

CARBAP achievements in Period 1

Activities Conducted, & Perspectives

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PARTNER Summary

(10 to 15 lines of Partner achievement for Period 1)

During Period 1, CARBAP delivered a State Of Knowledge (SoK) review on boiled plantain (activity 1). The SoK review focused on food science, gender and demand context. CARBAP actively participated in the Capacity Strengthening Workshop (Activity 2) which was held in Cotonou-Benin from the 16th to the 25th of April 2018. From the 5th to 20th of September 2018, surveys on boiled plantain were carried out in the West and Littoral regions of Cameroon within the framework of activity 3 of WP1. In each of these regions, four localities were of interest and the participants were selected randomly based on their ability to grow, prepare or consume plantain. Finally, eight key informant interviews, sixteen focus group discussions, seventy-eight individual interviews and eight market interviews were conducted. Excel spreadsheets, consent forms, filled questionnaires and activity 3 report were submitted. Concerning WP2, a SoK review was reported by CARBAP on the composition and structure of raw bananas and plantains, processing conditions of plantain pulps, sensory analysis and consumer preferences, boiled plantain characterization and relationship with sensory evaluation. CARBAP Also participated in the sensory panel training workshop held in National Agricultural Research Laboratories – NARL in Kawanda-Uganda from September 17th to 21st, 2018. For WP5, meetings were organized in collaboration with IITA in order to elaborate the protocols for the validation of agronomic and user preferred traits in selected genotypes. We settled on: the localities for trial setup, the plantain hybrids and local cultivars to be evaluated, the number of accessions and the agronomic practices.

PARTNER activities

PARTNER participation in the different WPs & cross-WP interactions

(Describe activities, collaborations between teams within the institution, project implementation)

In which WPs is the PARTNER team involved? For which activities conducted in Period 1? How is internally organized communication/coordination between WPs?

CARBAP is involved in WP1, WP2, and WP5. CARBAP elaborated the SoK review of WP1 and WP2 in collaboration with libraries of the universities of Yaoundé I, Dschang and Douala in Cameroon. The WP1 Capacity Strengthening Workshop was coordinated by CIRAD in collaboration with *Université d'Abomey Calavi*. It aims at designing a robust interdisciplinary methodology bridging economics, food science, gender and employing participatory approaches to identify trait preferences in RTBfoods products. The workshop was an occasion for CARBAP representatives to meet and discuss with researchers and personnel from various countries implicated in WP2 and WP5. Activity 3 surveys were carried out with the participation of a gender specialist from the University of Dschang – Cameroon. In WP2 CARBAP participated in the training workshop on sensory panel. It helps the leaders from

RTBfoods partner institutions to better understand processes related to recruitment, selection and forming a panel, in order to establish, with a harmonized methodology, the sensory profile for each of the 11 final products under study in RTBfoods project. The leaders were also trained in the setting up of tests (sampling, service,...), data collection and data processing. For WP5, CARBAP strongly interacted with IITA on decisions concerning the accessions to be involved in the trials and the agronomic practices to be implemented. Furthermore, as product profile champion, CARBAP helps IITA to setup the questionnaires for the activity 3 of WP1 concerning fried plantain.

PARTNER geographic implementation / strategy

In which countries (and sub-regions) is the PARTNER team conducting activities?

CARBAP conducted activities related to SoK and surveys in three regions of Cameroon namely West, Littoral and Centre. The capacity strengthening workshops were held in Benin and Uganda in Africa.

PARTNER Product Profile participation

In which product profiles the PARTNER team has been involved in Period 1? How & Where?

CARBAP has been involved with “Boiled Plantain” during Period 1 through i) SoK review for WP1 and WP2, and ii) surveys carried out in eight localities of two regions in Cameroon (Littoral and West regions). In each locality questionnaires were administered to Key informants, during focus group discussions, to marketers and individuals who were all knowledgeable on raw and boiled plantain.

PARTNER Personnel involved & Students activities

*List of Personnel involved in RTBfoods project in Period 1 (WPs + Country + Product Profiles implication):
(For more accuracy you can refer to: Tab “3a) PERSONNEL COSTS” of Partner Financial Report)*

Personnel of CARBAP and of the University of Dschang as well as internship students. They include:

1. Dr Gérard Ngoh Newilah, CARBAP
2. Mme KONZEM FOMBASSO Anliette Aimée, CARBAP
3. Dr Meli Meli Vivien (consultant hired for activity 3 of WP1)
4. Kendine Vepowo Cédric (PhD Student)
5. TAKAM NGOUNO Annie (Student hired for activity 3 of WP1)
6. YONG LEMOUMOU Judeon (Student hired for activity 3 of WP1)

List of Students involved in RTBfoods activities in Period 1:

NAME Surname	Master Student <u>or</u> PhD <u>or</u> Post-Doc	Subject Title	University of affiliation	Fellowship Starting Date	Fellowship Ending date	Tutor(s) in RTBfoods project
KENDINE VEPOWO Cédric	PhD student		University of Dschang			Dr Ngoh Newilah
TAKAM NGOUNO Annie	Master student		University of Dschang			Dr Ngoh Newilah
YONG LEMOUMOU Judeon	PhD student		University of Dschang			Dr Meli Meli

