



(ICENECDEV)

**International Center for Environmental Education and
Community Development**

An Independent Report

**Monitoring and Evaluation Report of the Donation of Agricultural Equipments in Buea
Subdivision by ICENECDEV Supported by 1% for Development Switzerland**

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September 2016 to November 2016



Women farmer using the spraying can to spray vegetable farm

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CHAPTER ONE INTRODUCTION

Project Framework

1. Recalling General Assembly Resolution 70/1 of 25th September 2015 adopting the outcome document of the UN Sustainable Development Summit, entitled ‘‘Transforming our world: the 2030 Agenda for Sustainable Development’’;
2. Recalling the outcome document of the United Nations Conference on Sustainable Development, entitled ‘‘The Future We want’’, and the United Nations General Assembly resolution 67/290 of July 2013, on the ‘‘Format and organizational aspects of the High Level Political Forum on Sustainable development’’
3. .Recalling general Assembly resolution 69/313 of 27 July 2015 on the Addis Ababa Action Agenda of the Third International Conference on Financing for Development, which is an integral part of the 2030 Agenda for Sustainable Development;

This project is aligned within the framework to contribute 2035 agenda in Cameroon,2030 Agenda for sustainable development and the sustainable Development Goals (SDGS1,2,5 & 17)

1.1. Background Information

While the percentage of people living in poverty has decreased in urban areas of Cameroon it has increased in rural areas where nearly half of all Cameroonians live. Nearly 6 million rural people, about 55% of the rural population in Cameroon, still live in poverty. Over half of all of men and women employed in Cameroon work in the agricultural sector and this sector makes up 20% of Cameroon’s GDP. The formal education rate in Cameroon sees that only 21% of females have received secondary school education in contrast to 35% of males while 64% of women are participating in the formal labour force compared to 77.4% of men. The project is aimed to enhance the livelihoods of rural women in the Southwest region villages of Tole, Bolifamba and Muea by donating on agricultural farming inputs alleviating poverty and reducing hunger in the long run

1.2. Justification of Monitoring and Evaluation

The overall purpose for the monitoring and evaluation is to enable ICENECDEV, partners and beneficiaries to draw lessons learned, share best practice and how these can be factored into planning, design, implementation and management of similar projects in the future. This monitoring and evaluation will carefully examined the cost benefit analysis of the project and the achieved desirable project outcome.

1.3. Objectives of the Monitoring and Evaluation

Global objectives

To assess the contribution of the donation of agricultural equipments (spraying can, wheel barrow, hoe and cutlass) by ICENECDEV in reducing poverty and improving on the living standards of the beneficiary farmers in Muea, Tole, Mile 14, Great soppo and Bomaka communities.

Specific objectives

- I. To assess the outcomes and impact of the donation of equipments on beneficiaries
- II. To assess the impact of the donation of agricultural equipments on the economic and social development of the beneficiaries.
- III. To make known best practices and lessons learnt for future poverty reduction development projects in the communities.

1.4. Methodology

The monitoring and evaluation required an in-depth study with the active participation of all the main stakeholders, thus participatory methods and tools were used. The Monitoring and evaluation was done by Centre for International Development and Agricultural Research(CIDAR) with assistance from support staffs put in place by ICENECDEV. The evaluation included the following methods:

Review of Relevant Documents

These include; project documents, base line study reports, minutes of technical meetings, reports on project activities etc.

Collection of Primary data through Field Surveys and Interviews

- I. Individual/household interview, and group interviews of the stakeholders and beneficiaries representatives;
- II. Field visits to beneficiaries , farms etc existing or developed as a result of the donation;
- III. Direct observations, focus group discussions, semi structured interviews, random and non random surveys, questionnaires, SWOT (strengths, weaknesses, opportunities and threats) analysis and case studies etc were used where appropriate.

Evaluation Scope

The geographical scope of the evaluation covers four communities: Muea, Tole, Mile 14, Great soppo and Bomaka. This included representatives and beneficiaries. The main emphasis was on measuring outcomes/impact and sustainability of the project.

