD DEMONSTRATION PLOT TO AN INTEGRATED RESOURCE AND AGRICULTURAL TOURISM CENTRE: CASE OF THE TWANTOH MIXED FARMING COMMON INITIATIVE GROUP (MIFACIG)



Kuh Emmanuel LO-AH

Email: mifacig@yahoo.com
Website: www.mifacig.org
MIFACIG Training and Resource
Centre Njinikejem
P.O Box 25 Njinikom
Boyo Division North West RegionCameroon

ABSTRACT

In this paper, we show case the experience and reveal the key to success of the Twantoh Mixed Farmer Common initiative as a viable Agro forestry Resource Centre, and also as a self-sustaining business in the North West Region of Cameroon. The paper begins by narrating the history of the group as an on-farm tree domestication and vegetative propagation demonstration site for the 'Cercle Internationale pour la promotion de la Création' (CIPCRE) and later the World Agro forestry Centre (ICRAF-WCA). The paper discusses the reasons and strategies for its successes amongst which its frustration of not succeeding to gain direct financial benefits from its research partners and other donors. Key success factors include: members' commitment to take advantage of agroforestry and vegetative propagation knowledge learned from its partners; dedicated leadership; progressive visibility and increased demand for improved planting materials and their integration into existing and new farms both from small scale and elite farmers. We further demonstrate how the group has split into more than 5 satellite branches yet they maintain a strong network which permits them to respond to huge demand for planting materials which may reach twenty thousand plants in some cases worth about twenty five millions FCFA a year (50,000 USD). From an agro forestry trial plot in the early nineties, we also exemplify how and why MIFACIG has now diversified its activities into animal rearing, bee keeping, horticulture, organic gardening and agricultural tourism. As farmers we suppose that our model can be replicated by other producer groups around the world.

Keywords: Farmer group, Agro forestry, Self sustaining business, Cameroon

1. INTRODUCTION

MIFACIG –Twantoh Mixed Farming Common Initiative Group was created in 1993 by KUH Emmanuel Lo-ah (agriculture technician) a graduate from the school of agriculture. Starting a private vegetable garden with a tree nursery was inevitable to respond to problems affecting yields resulting from poor soil fertility. Faced with these difficulties, planting trees and practicing modern agroforestry techniques was the only solution. To foster the implementation of this idea, people with unique goals were involved to promote tree cultivation in order to diversify production on farms, to increase food production, to protect the environment, to improve on soil fertility and to reduce human pressure on the forests (Kilum-Ijim forest, Djichami and Afua community forests). MIFACIG registered a total of 15 members from 1993 to 1999, 15 members in this project. During this period (1993-1999), the Kilum-Ijim Mountain forest project sponsored by Birdlife International, trained members on tree nursery establishment, gardening and bee keeping.

In 1998, The International Centre for Research in Agroforestry (ICRAF) involved MIFACIG in its quest to take research results to the fields, to empower end users to develop tree domestication technologies and establish efficient relays for the spread of these technologies. This partnership led to the training of MIFACIG members by ICRAF on innovative tree propagation techniques and acting as relay organisation for ICRAF. This led to the creation of eleven nurseries in Boyo Division from 1998 to 2004. Presently, the spread of nurseries has reached 2 Divisions of the North West Region notably Boyo and Menchum Divisions reaching a total of 22 community nurseries. In 2004, MIFACIG embarked on sharing the knowledge and experience gained over the years and started to stress on providing trainings and has massively invested in its infrastructure thanks to the US Peace Corps Volunteer program that supported the construction of a guest house and conference hall. Since the beginning of this venture, a strong feeling of initiating projects and a strong will have been noticeable through the dynamism of its members, who are offering their services free of charge.

With dedicated and assiduous members, MIFACIG have been able to source for funding from the provision of consultancy to other organisation and sales of agroforestry products. Raising the necessary funds to realise projects at the MIFACIG Resource Center has been a daunting task but thanks to its assiduous staff and support from other international organisations, they have been able to meet up with this challenge – especially through joint projects where MIFACIG had to play key role in training and dissemination. The main aim of this paper is to demonstrate the potentials for the transformation of a diversified agroforestry demonstration plot into a resource center which can serve as a relay organisation to foster the training of farmers, extension agents and students in adoption of agroforestry technologies, and practices.

