Midterm Evaluation of TechnoServe's Food for Progress BeninCajù Project

FINAL REPORT



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ABBREVIATIONS, ACRONYMS AND SYMBOLS

ABSSA	*Agence béninoise de sécurité salinatire des aliments* (Beninese Food Safety Agency)
ACA	African Cashew Alliance
AFI	Association of Food Industries
APIEX	*Agence de promotion des investissements et des exportations* (Investment and Export Promotion Agency)
ANOVA	Analysis of variance (statistical test)
ATDA4	*Agence territoriale de développement pôle 4* (Territorial Agency for Agricultural Development)
BDSP	Business development services provider
BRC	British Retail Consortium
CBO	Community-based organization
CIAP	Cashew Integration & Acceleration Program
CIPB	*Conseil des investisseurs privés au Bénin* (Benin Private Investors' Association)
CLCAM	*Caisse locale de crédit agricole mutuel* (local farm credit cooperative)
CNSL	Cashew nut shell liquid
CNTC	*Conseil national des transformateurs de cajou* (National Council for Cashew Processors)
CoNEC	*Conseil national des exportateurs de cajou du Bénin* (National Cashew Exporters' Council)
CRADIB	*Centre de recherche et d'action pour le développement des initiatives à la base* (Research and Action Centre for the Development of Field Initiatives)
CRS	Catholic Relief Services
CVPA	*Coopérative villageoise de producteurs d'anacarde* (village cooperative of cashew nut producers)
DAC	Development Assistance Committee
DEDRAS	*Organisation pour le développement durable, le renforcement et l'autopromotion des structures communautaires* (Organization for Sustainable Development and the Strengthening and Self-Promotion of Community Structures)
DID	Difference-in-difference
EMICov	*Enquête modulaire intégrée sur les conditions de vie des ménages* (Household Living Standards Survey)
FAGACE	*Fonds africain de garantie et de coopération économique* (African Guarantee and Economic Cooperation Fund)
FAS	Food and Agriculture Service
FBG	Farmer-based group
FCFA	*Franc de la Communauté financière africaine* (African Financial Community franc)

ABBREVIATIONS, ACRONYMS AND SYMBOLS (CONTINUED)

FENAPAB	*Fédération nationale des producteurs d'anacarde du Bénin* (National Federation of Cashew Nut Producers of Benin)
FFPr	Food for Progress
FGD	Focus group discussion
FTE	Full-time equivalent
GIZ	*Deutsche Gesellschaft für Internationale Zusammenarbeit* (German Technical Cooperation)
Ha	Hectare
HACCP	Hazard analyzes and critical control point
iCA	*Initiative du cajou africain* (African Cashew Initiative)
IEDF	Innovation and Development Enterprise Fund
IFA	*L'Interprofession de la filière anacarde du Bénin* (Inter-Professional Body of the Cashew Value Chain)
IGA	Income-generating activity (IGA)
INRAB	*Institut national des recherches agricoles du Bénin* (National Institute of Agricultural Research of Benin)
ISO	International Organization for Standardization
ITC	International Trade Center
Kg	Kilogram
KII	Key informant interview
KOR	Kernel out-term ratio
LCSSA	*Laboratoire central de sécurité alimentaire des aliments* (Central Food Safety Laboratory)
M&E	Monitoring and evaluation
MAEP	*Ministère de l'Agriculture, de l'Élevage et de la Pêche* (Ministry of Agriculture, Livestock and Fisheries)
MFI	Microfinance institution
MIC	Ministère de l'Industrie et du Commerce (Ministry of Industry and Trade)
MT	Metric ton
NGO	Non-governmental organization
ODK	Open data kit
OECD	Organization for Economic Co-operation and Development
PADA	*Projet d'appui à la diversification agricole* (Agricultural Diversification Support Initiative)
PCQI	Preventative Controls Qualified Individual

ABBREVIATIONS, ACRONYMS AND SYMBOLS (CONTINUED)

PMP	Performance Monitoring Plan
PPI	Progress out of Poverty Index
PPP	Public-private partnership
PPS	Probability-proportional-to-size
PSP	Private service provider
RCN	Raw cashew nut
SGS	*Société générale de surveillance* (General Monitoring Society)
SILC	Savings and internal lending community
SMS	Short Message Service
SWOT	Strengths, Weaknesses, Opportunities, Threats
TNS	TechnoServe
ToRs	Terms of Reference
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
USD	United States dollar
USDA	United States Department of Agriculture
VCA	Value Chain Analysis

EXECUTIVE SUMMARY

BeninCajù is a five-year project that works across all levels of the cashew value chain, primarily in 12 communes in the Collines, Zou, Borgou and Donga Departments of Central Benin. The USD 23.65 million project is funded by the United States Department of Agriculture (USDA) through a Food for Progress (FFPr) grant. TechnoServe (TNS) implements the project, in partnership with Catholic Relief Services (CRS), and coordinates with government ministries and departments, special interest groups, financial institutions and other non-governmental organizations (NGOs). The project, which launched in June 2016, aims to expand trade volumes of processed cashew kernel, increase sales volumes of cashew by-products, increase productivity and income of cashew farmers, foster large-scale job creation, and increase returns for all actors throughout the value chain. These results will contribute to building the cashew sector into a more productive, diversified, and inclusive economic engine for Benin and its people and set it on a sustainable course for continued growth.

This report presents the findings of a midterm evaluation of the BeninCajù project conducted by Advisem Services Inc. between June 2018 and October 2018. The primary objectives of the evaluation were to serve as an internal management tool to assess project progress to date, to identify needed changes and course corrections, to guide project management in achieving project objectives, to ensure the most effective use of project funding, and to provide recommendations for TNS, CRS, USDA, project participants, and other key stakeholders.

The evaluation used a quasi-experimental, mixed methods design with six lines of inquiry: a document and data review, surveys, key informant interviews (KIIs), focus group discussions (FGDs), an institutional assessment, and field observations. The approach was participatory, reviewing and assessing evidence from 31 participants in KIIs, 201 participants in FGDs, 996 participants in a cashew producer survey, and 14 participants in a cashew processor survey. The producer survey sampled 30 BeninCajù villages and 30 control villages, while FGDs were conducted in one village in each department. Qualitative and quantitative information was used relatively equally to inform the key questions identified in the Terms of Reference (ToRs) for this evaluation.

Findings

To facilitate comparisons with other FFPr programming, the midterm evaluation assessed findings using standard USDA criteria under five categories: relevance, effectiveness, efficiency, sustainability, and impact. The following are the key findings under each category.

Relevance

Responsiveness to the needs of participants and local conditions – Program design and project activities generally respond to the needs of the participants and local conditions; however, the project needs to increase female producer participation, deepen the access of nut processors to raw cashew nut (RCN), and conduct further marketing/business training with cashew apple juice processors (Sweet Benin).

Alignment with government – The project strategy and activities align with the development goals, objectives, and strategies of the United States Government and USDA. The project also aligns with the development plans of the Beninese government, which sees the cashew value chain as a strategic guiding value chain for sustained economic growth that benefits rural areas.

EXECUTIVE SUMMARY (CONTINUED)

Effectiveness

Progress towards targets – BeninCajù is making good progress towards its indicator targets. For the 40 indicators examined for the midterm, the project has already surpassed 12 of the final targets, is on track to achieve 13 targets, is somewhat behind for six indicators, and is relatively far from achieving seven targets—although a few of these indicators, and targets for two other indicators, need to be revised.

Producer use of improved techniques and technologies – Generally, producers report that they are applying at least one new good agricultural practice (89.5%), harvest and post-harvest practice (91.2%), and good farm management practice (78.6%). Lack of financial resources (such as to rent equipment and/or purchase labour) is the most common factor limiting producers' ability to implement the practices they have learned. Differences between producers receiving Gold and Silver training were not consistent.

Savings and internal lending community (SILC) groups and financial linkages affecting farm investment – At minimum, at least a quarter of individuals use loans to invest in their cashew plantations. SILC groups are an important mechanism, not only for accessing credit for productive purposes, but also in providing wider access to financial products and services, including savings, which helps increase the resilience of SILC members.

Change in the attitude of financial institutions – The involvement of BeninCajù as a knowledge/training provider, and as an intermediary between the processors and financial institutions, has made financial institutions somewhat more comfortable with engaging with individuals in the cashew value chain, and especially those associated with the BeninCajù project. However, because several processors have either defaulted on their loans or have portfolios at risk, financial institutions are currently very reluctant to lend to processors.

Efficiency

Generally, the project is achieving targets on time. Implementing a shared monitoring and evaluation (M&E) system that provides both CRS and TNS with real-time access to data would improve coordination between partners.

Strategies to improve female participation – The project could increase female participation through such modifications as having female trainers, revising training schedules to accommodate women's domestic responsibilities, promoting processor-level training for females, and encouraging female entrepreneurial activities. A project-specific gender strategy based on a gender assessment that identifies barriers to female participation and actions to overcome them would be the most effective way to address this.

Efficiency and accuracy of the M&E systems – The existing indicators generally measure project progress accurately; however, some indicators overlap significantly with others, a few may not be appropriate or their targets should be re-examined, disaggregations need to be examined to ensure their utility, and some could be measured by external consultants. BeninCajù could also use "control trees" as a benchmark to indicate whether good or poor climate/weather conditions have affected cashew production.

EXECUTIVE SUMMARY (CONTINUED)

Sustainability

Prospects for project sustainability and systems in place – The majority of producers stated they would likely continue using some of the good agronomic techniques, although the use of some of them (such as thinning) will be limited for lack of human resources to undertake the labour and financial means to purchase the tools. The newly-formed Territorial Agency for Agricultural Development (ATDA4), under which all cashew-related extension work will occur, should reinforce the good techniques taught. Increasing the use of grafted seedlings could be an important mechanism to ensure the sustainability of increased productivity for BeninCajù producers. Because the SILCs are useful for productive investment and general needs, their prospect for sustainability is high.

The internationally-owned nut processors have stronger management and technical capacity and more resources than the nationally-owned nut companies, and are therefore more resilient. Several nationally-owned processors are currently non-operational, partially because of price parity and speculation and, in some instances, poor financial management. For processors to take advantage of the anticipated lower RCN prices next campaign, they will need to continue to have access to finance. However, considering the processors' poor performance over the last two years, financial institutions will require additional support to provide credit to them. Some cashew apple juice processors show great entrepreneurial spirit, making their sustainability and profitability appear likely. In contrast, other cashew apple processors appear to require much more help with marketing and business management.

