



Rich Kofi Kofituo<sup>1</sup>, Abigail Tettey<sup>1</sup>, Richard Asare<sup>1</sup>, Theresa Ampadu-Boakye<sup>2</sup>, Frederick Amon-Armah<sup>3</sup>, Tata Ngome Precillia Ijang<sup>4</sup>, Mahyao Adolphe<sup>5</sup>, Kayode Oluyole<sup>6</sup>

<sup>1</sup>International Institute of Tropical Agriculture (IITA), Ghana

<sup>2</sup>International Institute of Tropical Agriculture (IITA), Kenya

<sup>3</sup>Cocoa Research Institute of Ghana (CRIG)

<sup>4</sup>Institute of Agricultural Research for Development (IRAD)

<sup>5</sup>National Center for Agronomic Research (CNRA)

<sup>6</sup>Cocoa Research Institute of Nigeria (CRIN)

### Introduction

The CocoaSoils Program is a Norad-Nowegian Agency for development funded initiative, implemented by a public-private consortium in Cameroon, Cote d'Ivoire, Ghana and Nigeria to address the issues of decline in productivity in cocoa and improve the livelihoods of smallholder cocoa farmers, while avoiding deforestation. The overall goal of the Monitoring, Evaluation & Learning system of the project is to 'provide critical information for decision-making in relation to the achievement of project results and implementation of activities.

### Materials and Methods

The MEL system has two components: i) The monitoring and learning system and ii) Impact assessment (at the end of the project) (fig 1).

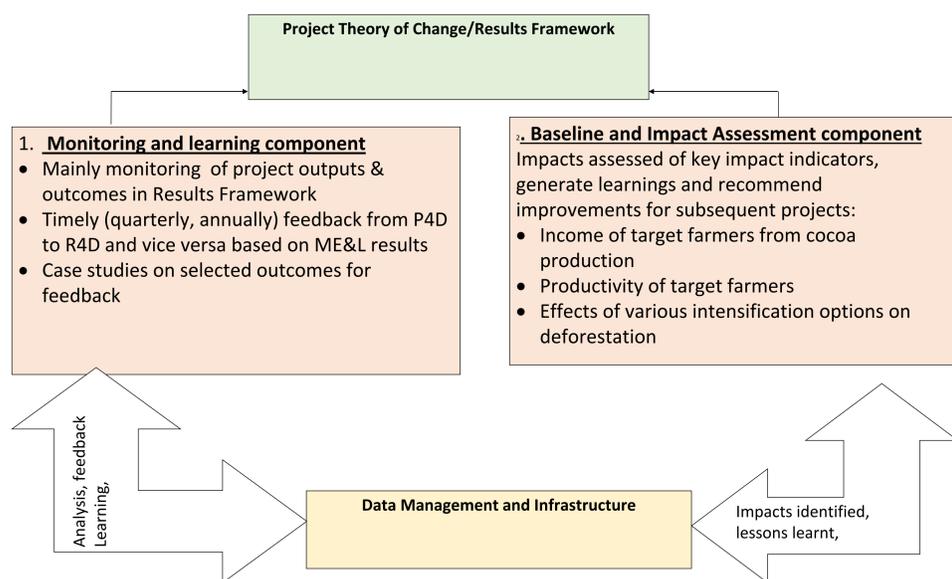


Fig 1. Components of the MEL system

The MEL system focuses on:

- Monitoring of project results against target set
- Documenting lessons/feedback from quantitative and qualitative data through Case studies (Panel Studies) to generate feedback from participating farmers and partners to determine project outcomes and behavioural changes
- Impact assessment to ascertain the changes made by the project on the beneficiaries and the environment based on its impact indicators

A baseline study was conducted across the four target countries, based on which subsequent panel and impact studies will be related.

MEL data is being collected using a Mobile app system (Fig 2). Partners and project staff in Cameroon, Cote d'Ivoire, Ghana and Nigeria will be trained on the MEL system.