2. OUR APPROACH

2.1. Adequate infrastructure

Success in the development of MIFACIG Resource Centre is thanks to its extensive infrastructure realised with financial and material support generated from the sales of agroforestry products and services rendered to other actors. The technical backstopping, financial and material support of partners especially ICRAF, the government of Cameroon have been the backbone for the success story of the centre which has led to the realisation of the following infrastructures:

- Conference hall, lodging facilities and canteen,
- Plant multiplication facility (propagators, nursery),
- Animal production unit (Piggery),
- Organic production unit (garden, compost site and medicinal plant garden),
- Demonstration plot (soil fertility, multi-storey home gardens, apiary),
- Food processing Unit (improved drier and honey processing equipment)

All these infrastructures have been used to improve on the farmer to farmer training approach as well as improved on the skills of farmer groups. The transfer of technology in the domain of agroforestry has witnessed a tremendous increase in the past years thanks to the support of ICRAF in collaboration with other national and international donors. Most of these structures have also been developed in other communities in Boyo and Menchum divisions.

2.2. Systematic identification and sampling of groups

The systematic identification of existing farmer groups during the Kilum-Ijim mountain project fostered the creation of the Ijim Tree Farmer Union (ITFU) and from this, a network of satellite nurseries were created. With tree domestication and forest management experience gained from this project Twantoh Mixed farming common Initiative group was created to respond to the problems faced by farmers under ITFU. There were no criteria to the selection of farmer groups since most farmer groups as well as individual households were interested in starting up a small organic garden around their households.

The rapid rural appraisal method was inevitable during this process as it facilitated the identification of groups and tailored the solution to the needs of these groups with the used of groups.

2.3. Participatory approach

With high expectations from farmer groups and households that were influence by poverty and increasing food scarcity especially leafy vegetables, a farmer to farmer approach was adopted. This eased the learning process and led to an increase in the number of farmers trained and activities expanded to two villages (Fungoh and Bafmen) in Menchum. MIFACIG

and its satellite nurseries further benefited from this approach with more technical support from ICRAF in 1998 to present date. Since then, MIFACIG has been using this approach to reach out to farmer groups in enclave communities of Ajung, Mbesa, Akeh and Menteh (Fundong sub division). This approach (farmer to farmer) has been very successful and has improved the lives of farmers living more than 65 km from the resource centre.

2.2.3. Training and capacity building

From each identified group, 2 to 4 members are invited for 3 days training at the Resource Centre. During this period, farmer groups are trained on the following:

- Tree domestication techniques (marcotting, rooting of cuttings and grafting of fruit trees),
- Seed bed nursery development and management of rootstocks,
- Composting/soil fertility improvement with leguminous MPTS (improved fallow),
- Organic gardening/ecological cultivation of medicinal plants,
- Marketing, communication and conflict resolution,
- Identification of meiliferous plants, apiary development, harvesting and processing of bee products,
- Sustainable harvesting and domestication of *Prunus africana*,
- Water catchment and watershed management/protection.

Most of these training modules and sessions are done at MIFACIG-RC under the tutelage of ICRAF technical staff. These modules have greatly improved on the capacity of MIFACIG staff and its satellite groups. The sub-components of the above listed modules cannot be over-elaborated and it now serves as a training guide used by MIFACIG staff to train and empower its network of nursery and farmer groups. It should be noted that these training have also impacted the lives of underprivileged, people living with HIV/AIDS, school environmental clubs and women wing group (Anonymous, 2009).

2.2.4. Field visits and sensitisation

This method has acted as a driving force to the achievement of great success in the dissemination and transfer of agroforestry technology. This practical learning experience with support from ICRAF has given the opportunity for farmers (cocoa cooperatives) in the Center and South regions of Cameroon, farmer organisations in the West and North West regions to learn from each other's experiences. This has foster the process of innovation adoption in the domain of tree domestication, composting, soil fertility improvement, integration of trees in farmland and plantations, and the establishment of demonstration plots (Anonymous, 2008).

3. RESULTS AND DISCUSSION

3.1. RESULTS

3.1.1. Achievements

3.1.1.1. Satellite nurseries and membership

MIFACIG membership has risen from 7 members in 1992 to 42 members in 2013. MIFACIG has witness a slow and steady increase in membership with a tremendous increase since 1998 with the involvement of ICRAF. At the end of CIPCRE project, there were some visible results in terms of improved gardening techniques and availability of fresh vegetable all year round and households saw the need to learn and adopt this innovation. With the launching of Food For Progress, satellite nursery groups rose from 4 to 10 in 2003 and up to 20 groups by 2008. MIFACIG monitors and manage field activities of 22 satellite nursery groups with more than 3000 farmers in 30 communities involved by the end of Food for Progress in 2010. The transfer of this technology always took into consideration gender balance with women representing 47.8 % and men 52.2 % with age ranging between 20 to 60 years (Anonymous, 2009). Till date, MIFACIG is still adding more farmers to its network and is engaged in the training and capacity building of a cross section of activities which has improved on farmers' livelihood as well as the centres' sustainability in the promotion of agroforestry education.