Risk factors to sustainability – The most pervasive risks to the sustainability of the benefits generated by BeninCajù are clearly those related to international markets, the RCN price fluctuation, the final price paid for processed nuts, and climate variability. These are also some of the most important external factors affecting project success.

Impact

Observed changes attributed to the project – In spite of price fluctuations, the project has generated important and positive changes for all stakeholders. BeninCajù producers were found to have undertaken significantly more pruning, thinning and weeding, and were significantly more likely to implement the majority of best harvest and post-harvest practices than control producers. Moreover, BeninCajù producers (50.2%) were significantly more likely to be able to name three practices for a well-managed farm than control producers (34.8%), suggesting that learning on best practices has occurred. No consistent trends in increased production and income were found, although BeninCajù producers often had significantly higher productivity and income values when standardized by productive tree.

Nut processors recognize BeninCajù's support in strengthening financial and administrative capacity, implementing certification processes, accessing finance, implementing extension services, and pursuing innovative and energy-efficient technologies such as the cashew nut shell liquid (CNSL) energy plant. Cashew apple juice producers found the greatest impact in the strengthening of production capacity and production quality, improvement in business management practices, and accessing finance.

The government and other public state actors recognize BeninCajù's influence in developing and in supporting the implementation of the institutional reforms, policies, and regulations that have had a

EXECUTIVE SUMMARY (CONTINUED)

positive impact on the cashew value chain. They feel that BeninCajù has had an important role in influencing the cashew value chain.

Recommendations

The evaluation identified some 20 recommendations for implementing the remainder of the project and for future programming. They include:

- Strengthening the capacity of cooperatives of cashew nut producers (CVPAs);
- Placing emphasis on Silver training;
- Focusing producer training on market requirements;
- Promoting entrepreneurs as service providers for the cashew value chain;
- Ensuring access to finance for processors in the next campaign;
- Strengthening deep procurement links between processors and producers;
- Providing further marketing and business training for cashew apple juice processors;
- Working with Sweet Benin to ensure the standardization of cashew apple juice;
- Re-examining the selection of female training participants and making adjustments that increase female participation;
- Promoting access for women to higher-value entrepreneurial and training opportunities;
- Transferring key competences to relevant stakeholders;
- Facilitating access to community-based storage facilities;
- Undertaking a revision of the M&E system;
- Documenting a theory of change for the BeninCajù project; and
- Developing a value chain roadmap.

1. INTRODUCTION

This report presents the findings of the midterm evaluation of the Food for Progress (FFPr) BeninCajù project in Benin, an initiative carried out by TechnoServe (TNS) in partnership with Catholic Relief Services (CRS), with funding support from the United States Department of Agriculture (USDA). The evaluation was performed by a team of international and national consultants from Advisem Services Inc., a consulting firm based in Canada.[1]

As indicated in the Terms of Reference (ToRs) issued in May 2018 (attached as Appendix 1), the midterm evaluation was primarily intended as an internal management tool to assess project progress to date, to identify needed changes and course corrections, to guide project management in achieving project objectives, and to ensure the most effective use of project funding. In addition, the evaluation presented an opportunity to resolve any inaccurate or incomplete measurements produced by the baseline study to enable management to more accurately measure the project's impact. The midterm evaluation was also intended to provide lessons learned and recommendations for TNS, CRS, USDA, project participants, and other key stakeholders for future food assistance and capacity-building programs. To facilitate comparisons with other FFPr projects, the midterm evaluation reported on findings using standard USDA criteria on relevance, effectiveness, efficiency, impact, and sustainability. The full set of evaluation questions, along with performance indicators, data and information sources, and data collection methods, is provided in Appendix 2.

The remainder of this report is structured as follows:

- Chapter 2 gives an overview description of TNS' BeninCajù project and provides a brief overview of the purpose and scope of the midterm evaluation.
- Chapter 3 describes the framework and methodology used to conduct the midterm evaluation.
- Chapter 4 discusses findings drawn for each of the five dimensions examined by the evaluation team.
- Chapter 5 provides a general conclusion and outlines lessons drawn from the BeninCajù project experience.
- Chapter 6 touches on industry challenges and opportunities to move forward, with a list of recommendations inspired by key findings of the study.

The contents of this report are derived from a review and cross-examination of information supplied by sources canvassed over the course of the midterm evaluation. The opinions are strictly those of the evaluation team, as informed by a large body of evidence gathered from these sources.

The evaluation team is grateful for advice and support provided by TNS, CRS, USDA and their dedicated staff, who not only helped the consultants grasp the essence of the project, but also helped organize the field visit schedule and made recommendations for accommodations and transport. The team also wishes

[1] The team consists of [redacted] (Team Leader), [redacted] (International Consultant), [redacted] (International Consultant), [redacted] (International Consultant), [redacted] (International Consultant), [redacted] (International Consultant), and [redacted] (National Consultant).

to acknowledge the contribution of cashew producers, cashew processors, members of government, and other partners who agreed to take part in the evaluation.

2. PROJECT DESCRIPTION

2.1 Context

Benin is one of the world's poorest countries, with a 2017 annual per capita income of USD 2,061 and a 2017 gross domestic product per capita of USD 2,064 (both statistics at 2011 purchasing power parity dollars). The United Nations Development Programme (UNDP) ranks it 163 out of 189 countries on the Human Development Index.[2]

Of the 10 million people living in Benin, nearly 70% of the workforce earns a living in the agriculture sector, which accounts for about 32% of the country's Gross Domestic Product. Cotton is the main export commodity, and cashew is second.[3]

Cashew nut is a global commodity that promises to have an increasingly positive impact on smallholder agriculture and employment opportunities in the developing world. Considered one of the four most valuable nuts on the world market—along with almond, pistachio, and walnut—cashew is unique in that it is produced primarily by poor farmers in several low-income countries in Sub-Saharan Africa (60% of world production takes place in Africa). Most of the processing into marketable kernels, however, occurs in India and Vietnam (92% of the world supply of kernels comes from India and Vietnam).[4]

Image 1
Departments and Communes of Benin



A fairly recent phenomenon, the separation of production in Africa from processing in Asia has come about due to a robust and growing demand for cashew nuts by consumers in India, North America, and Europe. As demand for cashew has continued to grow in world markets at compound annual growth rates of around 7%, processors in India and Vietnam have been unable to procure a sufficient supply of raw nuts from growers in their own countries.[5] Hence, in order to meet the growing

[2] UNDP. 2018. *Human Development Indicators and Indices: 2018 Statistical Update*. p. 121.
[3] The World Bank Group. Climate Change Knowledge Portal. < http://sdwebx.worldbank.org/climateportal/>; Economic Community of West African States. 2017. *Plan stratégique de développement du secteur agricole (PSDSA) 2025 et Plan national d'investissements agricoles et de sécurité alimentaire et nutritionnelle PNIASAN 2017-2021*.
[4] Kahlmann, K., and Kohn, M. 2018. *USDA/FAS Food for Progress LIFFT-Cashew: SeGaBi Cashew Value Chain Study*; N'Kalo. 2018. *Overview of 2018 Cashew Season in West Africa*.
[5] World Bank. 2018. *Project Appraisal Document for US$200 Million Loan to the Republic of Côte d'Ivoire for a Cashew Value-Chain Competitiveness Project*.

demand for kernels, they have begun to depend more and more on raw nuts from Africa (88% from West Africa, and 12% from East and Southern Africa).[6]

In 2018, roughly 200,000 smallholder farmers in Benin produced about 140,000 MT, or 4% of the global supply of raw cashew nut (RCN) (world production = 3.441 million MT). This placed Benin as the fourth-highest cashew producers in Africa behind Côte d'Ivoire (825,000 MT), Nigeria (250,000 MT), and Guinea-Bissau (180,000 MT).[7] Only about 13% of the RCN produced in Benin was processed in-country; the rest was exported to India and Vietnam.

Image 2
Smallholder Farmer in Benin



The growing demand for cashew has created an opportunity, particularly in West Africa, for smallholder farmers to participate in and benefit from a ready market for their product (see Image 2). It has also provided West African nations the opportunity to develop their own processing industries so they can keep more of the added value of kernel production within the country.

Global and regional projections indicate that West Africa will continue to grow in significance for both production and processing, as global demand will continue to outpace supply. The long-term growth in demand will continue in markets in India, North America, and Europe, with additional growth expected to come from greater consumption in the Middle East and China. Vietnam and India will continue to dominate the processing industry and export most of the kernels to the world market; however, they will be reliant on imports of RCN from West Africa, which will continue to dominate production.

There should also be increasing opportunities for establishing more RCN processing in West Africa, particularly as national governments recognize the benefits of capturing more of the added value of processing. In addition, United States and European markets emphasize food safety, including traceability and environmental and social concerns, which should lead to greater investment in West African processing facilities that are located closer to the source of RCN. The BeninCajù project focuses on helping growers produce more and better-quality nuts, while also working with the public and private sectors to facilitate the development of a processing industry.

The 2018 cashew season was highly speculative, which had a negative effect on many actors. In February and early March 2018, average RCN prices exceeded the highest levels ever reached at that time of the season in West Africa. This rapid and highly competitive start to the marketing campaign meant many producers and traders believed that, as in the previous three seasons, the price would continue to climb indefinitely. Thus, many traders bought despite a moderate export demand and many producers refused to sell available stocks hoping for further price increases. However, in early March, the Vietnamese Cashew Processors Association advised all members not to buy RCN at more than USD 1,800/MT (FCFA 1,000/kg)[8] in Asian ports, equivalent to capping West African farm gate prices between

[6] Interview with TNS Cashew Expert, Cotonou, Benin, September 22, 2018.
[7] N'Kalo. 2018. *Overview of 2018 Cashew Season in West Africa*.
[8] Exchange rate here is based on the report of N'Kalo, 2018. Exchange rate at time of the midterm evaluation was approximately 1 USD = 560 FCFA; oanda.com.