1.5. Expected Results

The evaluation provided:

- An assessment of relevance, efficiency, effectiveness, outcomes/impact and sustainability of the donation of farming equipments as regards increasing incomes and improving livelihoods among beneficiaries.
- Recommendation on the design and implementation strategy of future farming equipment donation activities.

CHAPTER 2 MAIN FINDINGS

In the month of August 2016, a joint team of senior staff of CIDAR and support staff of ICENECDEV met with the beneficiaries to record data on the outcomes and impact generated as result of the project.

Table 2.1: Composition of the team

No	Names	Function
1	Nana Jules Cabrel	Consultant
2	Fongoh Eric	Director
3	Tafon Emmanuel Babila	Support staff
4	Mbakwa Abong	Support staff
5	Akame Cyril	Consultant
6	Njeck Patrick	Support Staff



Following their discussions which were guided by questionnaires and the socio-

economic studies carried out before the donation of agricultural equipments, the following outcomes and impact data were recorded:

Cross section of Tole farmers during data collection

2.1. Change in farm sizes

Averagely, a farmer in the study area cultivates 5 different farmlands in one season. Analysis of data showed that an average farmer cultivates a cumulated land size of 1.5ha (15000m²) compared to the average of 0.575ha (5750m²) before the donation of the farming equipments. This is illustrated in the table below:

Table 2.2: Changes in farm sizes

Average farm size before	Average farm size after	Change	% Change in farm size
5750m ²	15000m ²	9250m ²	161

As seen in the table above, agricultural production in these communities witnessed a drastic revolution after the donation of the farming equipments. Many farmers increased their farm sizes to take advantage of the spraying can, wheelbarrows, hoes and cutlass available now at their disposal. This implies that the above equipments constrained increase in farm sizes in these communities.

2.2. Change in the production of agricultural commodities

Table 2.3: Change in the production of agricultural commodities

Type of commodity	Unit	Average before	Average after	Change	% Change in production
Maize	tons	0.16	0.44	0.28	175
Tomato	baskets	20	30	10	50
Pepper	bags	45	57	12	27
Huckle berry	bundles	39	100	61	156

Increase in farm sizes caused an increase in agricultural production as shown on the table above. Mixed cropping is generally practiced in these communities.

2.3. Change in income of farmers

Table 2.4: Change in income of farmers

Type of commodity	Before			After			Change in Average Income/F CFA	% Change in Average Income/F CFA
	Average Estimated Revenue/ FCFA	Average Estimated Total cost/F CFA	Average Estimated Income/F CFA	Average Estimated Revenue/ FCFA	Average Estimated Total cost/F CFA	Average Estimated Income/F CFA		
Maize	95400	63400	32000	199483	68233	131250	99250	310
Tomato	100000	58000	42000	150475	56825	93650	51650	123
Pepper	45000	24000	21000	57150	19800	37350	16350	78
Huckle berry	38750	13750	25000	100155	37550	62605	37605	150
Total			120,000			324,855	204,855	271

The increase in farm size results to an increase in production, which led to increase revenue and consequently income. The donation of agricultural equipments injected an average of 204,855 FCFA per farming household. This gives a total of 20,485,500 FCFA for the 100 beneficiaries of the project within a three month period.

The above crops are produced within an estimated period of three months. This implies that an average farmer before the donation earned $120000 \text{ FCFA} / 3 = \mathbf{40,000 \text{ FCFA per month}}$. After the donation, an average farmer now earns $324855 \text{ FCFA} / 3 = \mathbf{108,285 \text{ FCFA per month}}$. This implies an increase of **68,285 FCFA per month** as a result of the donation of farming equipments.

This increase in income can be seen by the number of high cost and modern household furniture purchased by the beneficiaries, the number of families having children in higher schools, change in family status of most families among others. These farmers are now growing on daily basis.