Table 1: Total number of farmers trained from 2003 to 2013

Training	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total # of farmers
Tree domestication	101	35	588	913		310	90	200	10		26	2273
Marketing strategy	73	18				28		10		15		144
Rapid multiplication of plantain suckers					13	10		5		8		36
Bee keeping			41			18					5	64
Honey by-product production			41			15		25				81
Medicinal Plants			18			40					25	83
Group dynamics and conflict resolution	45	35				25	40	8		10		163
Introducing agroforestry practices to secondary and primary school students/pupils				18								18
Soil fertility	28	39				45			20		12	144
												3006

Source: MIFACIG operational plan, 2009.

In 2007, a total of 2006 farmers were trained and to date, the network has increased to 3006 portraying an increase of 1000 farmers representing 33.26 % increase. This reveals an improvement in the livelihood of an additional 33.26 % of the rural population through the adoption of innovative practices and technologies.

Table 2: Tree nurseries involve in tree domestication techniques from 1993 to 2013

Years	Number of tree nursery groups involved	Cumulative of trees domesticated	% increase of trees domesticated	Percentage of tree nursery groups involved
1993 - 1998	2	10,500	2	9
1999 - 2003	7	196,000	39	32
2004 - 2008	11	220,000	43	50
2009 - 2013	2	79,500	16	9
Total	22	506,000	100	100

Source: MIFACIG archives, 1998; MIFACIG operational plan, 2009.

The involvement of farmer groups in the adoption of agroforestry practices and technologies related to the production and integration of high-value planting material increased as from 3 % -23 % between 1998 and 2003 and to 54 % in 2008. However, farmers' involvement dropped to 22 % from 2009 to present date because of inadequate market for trees produced and inadequate support to maintain and renovate production facilities. A total of 60 000 trees are produced per year at MIFACIG resource center with a dwindling number from active nursery groups.

Moreover, MIFACIG has carried out numerous sensitization meetings the level of groups and schools on agroforestry and environmental protection.

Table 3: Total number of groups sensitised from 2005 to 2013.

Activities	2005 - 2007			2008 - 2010			2011 - 2013				Total		
	F	Y	SC	W	F	Y	SC	W	F	Y	SC	W	
kola nut market opportunities, post-harvest/marketing techniques	752				255				150				1157
Agroforestry/poverty alleviation/environmental protection				54				60				75	189
MPTS/improved tree integration into coffee farms	782				825				214				1821
Sustainable development		35				56				28			119
Tree domestication and planting organic gardening/ecological		27				35				55			117
cultivation of medicinal plants Total			7				10				1		18 3421

Key:

F: Farmers, Y: Youths, SC: Schools, W: Women *Source: MIFACIG operational report*, 2009.

The sensitisation and training of households on the integration of agroforestry tree species in coffee farms was supported by NWCA, GTZ, ICP, and MIFACIG. The promotion of organic gardening in schools was sponsored by New England Biolabs Foundation with 18 schools benefiting from the establishment of demonstration gardens and 600 pupils sensitised and taught. Moreover, the following out-reach action have been established:

- 8 apiaries: they represent a production of over 4,000 litres of honey per year which represent about 7,634 € (5,000,000 million FCFA) for eight bee-keepers as well as an extensive apiary at MIFACIG demonstration plot with a capacity of 50 hives.
- 8 medicinal plant gardens: thanks to propagation techniques, traditional healers are able to better their production of plants with healing potentials there by promoting community health and modern traditional medicine.

3.1.1.2. Scalable activities and income generated

Since the creation of MIFACIG, raising funds for its survival for the first five years was a daunting task. With income from the sales of crops, trees and support from donors like the Peace Corps and CIPCRE was a silver lining and a source of hope especially to farmer groups. From 2008, MIFACIG and satellite nursery groups as well as farmers benefited from the support of several National and international organisation which has contributed to the growth and success of MIFACIG from a gardening group to a resource center (Fig 1).