FCFA 600/kg and FCFA 750/kg, depending on the country. This announcement led to a sharp slowdown in demand at the end of March and the beginning of April for both RCN and kernels. Traders and some processors who speculated badly found themselves stuck with large stocks of raw nuts purchased at very high prices, contract defaults, and the refusal of banks to continue to fund their activity.[9]

A significant amount of 2018 RCN stock is expected to carry over to the 2019 season, making it likely that there will be a sharp decline in the average quality of nuts available next year. However, cashew kernel supply is expected to decrease slightly because many plants in Asia have shut down or are running slow, which will mean an under-supply of cashew kernels for the end of 2018 and the beginning of 2019. It will probably be many months before the pace of processing returns to normal and some factories will probably close down for good because they failed to anticipate the price drop. The demand for West African raw cashews is expected to remain moderate given the good stocks still available in Asia, and thus West African raw nut prices are expected to remain low until the next season.[10] Although Benin has generally benefitted from strong demand and favourable pricing, due to its higher RCN quality, this trend was also closely reflected in the country, with producers and traders left with considerable unsold stock.

2.2 Project Description and Strategies

TNS, in partnership with CRS, was awarded FFPr funding to implement the BeninCajù project—previously the Cashew Integration & Acceleration Program (CIAP). The five-year, USD 23,650,000 project supports smallholder cashew-producing households, producer groups, and cashew processors in the following 12 communes:

- Department of Collines: Bantè, Glazoué, Ouèssè, Savalou, Savè, and Dassa Zoumé (all six communes).
- Department of Zou: Djidja.
- Department of Borgou: N'Dali, Parakou and Tchaourou.
- Department of Donga: Bassila and Djougou.

The project agreement was signed in September 2015, and the project was launched in June 2016. The first production activities started in July 2016.

BeninCajù encompasses a sector-wide value chain approach that aims to build the cashew sector in Benin into a more productive, diversified, and inclusive economic engine for Benin and its people and set it on a sustainable course for continued growth. The project's overarching goal is to increase financial benefits for cashew processors and producers. Two specific objectives are defined to achieve this goal:

- Increase agricultural productivity in the cashew value chain by increasing the use of improved agricultural techniques and technologies through trainings and strengthening of producer groups, expanding producers' access to credit for inputs, and improving post-harvest handling techniques that will engage producers more directly with the market.

[9] N'Kalo. 2018. *Overview of 2018 Cashew Season in West Africa*.
[10] N'Kalo. 2018. *Overview of 2018 Cashew Season in West Africa*.

- Increase trade of cashews and cashew apple products by increasing investment in processing infrastructure and technologies, strengthening trade associations and public-sector market actors and launching a real-time market information system specific to cashews.

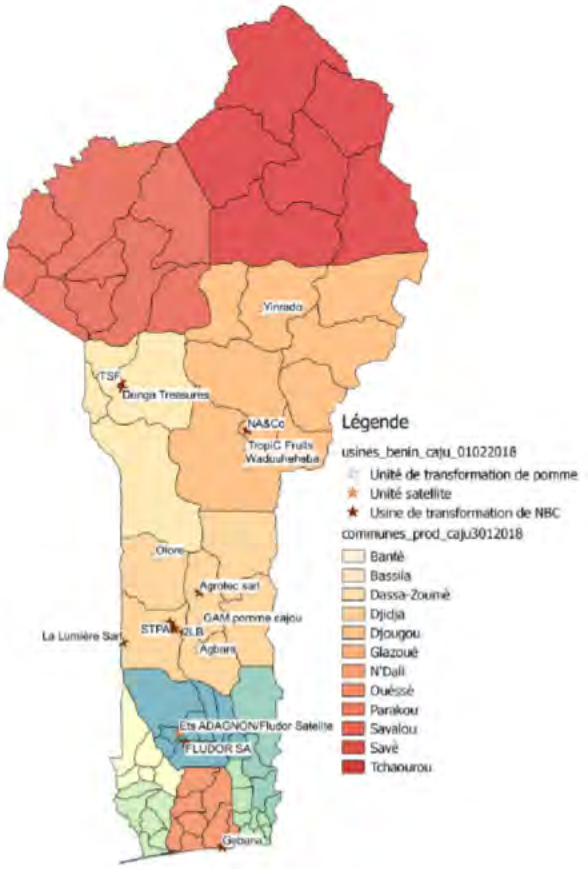
TNS has outlined five main activities to achieve these objectives over the five-year project period:

- *Activity 1. Capacity building and improved access to finance for producer groups/cooperatives* – This activity aims to improve producer yields and incomes and has four sub-activities:
  - Producer training and certification program.
  - Other tools/initiatives, including access to genetic resources, extension services, demonstration plots, and market information.
  - Increase producer access to finance through community groups, microfinance institutions (MFIs), and buyers' (processor) financing.
  - Capacity building for farmer-based groups (FBGs), especially at the communal level.
- *Activity 2. Trainings on improved farm management and improved post-harvest handling* – Modules on these themes are incorporated into the producer training and certification program described under Activity 1.
- *Activity 3. Infrastructure, capacity building and market development of the processing sector* – The project will catalyze investment in physical infrastructure and improve the management capacity for three categories of market actors:
  - New and existing medium- and large-scale industrial processors, mainly nut processors, but potentially also juice, cashew nut shell liquid (CNSL), and/or shell cake producers.
  - New small-scale satellite nut processors linked to industrial processors.
  - New small-scale cashew apple processors.
- *Activity 4. Increase access to finance and investment for the processing sector* – This includes efforts to familiarize the financial sector with the needs and opportunities in the cashew industry as well as facilitating the capacity building of cashew value chain actors, to identify and connect with financial mechanisms and institutions most appropriate for a given finance need, and to become creditworthy and to submit high-quality loan applications. BeninCajù has also set up an Innovation and Enterprise Development Fund (IEDF) as a co-investment mechanism whereby entrepreneurs across the value chain can apply for matching grants where investment capital is difficult to raise.
- *Activity 5. Capacity building of trade associations and public-sector agencies* – BeninCajù works directly with the key trade associations and Government of Benin entities to implement organization-strengthening initiatives that allow these entities to better support the development of an investment in the Beninese cashew value chain.

In the BeninCajù partnership, TNS is the lead partner, generally responsible for the activities associated with expanded trade of agricultural products, and CRS is generally responsible for the activities associated

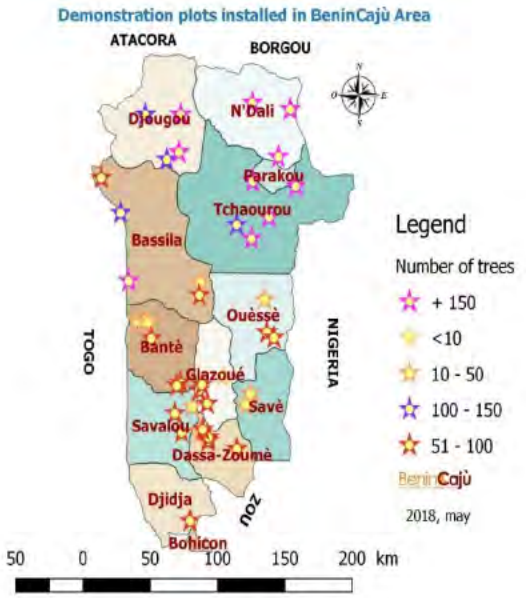
with increased agricultural productivity. In addition to producer-associated activities in the four target departments, BeninCajù is now working with approximately 10 cashew apple and 9 cashew nut processors (four that are operational) (see Image 3) and has created 46 demonstration plots in farmers' cashew orchards (see Image 4).

Image 3
Location of Processors



Source: TSN BeninCajù

Image 4
Location of Demonstration Plots



Source: TSN BeninCajù

3. METHODOLOGY

3.1 Design Framework

The midterm evaluation was conducted between June 2018 and October 2018. It adopted a quasi-experimental, mixed methods design that focused on observing, measuring and describing project-related phenomena as they occur or exist. It used several lines of inquiry to triangulate data collected and provide solid findings and evidence to address the evaluation questions. It also drew some comparisons between the original project baseline and fresh quantitative and qualitative data gathered by the evaluation team.

The evaluation also used a participatory approach, from identifying key learning questions to designing data collection tools and validating data analysis findings. The process gave key stakeholders—including TNS, CRS, USDA, local government bodies, partner organizations, financial institutions, cashew product processors, and cashew farmers—an opportunity to provide their input at many stages of the evaluation process.

The evaluation also included a Value Chain Analysis (VCA), based mainly on the *ValueLinks* methodology.[11] Data sources used for the evaluation provided the necessary input for the VCA: assessments using qualitative methods were correlated with quantitatively measured performance indicators, while the effects of interventions for beneficiaries were evaluated against the performance of non-project stakeholders in similar contexts. A full scope of evidence from value chain actors was used, including surveys, focus group discussions (FGDs), key informant interviews (KIIs), secondary data/records, and pertinent literature. The value chain mapping exercise looked at trends in Benin and emanating from project interventions for both the domestic and export markets.

3.2 Lines of Inquiry

In line with the ToRs, the methodology featured six lines of inquiry: a document and data review, surveys, KIIs, FGDs, an institutional assessment, and field observations.

Document and Data Review

This line of inquiry included a review that set the purpose of the project within the wider context of cashew as a global commodity with its unique supply, demand and pricing features. This review depended primarily on external documents that define how national, regional, and global cashew markets work, and particularly what others are doing to help smallholders and processors in Benin and in other West African nations take better advantage of these markets. For the project itself, the document and data review entailed a thorough examination of project documentation supplied by USDA/TNS/CRS and additional material from value chain operators, public sector associations and partner non-governmental organizations (NGOs). This included project descriptions, project documents, planning documents, contribution agreements, baseline report, other reports, annual monitoring surveys, other monitoring records, any necessary legal documents or financial reports, and other relevant sources of information on BeninCajù interventions. See Appendix 3 for the complete list of documents reviewed. Advisem also reviewed project data, including data collected previously for the baseline and regular project data, along with survey tools, procedures and strategies applied in the past to see if there were any gaps or issues in terms of validity and reliability that should be addressed.

[11] *ValueLinks* is the name given to a systematic compilation of action-oriented methods for promoting economic development with a value chain perspective. It provides essential know-how on ways to enhance employment and the business income of micro and small-sized enterprises farmers by promoting the value chains they are operating in. German Technical Cooperation (GIZ). 2007. *ValueLinks Manual: The Methodology of Value Chain Promotion*. First Edition.