2.4. Sustainability Mechanisms put in place for the Equipments

The donated equipments depreciate as they are been used over time (Depreciation Value). Consequently, the following measures were put in place to ensure that farmers do not lack these basic tools;

- Farmers were organized into a cooperative society (Women farmers' network) and encouraged to save and borrow to members in need at reduced interest rates. With this, farmers were able to access finance needed to purchase basic farm tools/materials and inputs and do repairs of malfunctioning equipments when need arises.
- Monthly Monitoring and Evaluation of the donated farming equipments by ICENECDEV Team and Extension Workers from the Ministry of Agriculture and Rural development.
- Signed Memorandum of Understanding(MOU) between ICENECDEV and the women farmers outlining the roles and responsibilities on the use of the donated equipments.
- Signed undertaking between ICENECDEV and the women farmers on the penalty involve in the loss of the equipments

2.5. Most Significant Change (Beneficiary Testimony)

A. Village: Dibanda mile 14

Name of Speaker: Mrs. Menging Stella

Age: 51 years

Family status: Widow and a mother of 5 children

Occupation: farmer

Activities carried out:

Mrs. Menging Stella is a farmer of maize, palm, cocoyam, plantains, okra and huckle-berry.

Situation before:

She had a maize farm which was about 5000m². She could produce less than 1 ton of maize because she could not take proper care of her farm and most of the maize cob were attacked by stem borers due to the lack of spraying can to spray insecticides. The lack of a spraying can is the main reason why she decided to engage in only maize production which is not labour and chemical intensive compared to

other crops such as okra and tomato though they are more profitable. Her family was poor. All her children were in the village primary school. She found it hard to pay their school fee and medical bills.

After the donation of equipments



She increased the size of her farm to 1.1ha. And planted okra, tomato, plantain, cocoyam, palm and huckle-berry. She sprays her farm regularly and so experiences less pest and disease attack, hence her productivity and production have greatly increased. She has a wheelbarrow to transport water for irrigation, produce from the farm to market and for domestic use.

Mrs. Menging spraying insecticide

Recorded outcomes and impacts

- *Increased farm size from ½ ha to 1.1 ha.*
- *Increase income from the sale of her farm products: now earns 120,000 FCFA per month compared to 45,000 FCFA per month she earned before the donation of the equipments.*
- *Has a spraying can to regularly spray her farm hence reduce pest and disease attack.*
- *Has additional hoe and cutlass thereby reducing her cost of renting these equipments during land preparation.*
- *Has a wheelbarrow to transport water for irrigation and farm output to the market.*
- *She has no problem in paying school fees for the children.*
- *She is able to prepare meat and fish in her house trice a week.*
- *She now wears expensive clothes.*
- *Her new palm and plantain farms are promising.*

B. Village: Tole

Name of Speaker: Mrs. Ngum Justina

Age: 55years

Family status: Single and a mother of 4 children

Occupation: farmer

Activities carried out:

Mrs. Ngum is a farmer of maize, cassava, okra and huckle-berry.

Situation

She had a farm which was about 1.5 ha but could only exploit 4450m² due to the lack of basic farming tools such as spraying can to spray herbicides against weeds since using a cutlass for such a large area was strenuous. She usually hires a spraying can from the chief palace at a cost of 1000 FCFA per day which she had to book for it at least a week before since many farmers depended on a single spraying can. This was never reliable and resulted to delay in planting and severe pest and disease attack on crops due to untimely and irregular spraying of pesticides. Averagely, she losses about 1/3 of her produce due to pest and diseases. Also, she lacked a wheelbarrow to transport water for irrigation. She had to carry water on her head for a very long distance. This caused her persistent head pain and was advice by a doctor to stop carrying things on her head. To adhere to the doctors advice, she was forced to reduced her scale of production. She mainly produced maize and cassava. Her harvest was generally less than 1 ton. She had a monthly income of about 38000 frs. Her family was poor. Her children who passed from primary school could not go to secondary school due to lack of adequate means. She could not afford to cook everyday for her children.

Situation after:

She now exploits up to 1.2 ha of her farm and hopes to fully exploit the farm by the end of the year. She has increase the type of food produced, adding okra and huckle-berry to cassava and maize. She sprays her farm regularly and so experiences less pest and disease attack, hence her productivity and production have greatly increased. She has a wheelbarrow to transport water for irrigation, produce from the farm to market and for domestic use. She no longer incurs any cost for hiring a spraying can which now goes into her monthly savings.