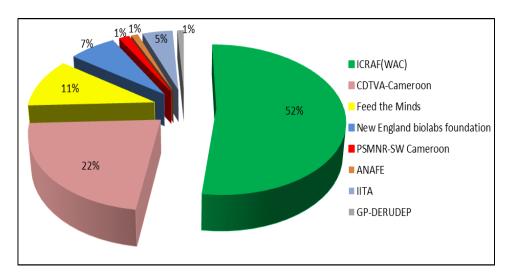


Fig.1. Level of institutional support to MIFACIG-RC from 1998 to 2012 *Source: MIFACIG Annual Reports 1998 to 2012.*

ICRAF, is rated as the highest (52 %) supporter and source of funding to MIFACIG-RC it is thanks to its technical, logistics and financial assistance that the center has attracted more support from other institutions like Feed the Minds (11 %), New England Biolabs Foundation-USA (7 %) and CDTVA-Cameroon (24 %) as well as PSMNR-SW. ANAFE (1 %) in collaboration with the Universit of Dschang provided assistance for agroforestry education and IITA (5 %) promoted farmer fruit tree-crop enterprise development.

3.1.1.3. Financial benefit from project activities

The profit or balance realised by MIFACIG-RC from the sales of trees and diversified activities has enable the centre to improve on its infrastructure and training facilities. With an

improvement in the Centre's technical abilities, there was need for diversification and thus an increase in revenue. Between 2004 and 2013, MIFACIG has received huge sums of funding from both national and international donors. These funds have fostered the promotion of agroforestry technologies and practices in communities in Boyo and Menchum Divisions (Table 2). Consultancy and trainings as well as lodging of participants and visitors at the Centre, has witnessed a tremendous increase from the end of 2008 to 2012.

Table 4: Finances generated from diversified activities at MIFACIG-RC

Activities	Total a	Total amount of Income generated (FCFA)						
	1993-1998	1999 - 2003	2004 - 2008	2009 - 2013	Total			
Organic gardening crops	800,000	400,000	100,000	225,000	1,525,000			
Sales of high-value planting material	100,000	1,850,000	4,560,000	6,500,000	13,010,000			
Sales of honey and by products	-	1,100,000	2,150,000	4,800,000	8,050,000			
Consultancy/trainings to institutions	-	20,000,000	28,000,000	114,840,538	162,840,538			
Grants from Donors	2,000,000	3,000,000	42,000,000	52,835,133	99,835,133			
Integrated livestock	-	1,500,000	1,850,000	5,460,000	8,810,000			
Total	2,900,000	27,850,000	78,660,000	184,660,671	294,070,671			

Source: MIFACIG archives, 1999 to 2008; Audit reports 2009 to 2012.

Income generated from consultancy and trainings, sales of honey and by products, sales of trees and gardening crops as well as livestock have greatly contributed to the development of infrastructure and the remuneration of staff.

Table 5: Balance sheet of income-expenditure from 2009 to 2012

		Income Per Year in FCFA						
Sources of income	2009	2010	2011	2012	(FCFA)			
Donors	23,653,177	4,306,713	11,634,758	13,240,485	52,835,133			
MIFACIG Project activities	22,585,000	32,578,927	43,779,789	32,881,822	131,825,538			
Total	46,238,177	36,885,640	55,414,547	46,122,307	184,660,671			
Application of funds								
On project activities	32,900,000	36,137,051	27,317,776	39,320,179	135,675,006			
On capital investment	12,953,040	-	27,488,344	6,275,000	46,716,384			
Total (FCFA)	45,853,040	36,137,051	54,806,120	45,595,179	182,391,390			
Balance (FCFA)	385,137	748,589	608,427	527,128	2,269,281			

Source: MIFACIG-RC audit report 2009 to 2012.

MIFACIG-RC started with organic gardening and production of plant seedlings and with support from donors, other activities like honey production and integrated livestock farming introduced (Table 2). With trainings from ICRAF, MIFACIG started receiving consultancy and executing training activities for other institutions. Moreover, farmer groups were also encouraged to diversify its activities. To realise this diversification campagne, MIFACIG helped its satellite nurseries to market trees by making the resource center a point of contact for buyers. A total of 15 satellite nurseries diversified their activities by the end of 2010 with a success rate of 75 % and a significant improvement in livelihood of group members.