Surveys

Advisem used two surveys—one for cashew producers (see Appendix 4) and the other for cashew processors (see Appendix 5)[12]—designed to gather mostly quantitative data, as well as some qualitative data (through open-ended questions) from project beneficiaries to assess the success of:

- Capacity building and improved access to finance for producer groups/cooperatives (incorporated in sub-activities), including:
  - Producer trainings and certification programs.
  - Other tools/initiatives, including access to genetic resources, extension services, demonstration plots, and market information.
  - Increases in producer access to finance through community groups, MFIs, and buyer (processor) financing.
  - Capacity building for FBGs, especially at the communal level (resulting in increased rate of applying improved practices promoted by the project, and increased productivity and income for producers).
- Trainings on improved farm management and improved post-harvest handling (incorporated in Activity 1a).
- Infrastructure, capacity building and market development of the processing sector (resulting in increased volumes and percentage of processed cashew kernel, and increased sales volumes of cashew by-products).
- Increased access to finance and investment for processing sector (resulting in increased access of individuals in the cashew value chain to finance and investment).

Cashew producer surveys took approximately 30-60 minutes and cashew processors surveys approximately 60-120 minutes. These surveys primarily consisted of structured questions with pre-defined answers (with the option of an "other" response in relevant cases) but also had some open-ended questions to obtain the opinions of the respondents. Each question asked was justified as either providing important demographic data or responding directly to the selected indicators and evaluation questions.

Survey questionnaires were uploaded to smartphones. Open data kit (ODK) and Ona software was used. Electronic surveys increased both the speed and accuracy of data collection, and assisted with quality control. High standards of data quality were also ensured by piloting the producer survey (performed by Advisem's local consultant), making necessary adjustments to the tools, training the data collectors and supervisors over a two-day period, having five supervisors monitor enumerator data collection, and having consultants closely monitor the implementation of data collection. The supervisors ensured quality control in the field and reported to the consultants each evening on the number of surveys completed

[12] After analysis of the baseline survey, as well as program goals, indicators and activities, the consultants felt that the processor employee survey would add little value to the midterm evaluation. Only a few activities are specifically directed at improving processor employee satisfaction and no outcome indicators would be answered by this survey.

and any issues that were encountered. Consultants reviewed questionnaires at the end of each day to ensure completeness and accuracy of the data collected and contacted enumerators/supervisors when irregularities were found. Furthermore, consultants conducted spot checks to observe the enumerators; and both consultants and supervisors randomly called producers to confirm survey implementation by the enumerators. The enumerators were trained on the questionnaires, inputting the data, good practices for data collection and were given an opportunity to practice until they were comfortable with the process.

Altogether, a total of 19 enumerators and five supervisors (one was both an enumerator and supervisor) were hired for data collection. Because of the great variation in local languages spoken in the BeninCajù project area, enumerators were divided into groups of two and placed in areas where they spoke the local language. Although the producer questionnaire was in French, it was necessary for enumerators to undertake the survey in the local language, as the majority of producers do not speak French. During the training an emphasis was put on ensuring the ability of enumerators to translate into their local language (see Image 5).

Image 5
Implementation of the Producer Survey



Key Informant Interviews

The evaluation team conducted semi-structured face-to-face interviews with TNS and CRS staff in Benin, as well as with other relevant stakeholders, including processors[13] (cashew apple processors and cashew nut processors), nursery managers (input suppliers), demonstration plot producers, financial institutions, training providers (FENAPAB, DEDRAS) and public/private[14] sector market actors. The KIIs allowed stakeholders the opportunity to discuss with greater depth the activities and results of the project to date. The interviews took approximately one hour. The list of stakeholder informants interviewed is included in Appendix 20. The key questions that were asked in the KIIs are listed in the Appendices 6-12.

Focus Group Discussions

The evaluation team conducted FGDs with cashew producers, members of savings and internal lending community (SILC) groups, and producer groups (see Appendices 13-15), in gender-segregated groups[15] as suggested in the ToRs. These FGDs allowed the consultants to have a better understanding of BeninCajù's performance, including through discussions focusing on relevance, effectiveness, and sustainability of the project, as well as discussions to help the team gain a better understanding of the evolution of the cashew value chains (RCN and cashew apple products), to better understand how female participation has evolved during the project, and offer recommendations for future programming. FGDs took approximately 90 minutes.

[13] Note that all processors were intended to be surveyed and a selected few were chosen to participate in the KIIs to gain additional insight.
[14] These included Sweet Benin, an economic interest group, and National Council for Cashew Processors (CNTC), the Cashew processors organization, which are not public actors, but rather civic organizations.
[15] To ensure the full participation from men and women and ensure they felt comfortable to share all their opinions and perceptions.

All FGDs were conducted by trained facilitators and note-takers[16] following a carefully developed set of tools and exercises. Advisem hired and trained (over a two-day training period) two facilitators, two note-takers, and one supervisor for the FGD exercises. An Advisem consultant was present in close proximity through all the exercises. FGDs with cashew producers and SILCs were conducted in local languages by the facilitators and note-takers. This was done to ensure the fluidity of the FGDs and to ensure that information was not lost during the translation process. All exercises began with a statement requesting participants' informed consent to participate (see Appendix 16). Selected respondents had the right of non-participation.[17]

Institutional Development Assessment

The evaluation team developed an institutional assessment tool (see Appendix 17) and gathered information through FGDs/KIIs[18] in order to arrive at an assessment to measure the progress of institutional stakeholders during the lifetime of the project. The institutional assessment allowed the consultants to assess the support provided by TNS to key institutions for the project—training providers, cooperatives of cashew nut producers (CVPAs) and others—and the perception of the members and recipients of services with regard to the relevance, outreach, accessibility, effectiveness and quality of the services provided.

Field Observations

The evaluation team observed how the project was being implemented during visits to project sites, which included BeninCajù producers' fields, and the various cashew processors. The evaluation team also visited two demonstration plots.

Value Chain Analysis

In order to evaluate project performance, a systematic VCA and mapping was conducted, derived from the data collected as described above. The VCA provided insight into the strengths and effects of the project across the value chain links and helped to identify which interventions were valuable or needed course-corrections. The analysis examined the margins/revenues, challenges, opportunities, and access to resources and market information.

3.3 Sampling Strategy

This section includes detailed information on the sampling methodology and the ultimate samples selected. See Appendix 21 for the general work plan and schedule and Appendix 22 for the detailed fieldwork schedule.

[16] There were two reasons for this: FGDs were conducted in local languages; and multiple FGDs took place in the same location so the Advisem consultant was present in the exercise or vicinity (within earshot) of the exercise.
[17] If the right to non-participation was exercised, this should bear no impact on their current or future relation to the current or future projects of FFPr/TNS.
[18] The institutional assessment was an additional set of questions conducted with the relevant institutions during the FGDs and KIIs already planned.

For farmer-focused activities, Advisem drew the sample for all the data collection methods from a database of BeninCajù (treatment) and control villages[19] and associated project participants. Based on this database, and taking into account project information, the overall sampling criteria applicable to the midterm evaluation of BeninCajù included:

- *Geographic location* – All of the TNS intervention villages are in Central Benin, specifically in the Collines (all six communes), Zou (Djidja commune), Borgou (N'Dali, Parakou and Tchaourou communes), and Donga (Bassila and Djougou communes) departments. All of the TNS control villages occur in Central Benin, specifically in the Collines (all six communes), Zou (Djidja commune), Borgou (N'Dali and Tchaourou communes), and Donga (Bassila and Djougou communes) departments (see Image 1). The sampling ensured that villages were selected in each of the departments and in the vast majority of communes.[20] Note that similar percentages of BeninCajù and control producers were sampled in departments and when possible in communes (see Table 1 below) to account for different cashew growing characteristics.

- *BeninCajù versus control* – The sample provided adequate control villages for comparison. TNS was responsible for providing the global population of control villages. However, it was communicated that there were other NGOs implementing similar cashew improvement projects and it was likely not possible to encounter an adequate population of control individuals. Questions were asked in the survey to determine if the individual had recently received assistance; however, the percentage of individuals that had received any assistance was low (discussed below). Control villages were specifically used for the producer surveys.

For other activities, including those focused on processors, access to finance, and policy work, sampling focused on selecting an adequate representation of beneficiaries and stakeholders influenced by the project, including smallholder farmers, SILCs, processors, government representatives, financial institutions, public actors, input suppliers, intermediaries, and key TNS, CRS, and USDA personnel. These groups of individuals were reached through a combination of quantitative and qualitative methods.

The specific methods for determining the sample for each of the quantitative and qualitative methods applied are discussed below.

3.3.1 Quantitative Sampling

The first step in determining the sample of the producer survey relied on the selection of BeninCajù and control villages to be visited. Because TNS suggested the use of the difference-in-difference (DID) method for various indicators to assess the impact of project interventions, the initial idea was to use the same control and BeninCajù villages that were sampled for the baseline for the midterm evaluation. In turn, this would also allow the midterm to be comparable with the final endline results, which will also sample the same villages if DID is utilized. However, when comparing the BeninCajù villages designated during the baseline with those villages that have received and completed training, it became apparent that less than half (11) of the 30 original baseline BeninCajù villages had producers who had completed BeninCajù training. Advisem believed that, for the midterm evaluation, it was more relevant to sample villages where producers had completed their training in order to assess the results of those trainings, rather than simply to re-sample the baseline untreated "treatment" villages for DID to be performed. Thus, the

[19] The database was provided by TNS Benin and was an updated version from that used for the baseline evaluation. Updates focused on revised village names and borders, as well as the current list of villages having received training.
[20] No producers were sampled from Parakou commune.

11 baseline villages where training was completed were sampled for the midterm evaluation. The other 19 midterm villages were either in the same *arrondissement*, if possible, or in the same commune[21] as the original baseline BeninCajù villages, with producers who had completed training.

TNS also advised the evaluators that the government had updated the delineation of some village borders since the baseline study. In cases where one baseline village had been divided into multiple villages, the village to be sampled for the midterm evaluation (if training had been completed) was selected using a random number selection. Appendix 18 provides details of this selection process and Appendix 19 provides the final selection.

Overall, similar to the baseline, a total of 30 control villages and 30 BeninCajù villages were sampled. The midterm evaluation also used two-stage sampling or cluster-sampling to minimize logistical costs and optimize survey implementation. For the baseline, the specific villages were selected using probability-proportional-to-size (PPS) where the "size" of each village was determined by the number of agricultural households in that village as given in a Government of Benin report.[22] Unfortunately, this database was never shared with TNS.