PARTNER Travels: Participation to RTBfoods meetings & International Events on RTBfoods budget

(For more accuracy you can refer to: Tab “3b) TRAVEL COSTS” of Partner Financial Report)

Number of People <u>or</u> List of NAMES	RTBfoods meetings	International / Regional Conferences	Dates
Dr Gérard Ngoh Newilah	Kick off Meeting	International meeting	January 2018
Carbap team	Kick off Meeting	International meeting	January 2018
Dr Gérard Ngoh Newilah	WP1 training workshop in Benin	International workshop	April 2018
Kendine Vepowo Cédric	WP1 training workshop in Benin	International workshop	April 2018
Dr Gérard Ngoh Newilah	WP2 training workshop in Uganda	International workshop	September 2018

PARTNER Capital Equipment or investment (co-investments)

List of equipment acquired on RTBfoods budget (e.g?. texturometer, RVA, pHmeter, etc.)
(For more accuracy you can refer to: Tab “3d) EQUIPMENT COSTS” of Partner Financial Report)

No equipment acquired during period 1.

PARTNER Training participations (within RTBfoods framework and other trainings)

Training Title / Topic	WP concerned (if training within RTBfoods framework)	Country	Dates	List of Participants NAMES
Capacity Strengthening workshop	WP1	Benin	16 th – 25 th April 2018	NGOH NEWILAH Gérard; KENDINE VEPOWO Cédric
Sensory Panel	WP2	Uganda	16 th – 22 nd September 2018	NGOH NEWILAH Gérard

PARTNER Sub-awards & Consultants

List of Sub-awards + WP concerned + Purpose. (For more accuracy you can refer to: Tab 3c) CONSULTANT COSTS and “3f) SUB AWARDS COSTS” of Partner Financial Report)

A consultant (gender specialist) was hired for activity 3 implementation.

PARTNER Other Sources of Support for RTBfoods activities

Which complementary / partner projects (other sources of fundings) contributed to RTBfoods activities in Period 1?

None

PARTNER List of Publications, Conference communications, Manuals, Leaflets, Posters, etc.

Publications:

1. Ngoh Newilah Gérard Bertin, Tembe Tembe Jonas, Nkouandou Mama, Ngombi Ngombi Eric, Kendine Vepowo Cédric, Fokou Elie, Etoa François-Xavier & Dhuique-Mayer Claudie. (2018). Effects of drying and boiling on some specific dietary carotenoids profiles and levels of plantain pulp (*Batard cv.*) produced in Cameroon. *International Journal of Agriculture, Environment and BioResearch*. 3 (6): 212-231. <http://ijaeb.org/link2.php?id=272>
2. Ngoh Newilah Gérard Bertin, Njapndounke Bilkissou, Tembe Tembe Jonas, Nkouandou Mama, Ngombi Ngombi Eric, Kendine Vepowo Cédric, Manjia Ngougoure Solange Ulrich & Zambou Ngoufack Francois (2018). Optimization of process conditions for jam production from plantain-

like hybrid (CARBAP K74) grown in two agro-ecological zones of Cameroon. *International Journal of Agricultural Policy and Research*. 6 (4): 50-63. <https://doi.org/10.15739/IJAPR.18.006>

PARTNER Gaps & Constraints faced

Which challenges faced in implementation of RTBfoods project within the PARTNER institution?

Risks identified & Risk mitigation proposed?

During Period 1, the implementation of RTBfoods project activities were disturbed by:

1. A strike in CARBAP due to lack of funds for functioning, followed by the resignation of the formal Director. Up to date, the situation is not yet stable.
2. Lack of budget for IITA to participate in WP5 activities defined in collaboration with CARBAP. It was planned that IITA will conduct WP5 trials in two localities and CARBAP in three.
3. The security situation in North-west and South-west regions of Cameroon where surveys on boiled plantain were supposed to be carried out. Furthermore, a WP5 trial was supposed to be settled in the South-west region at 400 m above sea level during Period 2.

PARTNER Perspective & Internal organization for Period 2

Which planification for the PARTNER team in Period 2 across WPs, Product profiles (& countries)?

Planned from February to October 2019, CARBAP will continue WP1 activities related to:

- Activity 3: management of data from “gendered product mapping and user profiles”,
- Activity 4: participatory processing diagnosis and quality characteristics,
- Activity 5: Consumer testing in rural and urban user segments.

CARBAP will also contribute in WP2 activities concerning the biophysical and biochemical characterizations of plantain accessions, the establishment of standardized protocols for: i) uniform sensory testing validation related to boiled plantain, ii) conducting sensory testing on boiled plantain, iii) preparing boiled plantain.

For WP3, CARBAP hosts the largest on-farm plantain collection and will therefore strongly contribute through sampling and analysis in order to generate quantitative and qualitative predictive models based on reference analysis.

Activities of WP5 will be focused on planting material production – trial setup in contrasted localities – follow up and trial maintenance.

Finally for period 2, CARBAP will participate in the training sessions (sensory and physico-chemical analyses) organized within the framework of RTBfoods project and to the annual meeting.

CARBAP will technically support partners working on plantain derived products such as chips and fried ripe plantains.