3.1.1.4. Links with other social structures

Apart from partnering and working with several national and international organisations and institutions, MIFACIG has built a strong working relationship with the Ijim Tree Farmer Union (ITFU: since 1994 under birdlife project), women wing, the Njinikejem Development Association (NDA) and youth groups in Boyo Division, The Cameroon National Youth Council, the National Platform of Agro-Sylvo-Pastoral Organisations of Cameroon, . These groups benefit from the use of MIFACIG structures for the hosting of events, lodging of guest, recreation and for practical learning/demonstration on sustainable agriculture and agroforestry practices. Thanks to its numerous activities, MIFACIG has been able to generate income which is supporting its investments. Even if MIFACIG tries to increase the income, it is not enough to support the expenditure of the trainings and of the staff required.

3.1.1.5. Factors contributing to the success of MIFACIG-RC

- Dedicated leadership

The vision, commitment, honesty, dynamism, and focus, has led to the success story of MIFACIG- training and resource centre.

- Availability of land and enabling environment.

The on-farm demonstrations on bee keeping, multi-strata tree-crop plots, medicinal plants, multipurpose tree nursery and integrated animal farm has serve as a model for the adoption of agroforestry technologies. This resource centre here serves as a beacon of salvation to farmers. The results of exhibited has provoked a steady demand of improved planting material at affordable prices which has supported the sustainability of the centre.

- Increased demand of planting materials

The market for improved planting material continue to increase over time as many people especially in neighbouring cities are in need of high quality domesticated trees to add value to arable and habited land and by 2013, the MIFACIG Resource Centre has domesticated and sold over 55 000 trees.

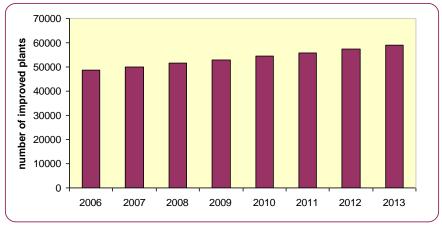


Fig 2 Market trends of the demand of improved trees in Douala, Yaounde, Bamenda and villages of the North West Region. (Source: Awa, 2006).

- NGOs has supported MIFACIG resource centre on trainings on group dynamics, leadership tree propagation; financial assistance, communication and marketing techniques.

3.1.1.6. Challenges faced by MIFACIG and satellite groups.

3.1.1.6.1. Farmers' needs and constraints

Farmers in the North-West region and in Cameroon are confronted with many problems which affect their access to food, health, education and therefore lead them to impoverishment and weakness as entrepreneurs. Therefore their needs titled towards securing enough food to sustain their households, to generate income to educate their siblings, have access to healthcare, buy all inputs needed for their farm (tools, fertilizers, plants and livestock) and acquire basic household needs (clothes, soaps, kitchen tools).

The major constraints are difficulties to have access to land, impoverishment of soils compromising good yields, and non-sustainable agricultural practices which affects severely the sustainability of the next generation agriculture.

Moreover, inadequate capital limits access to proper tools, proper trees or livestock and limits access to knowledge on the modern agricultural technologies as well as transportation. Easing access to these technologies will lead to an increase in yields and quality of products.

Furthermore, farmers encounter a lot of difficulties in bee-keeping and honey production, as stressed on SNV market survey 2006. These difficulties encountered are not only limited to quality of honey but also to redundancy in the adoption of modern bee farming techniques, inefficient marketing strategies and processing techniques (packaging and trader network). Bee farmers are trapped in the saga of hope in the honey sector as the absence of a strong marketing network lurks in the honey business environment.

3.1.6.2. Constraints of MIFACIG (Challenges)

The main constraints encountered by MIFACIG are financial: the small income from the nursery, the piggery, the apiary and the garden is not enough to provide free trainings to farmers and to compensate the staff adequately. As a result, MIFACIG encounters material constraints for providing proper trainings: material for apiary (hives, smokers, suits, gloves), for the nursery (no water supply), and for pedagogic tools (projector and communicating tools), for trainers (service van for transportation of people and material). This difficulty is enhanced by the bad roads which make transportations and movements in other provinces being complicated.

Besides, the construction of the additional 8 guest rooms, two offices and a class room are on-going: woodwork, electrification, water supply are still to finish. This infrastructure is primordial for our activities.