Cashew-Producing Households

Currently, the total number of Silver and Gold[23] trained beneficiaries who have completed their training[24] is 6,922 (Silver—Wave 1 and Wave 2—are 5,375; Gold producers—Wave 1—are 1,547). Importantly, 11 of the villages that were sampled had individuals who had completed Gold training and 19 of the villages have individuals who had completed Silver training. Using a true random sample at the village level, at 95% confidence level, 7% margin of error and using the formula, $ME = z\sqrt{((P\ (1-P))/n)}$, resulted in a sample size of 191 individuals. Because cluster sampling is occurring, this sample was doubled, resulting in 382 individuals. A 15% non-response rate was also applied, meaning a maximum sample of 440 BeninCajù producers and 440 control producers. This means that a minimum of 15 producers have been sampled from each village. Advisem consultants further increased the target number to 18 producers per village. Advisem consultants randomly selected the BeninCajù producers in each village to be sampled from the list of beneficiaries.[25] Also, when "replacement" producers were required (for instance when the selected producers were unavailable) enumerators were instructed to proceed sequentially down the list. As there were no phone numbers in the BeninCajù producer training database, these producers were contacted through local leaders (village chiefs) or heads of producer groups. For the control group producers, only the list of those sampled in the baseline was available.[26] Attempts were made to contact all of these individuals and when necessary snowball sampling[27] was applied.

[21] This was done to maintain comparability in terms of geographical area with the control villages.
[22] The Government of Benin report source was not specified in the baseline.
[23] Silver and Gold refers to types of training delivered by the project. Gold training occurs over a two-year period (28 days) and Silver training occurs over a one-year period (10 days). Other training modalities include Bronze training (Farmers days), and Copper training (extension services supplied by processors).
[24] This is taken from the August 6th, 2018 producer training database and does not include all beneficiaries.
[25] This was done in Excel. Each beneficiary was provided a random number (using the *rand()* operation), then these random numbers were sorted from smallest to largest.
[26] For the control village Boko in N'Dali, there was no information available in the baseline database. The enumerators utilized the method of asking who was a cashew farmer in the village to obtain the sample.
[27] Farmers, producer group leaders and village chiefs were asked to provide names or contact information for other farmers who are specifically involved in cashew farming.

Appendix 19 provides the number of individuals sampled in each village. Only in two cases was the sample size of 15 not reached. One was the BeninCajù village Affizoungo-Kpota (Glazoué) where only 14 producers were trained, and the other was the control village Konkondji (Savalou) where the enumerators found that many producers were no longer engaged in cashew nut production, stating that the land is not giving good production and they have started growing maize, soya and other crops. Overall, a total of 996 producers were sampled, with 830 males and 165 females and 516 BeninCajù producers and 480 control producers. The percentage of females actually sampled was 16.6% (BeninCajù: 16.9%, control: 16.3%), which was close to the overall percentage of females in the villages selected for the BeninCajù sample (19.0%) and the percentage of females sampled in the baseline (16.2%). Table 1 provides the number and percentage of BeninCajù and control individuals sampled in each department and commune.

Table 1
Total Number and Percentage of Producers Sampled, by BeninCajù/Control and Department and Commune

Department	Commune	Number			Percentage of total (by column)		
		BeninCajù	Control	Total	BeninCajù	Control	Total
Borgou	Tchaourou	34	45	79	6.6	9.4	7.9
	N'Dali	54	30	84	10.5	6.3	8.4
	Total	88	75	163	17.1	15.6	16.4
Collines	Bantè	70	54	124	13.6	11.3	12.4
	Dassa Zoumè	31	45	76	6.0	9.4	7.6
	Glazoué	68	47	115	13.2	9.8	11.5
	Ouèssè	54	55	109	10.5	11.5	10.9
	Savalou	83	79	162	16.1	16.5	16.3
	Savé	34	45	79	6.6	9.4	7.9
	Total	340	325	665	65.9	67.7	66.8
Donga	Bassila	37	16	53	7.2	3.3	5.3
	Djougou	36	34	70	7.0	7.1	7.0
	Total	73	50	123	14.1	10.4	12.3
Zou	Djidja	15	30	45	2.9	6.3	4.5
	Total	15	30	45	2.9	6.3	4.5
Total		516	480	996	100.0	100.0	100.0

The general household characteristics were similar between the BeninCajù and control villages, including the average household size (BeninCajù: 9.7 individuals, control: 9.4 individuals), number of household members involved in cashew production (BeninCajù: 4.0 individuals, control: 4.1 individuals), and the average age of the producer surveyed (BeninCajù: 49.4 years, control: 48.8 years). A total of 39.4% of producers in both BeninCajù and control villages reported themselves as being literate. The majority of producers reported receiving no education (BeninCajù: 53.0%, control: 56.7%), followed by primary

education (BeninCajù: 31.3%%, control: 26.7%), and secondary education (BeninCajù: 15.4%, control: 15.2%).[28]

On average, BeninCajù producers had more plantations, larger fields, more trees and slightly more productive trees, higher tree densities, and estimated the productive age of their trees as younger; however, only differences in plantation number, total number of trees, and density of trees were statistically significant (see Table 2). Midterm values were higher than those of the baseline for plantation number (BeninCajù: 1.6, control: 1.5) and hectares under production (BeninCajù: 4.1, control: 3.6); however, it should be noted that the baseline deleted values greater than 20 hectares. In regard to productive trees the baseline (BeninCajù: 703, control: 488) had higher values for BeninCajù producers, but lower values for control producers. Midterm producers were able to provide estimates for hectares and total number of trees more commonly than for productive trees (see Table 2). The smaller sample size for productive trees means that productivity and income values standardized by productive trees are less reliable.

Table 2
Cashew Plantation Characteristics Reported by BeninCajù and Control Producers

Characteristic	BeninCajù		Control	
	Average	Sample size	Average	Sample size
Plantation number**	1.91	514	1.72	480
Hectares	8.74	515	5.46	480
Total number of trees*	871	426	614	417
Number of productive trees	438	345	409	328
Average age of productive trees	19.9	510	27.9	460
Density (trees per hectare)***	128.9	426	104.0	417
Density (productive trees per hectare)	79.5	345	72.8	328

Statistical tests (ANOVAs): *** p<0.001, ** p<0.01, * p<0.05.

Cashew Processors

Using the same confidence level and margin of error as for the cashew producers, a total of 18 of the 19 BeninCajù partner cashew processors (9 nut processors, 10 apple processors) were scheduled to be surveyed/interviewed. Advisem believed that it was best to only sample processors that were operational during the previous cashew season, as all processing and value chain analysis information (buying price of RCN, selling price of kernel, costs of production, other costs, employment data, etc.) would not be relevant if the processor is not operational. TNS relayed that only four nut processors were currently active. Therefore, a total of four RCN processors and all 10 of the apple processors were surveyed. See Table 3 below for details on those that were surveyed, and reasons for why others were not. As this survey covered sensitive information, it was implemented by the three international consultants in the field (in some cases with the help of translators). It should also be noted that, because there was no control group available for processors, many survey questions had a multi-year timeframe to establish trends over the project period.

[28] Differences in education level completed between BeninCajù and control groups were not statistically significant.

Table 3
Cashew Processors that Work with BeninCajù, their Product and Location, as well as Programmed and Performed Survey Sampling

Cashew processor	Location*	Programmed to be surveyed	Performed survey	Reason
Value chain: cashew nut				
1. La Lumiere	Collines, Savalou, Tchetti	No	No	Non-operational
2. Fludor SA	Zou, Zogbodon, Cana	Yes	Partially	Survey sent via email; owner was not willing to undertake the survey at time of visit
3. Kake 5	Collines, Savalou, Savalou Agbado	No	No	Non-operational
4. Tolaro	Borgou, Parakou,Tourou	Yes	Partially	Not willing to provide all information
5. AN Industrie	Ouémé, Sèmè Kpodji, Djregbe	Yes	Yes	
6. Nad & Co	Borgou, Tchatchou, Badeparou	No	No	Non-operational
7. Afokantan Benin Cashew	Borgou, Tchatchou, Tchaourou	Yes	Partially	Survey sent via email; in Cotonou when consultants in Borgou
8. BPS SARL	Atlantique, Calavi	No	No	Non-operational
9. Donga Treasures	Donga, Djougou	No	No	Non-operational
Value chain: cashew apple				
10. 2lb	Collines, Savalou, Logozohe	Yes	Yes	
11. Agbara	Collines, Dassa, Dassa	Yes	Yes	
12. Irede	Collines, Savè, Adido	Yes	Yes	
13. Olore	Collines, Bantè, Akpassi	Yes	Yes	Women's group; owner in Cotonou
14. Triangle	Borgou, Ndali, Sirarou	Yes	Yes	
15. Tropic Fruits	Borgou, Tchatchou, Tchaourou	Yes	Yes	
16. TSF Djougou	Donga, Djougou, Djougou	Yes	Yes	
17. Woudou/ Waduheheba	Borgou, Tchatchou, Tchaourou	Yes	Yes	Women's group; owner in Cotonou
18. Yelokpon	Collines, Savalou, Savalou Attake	Yes	Yes	
19. Yinrado	Borgou, Bembèrèkè, Bembèrèkè	Yes	Yes	

*Tropic Fruits and Yinrado surveys were conducted at the Kobourou City Hotel in Parakou.

3.3.2 Qualitative Sampling

Interview Sampling

Advisem conducted individual interviews primarily with implementing stakeholders of the BeninCajù project (project staff of TNS and CRS), the USDA representative,[29] and representatives of the processing companies, input suppliers, demonstration plot producers, financial institutions/MFIs, training organizations, business development services providers (BDSPs) and public state market actors. Advisem developed an initial list of stakeholders to be interviewed based on the level of engagement and relevance to the project, and to ensure that various types of institutions and stakeholders were covered. This list was then discussed with the TNS Policy Lead, Mr. [redacted], and was further modified with input from other TNS and CRS representatives. Advisem randomly selected the processors for KIIs, with the exception of Sweet Benin. As it is an interest group representing all cashew apple processors, Sweet Benin was a particularly pertinent stakeholder to interview (see Table 4). With regard to demonstration plot KIIs and input suppliers (nurseries), Advisem decided to interview those from some of the same villages where FGDs had been conducted with producers so as to better understand the complete ecosystem. The nurseries and demonstration plots in Djidja and Zou and the demonstration plot in Komiguea were selected for that reason. The consultants also met with a nursery manager in Parakou, Borgou. See Table 5 for the programmed and performed KIIs by category and Appendix 20 for the complete list of individuals interviewed. These interviews were conducted at the place of operation, unless otherwise specified by the interviewee, or virtually, as required.