Mrs. Ngum Justina on her way to the farm transporting water for irrigating her nursery and a spraying can

Impacts

- *She now exploits her farm up to 1.2 hectares due to available spraying can , wheelbarrow, hoe and cutlass;*
- *Her income has increased : now earns 100,000 FCFA per month compared to 38,000 FCFA per month she earned before the donation of the equipments;*
- *She produces maize, cassava, okra and huckle-berry;*
- *She can afford for her children secondary education;*
- *She cooks every day for her children;*
- *She can afford to buy new cloth for her self*

CHAPTER 3 OVERALL IMPACT

The overall impact is based on the main objectives of ICENECDEV which is to improve on the standards of living of the rural population in Cameroon.

The objectives of this assignment are to assess the contribution of the donation of agricultural equipments (spraying can, wheel barrow, hoe and cutlass) in reducing poverty and improving on the living standards of the beneficiaries' households.

The contribution from the donation of agricultural equipments in the above objectives can be seen by analyzing increase in the level of income of beneficiaries as presented below;

3.1. Income Increase of Beneficiary

Income was derived from the donation of equipments through induced activities. These activities are;

1. INCREASE IN FARM SIZES

Taking advantage of the equipments, many farmers increased the size of their farms and cultivated new farms. Thus, the production of agricultural commodities of most farmers more than double.

2. INCREASE IN THE REVENUE FROM FARM PRODUCTS

With increase in production as a result of the donated equipments, most farmers experienced a boast in their revenue acquired from the sales of their farm products.

3. INCREASE IN FARMERS' PRODUCTIVITY

The high income of farmers has also been influence by an increase in farmers' productivity. Farmers are now able to spray regularly hence reduce pest and disease attack on crops, farmers can transport water for irrigation with ease etc. These have significantly increase farmers' output per unit input.

3.2. An Assessment of Cost and Benefits from the Donation

The benefits derived through the donation of the farming equipments outweigh their cost of purchased. This is illustrated on the table below:

Table 3.1: Cost and Benefits from the Donation

Total change in farmers' income/ FCFA	Total cost of equipments/ FCFA	Benefits/ FCFA
20,485,500	6.600,000	17,185,500

3.2. Recommendations

Particular attention should be given to the following:

- They should be proper training of farmers on protective clothing and nose mask during spraying of chemicals;
- Demonstrations should be organized to illustrate to farmers on the proper ways of using the equipments to ensure it last longer
- Women will take full responsible for the donated equipments
- Most women abandone the group farms to the group leaders
- Taking into consideration the terrain and the size of the wheel barrow the women requested for larger wheel barrow(trucks).
- Equipments wheel barrow are used to water in household/home of farmers
- Reduction of transportation of Load(farm) on their heads hence reduce hyena illness.
- Save money in hire the equipments donated and compare to the past.
- Foster collaboration of the women farmers to work in groups
- The women farmers suggest to save money earned from farming in Village banks/njangi houses on weekly basis.
- Improvement of quality of their produce and quantity due to the availability of Spraying cans for the application of pesticide on diseased plant.
- Expansion of their nursery farms and farm size with the donated equipments.

3.3. Conclusion

The impact assessment of the donation of agricultural equipments by ICENECDEV carried out by the team using standard methods shows that the interventions of the institution are making significant positive change in the socio-economic life of the beneficiaries.

The impacts recorded were:

- Increased production of agricultural commodities as a result of increase farm sizes leading to creation of more employment;
- Increase farm efficiency as result of regular pest and disease management, irrigation etc leading to increase productivity;
- A more than double of farmers' income from an average of 40,000 FCFA per month to 108,285 FCFA per month.

With the high number of women and youths involved in the activities induced by the donation of farming equipments, there is a noticeable forward match by them to further create positive changes on the socio-economic landscape of their various communities.

Considering that all the impacts recorded from the various activities contributed to poverty reduction and improvement in living standards of the beneficiary population, it could be concluded that the donation of agricultural equipments (spraying can, wheelbarrow, hoe and cutlass) have achieved their objectives.

Furthermore, the sustainability mechanisms in place would ensure that these impacts are long lasting. To maintain and improve on this trend of events, there is need for donor organizations and governments to continue to fund these donation activities through ICENECDEV where cost is minimized with an effective output.

Photos



Muea women farmers establishing a group farm



Tole women farmers spraying insecticides



Transplanting of vegetable seedlings

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