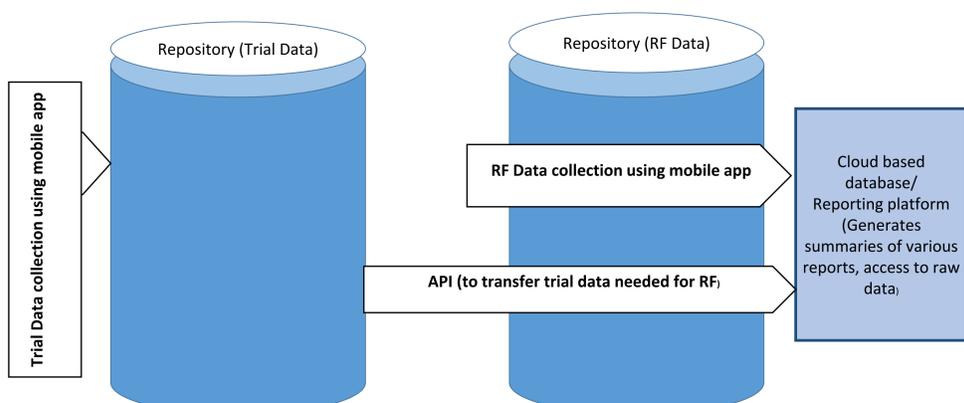


Fig 2: Data management infrastructure

### Results and Discussion

The baseline study involved 3277 smallholder cocoa farmers across selected partner operational areas in Cameroon, Cote d'Ivoire, Ghana and Nigeria. The preliminary analysis of awareness and use of ISFM components and yield across Cameroon, Ghana and Nigeria are shown in Table 1 & Figure 3.

About 65% of the respondents are aware of at least one component of ISFM across the three countries (based on the overall sample size of the survey). The average awareness levels per country stands at 58% in Cameroon, 75% in Ghana and 59% in Nigeria. The results further indicate that there is a strong relationship between awareness and use of the various ISFM practices except in few components. In all, structural pruning, sanitary pruning, pest management, manual weeding and use of improved varieties were the most used practices across the countries (Figure 3).

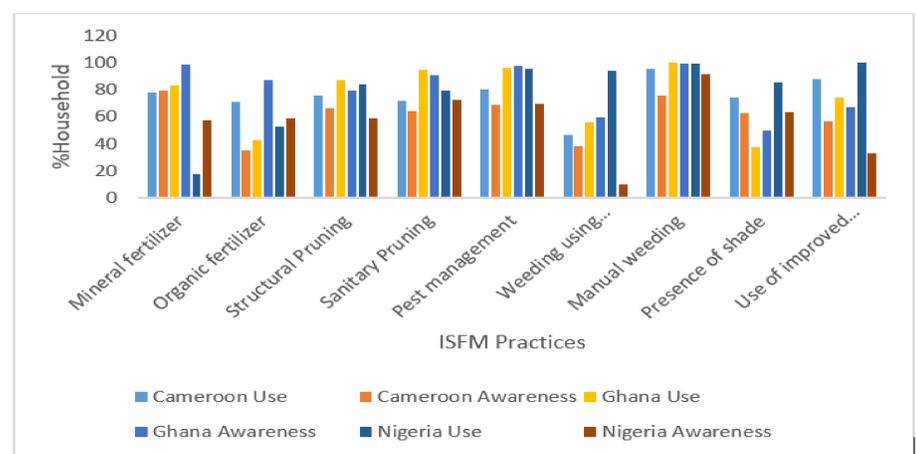


Figure 3. Awareness and Use of ISFM practices in Cocoa Production

Yield estimates in Cameroon were close to those of Cote d'Ivoire and Ghana with slight differences between gender, male respondents having slightly higher yields than their female counterparts (Table 1)

Table 1. Average Yield(Kg/ha)

	Cameroon			Cote d'Ivoire			Ghana			Nigeria		
	Male	Female	Average	Male	Female	Average	Male	Female	Average	Male	Female	Average
Avg. plot size (ha)	2.60	2.43	2.5	2.72	2.20	2.46	1.75	1.38	1.6	2.31	1.64	2
Yield 2015/16	422	382	402	437	346	392	445	383	414	291	299	293
Yield 2016/17	430	377	403	445	350	397	428	368	398	291	300	292
Yield 2017/18	442	396	419	464	368	416	420	361	391	296	299	296
Avg. 3 Yrs	432	385	408	454	354	404	431	371	401	292	299	294

### Conclusion

The MEL system has provided an effective performance measurement mechanism and real time feedback to integrate in project implementation.

Awareness and use of ISFM components among respondents are relatively high. However, yields are still very low and way below the potential (Cameroon and Ghana), ranging between 291 kg/ha and 442 kg/ha. Improvements in yields may therefore not require much awareness creation about the existence and importance of the ISFM components but the right application of the components and the gaps in the various training contents based on assessments..

### Acknowledgements

This research is funded by the Norwegian Government-NORAD.