Table 4
Processors Selected for KIIs

Cashew processor	Value chain	Comments
Fludor SA	Cashew nut	
Tolaro	Cashew nut	
Kake 5	Cashew nut	Not operational
Yelokpon	Cashew apple	
TSF Djougou	Cashew apple	
Sweet Benin	Cashew juice	Interest group

FGD Sampling Strategy

The Advisem team identified gender-disaggregated samples of participating BeninCajù cashew producers, SILC group members, and producer group members (see Image 6). Individuals to participate in FGDs were randomly selected from the producer training lists, producer group member lists, and SILC group members' lists. Advisem ensured that there was an adequate number of male and female participants in the FGDs. Advisem consultants requested SILC and CVPA leaders to

Image 6
Undertaking FGDs



[29] Completed in the initial call with USDA.

help mobilize the previously randomly selected participants for the FGDs. See Table 5 for the programmed and performed FGDs by category.

Table 5
KIIs and FGDs Programmed and Performed

Stakeholders	KIIs		FGDs	
	Programmed	Performed	Programmed	Performed
Producers*	-	-	8	8
Processors (including interest group Sweet Benin; and one non-operational nut processor)	5	6	-	-
CVPAs/producers groups*	-	-	8	8
Demonstration plot producers	2	2	-	-
Nursery managers (input supplier)	2	2	-	-
Project staff/TNS/CRS	7	10	-	-
Financial institutions	3	4	-	-
SILCs*	-	-	6	6
Public/private state market actors	4	4	-	-
Training providers (FENAPAB, DEDRAS, CRADIB)	2	2	-	-
Field observations	2	2	-	-
USDA	1	1	-	-
Total exercises	28	33	22	22

* Gender disaggregated exercises, two exercises per selected village for each of the four departments. Please note that SILCs were present in three departments.

Advisem selected the BeninCajù villages randomly (see Table 6), from within the subset of BeninCajù villages selected for the surveys (quantitative) data gathering for the midterm evaluation.[30] The pre-defined criterion was that there should be one village per department.

Table 6
Specific Villages and Companies Selected for FGDs and KIIs, Respectively

Type of training	Village	*Arrondissement*	Commune	Department
Silver	Komiguea	Sirarou	N'dali	Borgou
Gold	Tchetti	Tchetti	Savalou	Collines
Gold	Nanogou	Partago	Djougou	Donga
Silver	Assantoun	Dan	Djidja	Zou

Table 7 shows the division of individuals that participated in the 22 FGDs (201 participants; 114 males, 87 females).

[30] With the exception of Tchetti, which was selected to ensure sufficient female participation and because it had a SILC group.

Table 7
Number of Participants in FGDs

Stakeholders	Tchetti		Assantoun		Nanogou		Komiguea	
	Males	Females	Males	Females	Males	Females	Males	Females
Producers	10	20	9	3	13	8	20	13
SILC	8	14			11	3	10	14
CVPAs	1	2	8	5	10	3	14	2
Total	19	36	17	8	34	14	44	29

Institutional Assessment

The institutional assessment was implemented with selected organizations/groups as an integral part of the FGDs/KIIs. It was conducted with the organizations providing training to producers (FENAPAB/DEDRAS) and with the existing CVPAs in the villages where qualitative exercises were conducted.

3.4 Data Contamination Avoidance Measures

Advisem understood that the control villages may also have received assistance from other organizations implementing cashew productivity assistance programs. However, a total of only 13.1% (63 of 480) of control producers reported receiving some sort of training between 2016 and 2018, and only 10.2% (49 of 480) reported receiving direct training. Of that group, 63% (31 of the 49) stated the direct training they received was from BeninCajù. This is unlikely for several reasons. First, producers were probably confused by the way the question was asked, since it referred to training received by "animateur/conseiller agricole, BeninCajù/FENAPAB/CRADIB/DEDRAS." When these 31 individuals were specifically asked if they had received more specific training, 29.0% (good agricultural practices), 32.3% (good harvest/post-harvest practices), and 41.9% (good farmer management practices) said "no," further suggesting that they probably did not receive BeninCajù training. Other control producers primarily stated receiving training from FENAPAB, CRADIB, DEDRAS, and MAEP that lasted one day (66.6%) or two to three days (33.3%). Also, two-thirds of these control producers stated they had received some indirect training and there could be some confusion about what constitutes direct or indirect training. Ultimately, cashew production income was analyzed both including and excluding these 63 control individuals and there were very limited differences. Thus, these control individuals remained in the dataset.[31] Also, only 15.6% of control individuals stated they received indirect training, compared to 71.7% of BeninCajù producers. This indirect training most commonly occurred through other producers (BeninCajù: 70.5%, control: 64.0%), village demonstrations (BeninCajù: 26.3%, control: 25.3%), demonstration field visits (BeninCajù: 26.3%, control: 8.0%) and radio programs (BeninCajù: 13.6%, control: 8.0%). Ultimately, there is likely even more such indirect training occurring as there were instances that control individuals commented to the enumerators on nearby villages receiving BeninCajù training. Thus, it is important to note the spillover effect and that a limited number of control individuals may have received some level of training. The

[31] However, those 31 who stated they undertook BeninCajù training and thus have a Silver or Gold designation associated with them were not included in any of the analyses that compare Silver or Gold, but are still considered in the overall control.

midterm sampled the original control villages to avoid further complicating the comparability of BeninCajù and control villages.

The survey of processors included a question about any interventions from other sources (such as NGOs or government) they had participated in. Of the 14 processors surveyed, four stated they had not received any other assistance, while two did not respond, two said they had received assistance from the government, and 6 apple processors said they were receiving assistance from other NGOs (such as PADA, GIZ or Pro Agri). However, most of the survey questions asked for responses that were specific to BeninCajù and there does appear to be a trend between "other help" and how the processors are faring.

3.5 Data Analysis

Quantitative Analysis

Advisem's consultants developed databases in Excel to store survey data, which was then imported into the *R-project* software for relevant analyses. Output tables and figures of means and proportions were created as needed to answer evaluation questions. Changes since the baseline were examined simply by making comparisons of averages. Differences between the midterm BeninCajù and control groups were examined using primarily ANOVAs and Chi-Square tests, depending on the type of data. Particularly, this was done for indicators such as the percent of agricultural producers in target region/area who can identify key characteristics of a well-managed farm, usage of good agricultural practices, and production level indicators (yield, revenue, etc). Additionally, the consultants examined whether there was any difference in impact between the Gold technical assistance package and the Silver technical assistance package. Data was disaggregated by various factors (such as gender, commune, Gold/Silver, and BeninCajù/control) depending on the question being answered, with the caveat that the margin of error of results obtained increases with each disaggregation level.

Indicators

Specifically, according to the Performance Monitoring Plan (PMP), Advisem was required to assess two indicators: the Progress out of Poverty Index (PPI)[32] for target regions, and the percent of agricultural producers in target region/area who can identify key characteristics of a well-managed farm (illustrative). Additionally, estimations of the percentage of producers satisfied with technical assistance were made, along with cashew productivity and value of RCN sales.[33] All other output indicators were assessed using

[32] "The new simple poverty scorecard poverty-assessment tool for Benin is based on data from the 2015 Household Living Standards Survey (EMICoV). It replaces the old scorecard for Benin based on data from the 2010 EMICoV (Schreiner, 2012a). The new 2015 scorecard should be used from now on, both by first-time users and by legacy users of the old 2010 scorecard. Many assumptions of the 2010 scorecard have not held (for instance, the scorecard will often not provide the right sign; it estimates an improvement (reduction) in poverty for Benin from 2010 to 2015, rather than the actual worsening) and direct comparisons cannot effectively be made between the scorecards. If consumption-based poverty in Benin continues to increase (worsen), then the new 2015 scorecard will probably also under-estimate poverty rates. But if consumption-based poverty decreases (improves), then it is reasonable to expect that the new scorecard's accuracy will be similar to that of other scorecards. This uncertainty is the nature of poverty assessment tools that use non-consumption indicators to estimate consumption-based poverty and that are constructed with data from an earlier time period and then applied with data from a later period." Please see *Simple Poverty Scorecard® Poverty-Assessment Tool Benin, by Mark Schreiner and Jean Paul Sossou, December 15, 2017*, for additional details on the PPI.

[33] Cashew productivity was reported by hectare; and sales of RCN was calculated using the average RCN sale multipled by the population of trained producers.

information provided by TNS through its bi-annual progress reports. However, the consultants attempted to measure many of these indicators (using the calculation methods of BeninCajù) and where possible have provided comparisons with TNS data collection, as well as collected data for these indicators from the producer control group so that statistical comparisons could be made.

Qualitative Analysis

The qualitative analysis of KIIs, FGDs and documentary data complemented and deepened the statistical data of the surveys by serving to explain and elaborate on the quantitative evidence of results achieved and relationships among variables, and thereby enabling more complete answers to the key questions of the ToRs than would be possible through the numbers alone. Assessments of the ways in which beneficiaries have been changed, or not, by the project and the extent to which they have assumed ownership of, and are therefore likely to sustain, those changes, have been made. In this sense, the qualitative analysis has served to "dig deeper" to illuminate why and how BeninCajù results have been realized and/or fallen short and, from there, to make recommendations for future action.

Data generated through the KIIs and FGDs was analyzed using ATLAS TI, a qualitative data analysis software. This analysis consisted of coding statements made by various stakeholders as per a code framework based on the evaluation matrix. This allowed the evaluation team to identify and confirm patterns and highlight any inconsistencies.

Value Chain Analysis

The analysis of the value chain encompassed factors that are linked to the project indicators using the ValueLinks approach around value chain functions such as input supply, production, processing and trading. Refer to Appendix 24 for the list of indicators that have been collated and evaluated in relation to value chain-wide changes. The sum total effect of the project is the value chain-wide impact.

3.6 Challenges, Issues and Limitations

Advisem has identified the following challenges, issues and limitations for this midterm evaluation:

- *Reluctance to consider challenges* – There is potential that the enthusiasm of project participants for the services provided by BeninCajù might dissuade them from responding openly to questions asking about any weaknesses in the project or the likelihood of sustainability. The FGDs in particular attempted to encourage well-balanced, honest responses, assuring participants that their answers would be held in confidence.