Moreover, insufficient and competent staffing has been a major problem since inception. Although MIFACIG staff has benefited from a series of trainings from ICRAF and other partners since 1998, there is still need for technical backstopping and capacity building on management and accounting techniques. The absence of a competent secretary impedes the coordination and preparation of reports on time. Furthermore, the coordinator is responsible of a lot of activities which are difficult to realise for a single man. Therefore, MIFACIG has achieved great things but with all those financial and human difficulties, a lot of energy and time are wasted.

Today, MIFACIG is getting into a new era in which *sharing knowledge that serves life* could be its new motto based on its achievements and experience.

4. CONCLUSION AND RECOMMENDATIONS

The realisation of such a scheme is not solely dependent on money. The commitment, honesty and vision focused are guiding principle to a success story of this nature. Nowadays, farmers capitalise on financial aspect of community projects and rely on external inputs with little or no internal inputs. Nonetheless, the financial aspect facilitates the realisation of a vision. However, the guaranteed multiplier effect demonstrated by this resource centre is an epitome of pure dedication with little financial support at the initial stage of this project shows that MIFACIG resource centre can do better with more support from scaling up partners.

REFERENCES

- Anonymous, 2008. Information on impact and partnership: MIFACIG Portfolio. *MIFACIG Resource Centre Archives. Unpublished 5pp.*
- Anonymous, 2009. Feed The Minds follow up report on project activities. *MIFACIG Resource Centre Archives. Unpublished, 10 pp.*
- Anonymous, 2009. MIFACIG Audit reports from 2009 to 2012.
- Anonymous, 2005. MIFACIG Annual Report. 8p.
- Anonymous, 2009. MIFACIG Operation Plan 2009 to 2014. 17p
- Awa A. Samba., 2006. Market survey on domesticated trees. ICRAF.

APPENDICES

Table 1: List of donors and sponsors of MIFACIG projects from 1993 to 2013

Institutions/organisations	Year of	Project Focus	Funds allocated
	collaboration		(FCFA)
Government of Cameroon			
Ministry of Agriculture and Rural Development	Since 1993	Agriculture (General)	3,000,000
Ministry of Livestock, Fisheries and Animals	Since 1993	Integrated Livestock	10,000,000
Husbandry		(piggery project)	
GP-DERUDEP	2009	Community watershed	3,750,000
		protection	
International NGO	_		

Birdlife International (Kilum-Ijim forest Project)	1994	Model for the training of farmers on tree nursery development.	2,500,000
American Peace Corps (APC)	1997 - present	Agroforestry training to APC volunteers, construction of hall/guest house.	5,750,000
New England Biolabs foundation-USA	2004	Organic vegetable production and creation of environmental clubs in primary/secondary schools.	26,500,000
Feed The Minds	2009 - 2012	Training of farmers on innovative bee farming, cultivation of medicinal plants/tree nursery establishment/gardening, Gender mainstreaming on HIV/AIDS, conflict resolution, marketing strategies, literacy and legal land rights, natural resource management.	41,000,000
CDTVA-Cameroon	2007 - 2013	Ecological cultivation of medicinal plants and bee keeping.	85,000,000
PSMNR-SWR Cameroon: GIZ sponsored project	2010	training of trainers on tree nursery establishment, integration and follow up	5,865,000
ICRAF (world Agroforestry Center)	1998 - 2013	Pilot center for the valuation of agroforestry education, scaling up of agroforestry activities, creation of 24 tree nurseries.	Over 100,000000
IITA (International Institute of Tropical Agriculture)	2007 - 2009	Train and follow up farmers in 12 cooperatives in the Center and South West Region of Cameroon on the production and integration of improved fruit trees in their farming systems and integration of bee keeping in cocoa farms	40,650,000
Nation Professional Schools and Universities			

University of Dschang (ANAFE sponsored	2007	Agroforestry	
project)		education and research	
		to students and	
		farmers	
Regional College and Technical School of	2005 - 2013	student research and	
Agriculture		internship	
The National Cooperative College (NCC):	2005 - 2013	Monographic studies,	
		research/internship	
International Students			
AgroParisTech-France	2008	Group dynamics and	
		marketing strategies	
		(end of course defense	
		paper)	
Ghent University-Faculty of bioscience	2013	Farmers perception on	
engineering		cooperative societies	
		(Research-Thesis)	
Others			
Belo Council	1996 - 2013	member of the local	
		Management	
		Development Fund	
		(LMDF)	
Community Development Associations	1995 - 2013	Fundraising for	
		community projects,	
		linking associations	
		with partners, training	
		on watershed	
		management	