- *Multiplicity of data types and sources* – The nature of the BeninCajù project, with its range of stakeholders and requirements of the ToRs, could lead to a multiplicity of data perspectives and types, both qualitative and quantitative. This presents a challenge to maintaining consistency, recognizing patterns and identifying key points of differentiation. The evaluation mitigated this limitation by ensuring that all tools (KIIs, FGDs, observation protocols and surveys) adhered to the evaluation matrix. In addition, sources were clearly identified in the evidence matrix, and data were analyzed through triangulation and a constant comparative approach.

- *Lack of a theory of change* – Currently, BeninCajù is based on a results framework that was built upon the standard USDA FFPr results framework. It is mostly the choice of standard USDA indicators that have conditioned the BeninCajù results framework. As a result, the theory of change

for the project is not always based on the most obvious cause-and-effect relationships one could expect between activities and the different levels of results. This limits the consultants' ability to assess if project activities are resulting in the "appropriate" changes, as such outcomes have not been clearly identified. The consultants have focused specifically on answering the questions in the ToRs.

- *Reluctance of nut processors to provide information* – The majority of nut processors stated they did not have time to complete the survey during the consulting team's visit. Also, many processors were reluctant to provide information to all of the questions asked in the survey, especially questions directly related to processing, acquisition and sales prices, and finance. This situation was further compounded by the fact that only four nut processors are operational (something the consulting team had no control over). Thus, the consulting team received rather limited information from the nut processors, thus affecting our capacity to conduct related analyses. We used N'Kalo and other secondary data to address gaps in the information gathered.

- *Inappropriate control villages/farmers* – TNS suggested that spillover may have occurred in the control group. Ultimately, a limited percentage (10.2%) of control producers said they had received any direct training. In fact, there is some indication that producers may not have actually received direct training. However, other spillover effects, such as that seedlings produced by project-supported nurseries can be bought by all producers, all producers can attend village demonstrations, and control producers may have visited demonstration plots, as well as spillover by producers in nearby villages talking among themselves, have all likely occurred. This should be taken into consideration when reading the report and it should also be noted that differences seen between the BeninCajù and control groups may have been even larger had spillover not occurred.

- *Control village participants* – Producers in some of the control villages were taken aback that enumerators were coming to survey them again when they had not received any training. However, enumerators did a good job of convincing these individuals to participate in the survey. In Donga region there were cases when the names on the baseline list were actually the children's names; however, this only meant that the enumerators had to clarify the producers' names. In the control villages of Lakoko and Laminou, enumerators found some individuals on the baseline lists were "friends" who did not have cashew plantations; in these cases, the enumerators located other individuals with plantations for these villages. It appears important to assess if some limited assistance can be provided to these control group individuals, especially if they will again be surveyed for the endline, although this may be something that will have to be implemented immediately before or after the endline study.

4. Evaluation Findings

The following section forms the heart of this report, summarizing the findings of multiple lines of inquiry, and melding qualitative and quantitative data. It is organized around the five evaluation criteria laid out by the Development Assistance Committee (DAC) of the Organization for Economic Co-operation and Development (OECD) in its *DAC Principles for Evaluation of Development Assistance*: relevance, effectiveness, efficiency, impact, and sustainability. The findings reported in this section respond to the specific questions that were posed in the ToRs for this assignment under each of these criteria, and which are listed in their entirety in the evaluation matrix provided in Appendix 2.

4.1 Relevance

This section of the report discusses whether the BeninCajù project is doing the right thing with the right people in the right place. It provides evidence that speaks to the appropriateness of implementation strategies adopted by the project and to the degree of satisfaction of stakeholders involved.

Take-Away Points – Relevance

- BeninCajù responds to the needs of participants and local conditions.
- The project aligns with the goals of the United States Government and USDA, and those of the Beninese government.

4.1.1 Responsiveness of Project to the Needs of Participants and Local Conditions

Program design and project activities are generally responsive to the needs of the participants and local conditions; however, there are several areas where improvements can be made.

Producers

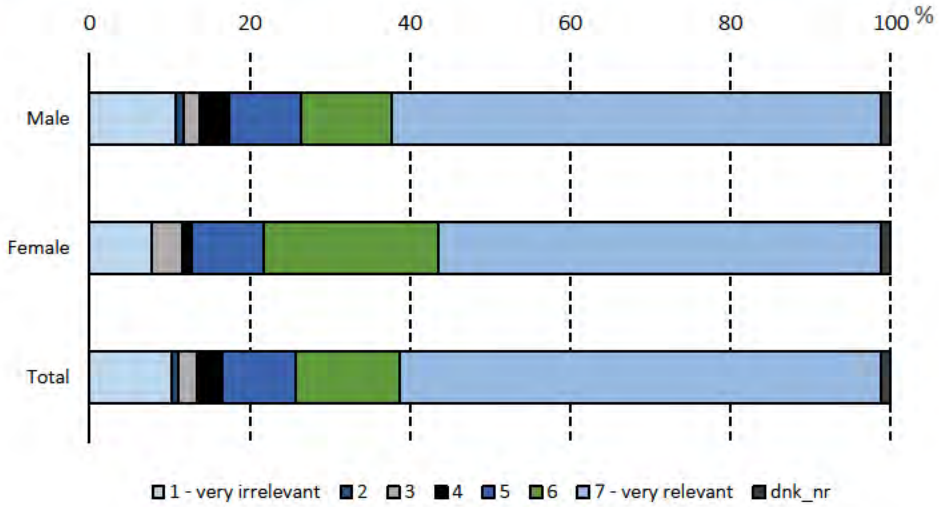
BeninCajù producers expressed satisfaction with the training and knowledge they have received. Surveyed producers most commonly gave the highest rating of relevance (60.1%; males: 61.0%, females: 55.1%); however, a small number of producers also provided the lowest rating of relevance (10.3%; males: 10.8%, females: 7.7%) (see Figure 1). The producers recognized the validity of the knowledge they have received and that if they apply it correctly they will increase their yields and produce cashews of better quality. As detailed below, many producers are using the techniques they have learned, because they agree that they increase productivity, quality and, consequently, revenue.

> "The project has had a remarkable impact on the capacity of each one of us. Those who have put into practice the instructions of the trainer benefit. Their fields produce more cashews in comparison to the past (before the project). But those who do not put the knowledge into practice do not benefit." – *CVPA FGD (translated)*

However, producers in all villages where qualitative exercises were conducted also noted challenges to implementing the techniques they had learned. These included lack of tools, such as mechanized saws, to prune and thin plantations, and of human resources to clean the fields. In qualitative interviews, producers said they often contracted loans (the majority from SILC groups[34]) to cover some of these costs. Still, producers are unlikely to be able to put all the knowledge they have learned into practice throughout their operations. In addition, not all producers receiving training are part of a SILC group (only 17.1% of surveyed BeninCajù producers are currently part of a SILC group), limiting their ability to access financing. Thus, even for those who are trained, there is still a desire and need for credit to enable the proper maintenance of their plantations.

[34] In the village of Assantoun (Dan, Djidja, Zou), the only village where FGDs were conducted that did not have a SILC group, the producers offered no other source of financing, instead requesting assistance from the project to secure financing. Quantitative exercises found that some producers were able to access finance through MFIs.

Figure 1
Rating of BeninCajù Producers in regard to the Relevance of the Trainings they have Received



Overall, a total of 50.3% of BeninCajù producers stated they had visited one of the project's 46 demonstration plots. Of these, 96.9% said this enforced their learning of good agricultural practices and 83.9% of good collection practices.

However, apart from making use of improved techniques and technologies, there are some challenges to producers adopting other project activities and goals. For example, there has been extremely low uptake of high-quality inputs, such as grafted seedlings (see Image 7), with only 3.3% of surveyed BeninCajù producers (4.1% of control producers) reporting they use grafted seedlings. The vast majority of producers are using seeds (BeninCajù: 78.3%, control 79.2%) or non-grafted seedlings (BeninCajù: 13.6%, control: 14.0%). The consultants suggest this could be due to cost and availability issues—for example, nurseries may not be close to some villages. Also, because the project is working with established cashew producers, there may not be many who have planted new areas. Nursery managers interviewed described experiencing unprecedented growth since the beginning of the BeninCajù project, suggesting a large growth of demand, but starting from a very small base.

Image 7
Grafted Seedlings



Another goal of the project is to encourage producers to join cashew cooperatives (CVPAs). To participate in the training, producers had to be part of a cooperative or another type of producer group developed by the project that, over time, would become an official CVPA. However, of surveyed BeninCajù producers, only 75.5% said they belonged to a cooperative or other group of producers which, although much greater than the 26.7% of control group producers, is still lower than the expected 100%. The most common reasons producers gave for not being part of such a group were

that there was not yet a group in their village or area (42.6%), that participation took too much time (21.3%), and the high cost of participation (10.7%). It is not known if producers who said there was no group in their village or area did so because the group had dissolved after the training ended, the group developed by the project was not considered valid, or for some other reason. In addition, project implementers were somewhat confused about whether BeninCajù training participants were required to be part of a cooperative or other type of producer group. Therefore, the consultants recommend that the process for beneficiaries to join and the goals for such should be examined and clarified.

The project also aims to improve the efficiency of producer sales through group selling. However, producers have expressed lack of trust within groups and dissatisfaction with group sales. Their dissatisfaction may be due to what they perceive as bad sales (or lack of sales) made by the groups, and loss of expected income. These sales are, of course, dictated by demand and supply in the general market, and price expectations. For example, expectations for a high price were prevalent at the beginning of this season, but the prices then fell significantly which made the groups reluctant to sell at a lower price. To further improve project results, it will be necessary to review group sales.

> "We had a better harvest, but a bad sale. We haven't found a good buyer. No one wants to buy at a good price so the nuts are still in the rooms. We were waiting for the price to rise before selling to get some profit. But the price ended up falling." – *CVPA FGD (translated)*

In addition, 28 BeninCajù individuals (5.4% of the BeninCajù sample) specifically stated that they did not participate in project training. However, these individuals were on the list of producers who had completed training. When they were asked specifically why they did not undertake or complete the training, their reasons included not having time, being absent, travelling, being old or ill, that they felt the training was not done seriously, or that they were not informed about the training. Project documentation noted that attendance is taken, but sometimes trainers do not complete the required form. Thus, additional checks and balances should be implemented to ensure that all individuals who are reported to be receiving training actually are, as 5.4% can represent a large number when thousands of individuals are trained. The consultants strongly recommend implementing a beneficiary identification system and, more importantly, collecting the cell phone numbers of all producers trained (or of someone in their household) and including these in the trainee database. TNS can then make it clear they will be doing quality control checks to ensure training is being completed.

Female Versus Male Producers

Although interviews and project documentation implied that females were not involved in training to the same degree as men because of land ownership status, the results of the producer survey do not entirely support this reasoning. For example, 47.9% of BeninCajù males and 46.0% of BeninCajù females stated that they did not own land, 38.1% of males and 44.8% of females stated they have undeveloped land, and 13.8% of males and 9.2% of females stated they have developed land. These percentages are similar and do not suggest that females are excluded for not owning land. Moreover, the eligibility criteria (should meet *most*) outlined in the USDA-TNS contract for selecting producers to participate in the training include: 1) living in the project target areas; 2) having private or communal land holdings; 3) being serious and willing to invest in group high-value crops; 4) having the capacity and discipline to perform the necessary labour; and 5) demonstrating a level of enthusiasm and interest to collaborate with other producers on high value agriculture production. It would therefore be advisable to examine how the second criterion is being used to select individuals to participate in training.

Cashew Nut Processors

Cashew nut processors can be further subdivided into two groups: nationally-owned processors and foreign-owned processors. These two groups have different needs and should be seen in slightly different light. Nevertheless, both recognize the value of BeninCajù's interventions and both are vulnerable to RCN price oscillations and the price of sale to the off-takers. Three of the four national processors are currently non-operational (Kake 5, La Lumiere, Nad & Co). They say this is due to the high price of RCN and the high cost of capital. However, the high price of RCN is a global problem that other processors have been able to compensate for by increasing production efficiency. Many of the KIIs also noted that loans, which should have been received in January in time for buying RCN, were often not received until April or May, at the end of the procurement season. This was further compounded by the fact that financial management continues to be a challenge for some processors.

National processors have received a great deal of capacity building assistance in operations and financial management of their processing units, and the qualitative exercises showed that they were particularly satisfied with this support. Generally, improvements in operational capacity, staff quality, and training in certification mechanisms were the most appreciated by processors. Ultimately, the processors were happy with the tailored approach to training and would like to see it continue. Quantitative results revealed two processors providing high ratings (6 and 7 out of 7) for training relevance and one processor providing the lowest rating (1 out of 7).

Although only one of the operational cashew nut processors reported BeninCajù connecting them with buyers, project documentation shows this has occurred with various processing units.[35]

Qualitative discussion revealed all processors were satisfied with BeninCajù's efforts to facilitate their access to capital. However, processors were reluctant to provide detailed figures in the survey. BeninCajù's role in helping prepare the required documentation for financial institutions, imparting knowledge about the cashew value chain, and assisting in monitoring RCN stocks—as well as its involvement in general—has made financial institutions somewhat more comfortable about engaging with processors of the cashew value chain.

One of the main challenges nut processors identified was the challenging environment in which to purchase RCN at an appropriate price, something processors see as causing lack of regulation of the value chain. In 2017, only 13% of RCN was processed in Benin,[36] with the rest being exported. Processors see BeninCajù as a well-placed entity to lobby government actors to enforce tighter regulation of the value chain, thereby creating available and affordable RCN for processors. All processors said this was a major impediment to their sustainability and hoped BeninCajù could address it. To date, BeninCajù has been involved in numerous efforts to influence the policy and regulatory environment, including contributions to the National Plan for Cashew Research in Benin, the National Plan for the Promotion of the Cashew Sector in Benin, the Agricultural Sector Development Strategic Plan (which has been adopted), sharing market analysis data with the Ministry of Agriculture, working with CNTC, and helping to develop a strategy for resource mobilization for the nascent Beninese cashew industry trade association (IFA).

[35] Because many processors filled in the survey on their own, there may have been some confusion with understanding the question.
[36] As per World Cashew Convention 2017 data, available at <http://www.cashewinfo.com/pdf/highlight/English_WCC_Highlights_2017.pdf>.

Cashew Apple Processors

Cashew apple processors engage directly with BeninCajù and also indirectly through Sweet Benin, an economic interest group that acts as a brand and marketing body for all member cashew apple processors. BeninCajù and Sweet Benin conducted market research to arrive at a cashew juice product that was well received by consumers. The process for producing the juice includes caramelization and the use of a specific settling agent (gelatin). Apple processors were very pleased with the technical support BeninCajù provided on processing techniques and capacity building—many processors specifically commented on the three days of intensive in-house training on producing apple juice, as well as the training on business management. All cashew apple processors rated the relevance of training as high (average 6.12 out of 7).

Generally, cashew apple processors were also pleased with the product developed and considered it an important added value. Although BeninCajù does have a selection process for bringing processors into the Sweet Benin circle, it might be beneficial to assess the risks of joining to some of these processors. For instance, one processor already had an agreement to sell 100% natural juice in a shop supported by DEDRAS; however, because the processor now uses gelatin in the production process, the shop will no longer accept the juice. In this case, the processor found it easier to sell the juice before changing the recipe.

Several apple processors surveyed found financial access to be a benefit of the project. Financing was used for business growth (infrastructure and new tools and equipment), maintenance (replacing equipment and works), working capital (daily management of the company) and training/education. When asked if the loans allowed them to reach their business objectives, processors cited challenging market conditions, difficulties in finding clients (market access), or facing delays in delivery of supplies (such as bottles) as obstacles to realizing them. There seems to be a considerable range in the degree to which cashew apple juice processors are succeeding; some are very effective in selling their juice, while others are having a very difficult time. This may be explained by the fact that some processors, such as TSF Djougou, were already experienced in marketing before entering the cashew apple juice value chain.

Image 8
Unsold Cashew Apple Juice



A large number of processors said they were disappointed with the support BeninCajù and Sweet Benin provided to offload/sell the produced juice (see Image 8). Some pointed out to the consulting team that BeninCajù had a responsibility to assist in selling the product, which was corroborated to a certain extent by the technical assistance contracts[37] signed between BeninCajù and the processors; in the opinion of apple processors, that assistance had not materialized. Those apple juice processors who did not complain about sales were often those who had other business activities that were leveraged to sell the produced juice (such as processors who also had catering businesses, hotels or restaurants, and/or had access to a good marketing channel to offload their products). Apple juice processors who rely solely on

[37] Roles of BeninCajù include: "assistance with access to markets; support for the improvement of storage; support for the acceptance and placement of processed cashew apple products; marketing and communication plan about the nutritional benefits of cashew apple; and establishing relations with commercial links." *(translated)*

other distributors and retailers generally have a difficult time selling their product. This is compounded by the bullish forecast by BeninCajù, which predicted that the market would absorb 200,000 bottles of juice. Based on this forecast, processors made commitments to increase production and accessed credit (or used their own capital), but were unable to sell their product. In addition, the Central Food Safety Laboratory (LCSSA) assessment has given cashew apple juice a one-year shelf life, meaning that this year's production will begin to expire in February/March 2019. This is therefore an important issue for BeninCajù and its apple juice processors to address.

> "BeninCajù has taught us well how to process cashew apple juice. BeninCajù has helped us with production; but selling, we still need to strengthen this." – *Cashew apple processor (translated)*

However, despite processors' desire for more support, TNS wants processors to be more independent. TNS has already provided considerable support, including facilitating trade shows (with very low return on investment), leveraging marketing through televised events (the most effective approach to date, responsible for kick-starting sales), performing extensive searches for independent distributors (the retail market is highly fragmented), recruiting and training sales agents/distributors in Cotonou, and hiring a professional market research and promotions firm that is used by the main global beverage companies (which resulted in useful feedback that BeninCajù is currently analyzing). TNS has had the opportunity to participate directly in the sales process, as it receives many orders, but does not want to become part of the supply chain out of concern for sustainability. Some of the biggest constraints have been arranging logistics and coordinating among 10 processors located far from Cotonou to get their product to the main market, and the lack of internal communication and collaboration within the Sweet Benin group.

The consultants firmly believe that BeninCajù should continue to provide training and assistance to support development of Sweet Benin's marketing strategy and its efforts to increase sales and to identify and expand its markets. The consultants agree less that there is a "wide demand for cashew juice,"[38] and instead believe the market still requires much development, in spite of considerable growth in sales of cashew apple juice year-on-year. Training in marketing and continuing to establish marketing linkages would also help promote the sustainability of the cashew apple juice market, in addition to ensuring that these processors remain operational.

Apple processors have only reached local or regional buyers and several of them feel that the absence of certification is a hindrance to business growth, particularly for international markets. However, setting up an industrial facility with the required quality assurance and internationally recognized certification processes would require a significant investment (several hundred thousand dollars) and place severe pressure on the prices and margins of current processors. In addition, the general management, financial management, and marketing abilities of some apple processors do not yet appear to be at the level required for international export.

Other Stakeholders

The project has provided or facilitated access to credit and capacity building for nursery managers, and nursery managers have testified to experiencing an unprecedented growth as a result of BeninCajù. They attribute this to the understanding producers have gained about the importance of grafted seedlings

[38] BeninCajù had forecasted a demand of 200,000 bottles of cashew apple juice for 2018. Sales figures show that there were about 120,000 bottles sold to date (however, almost half are by one processor)—still a significant growth from the 71,684 bottles reportedly sold from 2017 (Semester 5 report reported 68,000 bottles).

from elite trees and the higher production that can be derived by trees from these seedlings. They also feel that the processes of rejuvenating trees and adapting the spacing requirements proposed by BeninCajù have contributed to a substantial increase in demand for cashew tree seedlings.

> "We produced before BeninCajù, but we were not selling many seedlings. Sold around 500 before (not much demand), but after BeninCajù started working with us, we sold 5,400 seedlings (demand was > 12,000)." – *KII Nursery Manager (translated)*

Survey results found BeninCajù producers purchased 1,007 grafted seedlings and control producers only 280. Ultimately, it would be interesting for BeninCajù to dig deeper into who is actually purchasing these seedlings and, if necessary, to assess mechanisms for increasing the uptake by trained producers.

Financial organizations have better understanding of the cashew value chain through BeninCajù interventions such as workshops and presentations. Representatives of financial institutions said the learning workshops offered by BeninCajù were important, but also time consuming. It is the opinion of the consulting team that the workshops were important for brokering relationships between financial institutions and project stakeholders. They have learned more about the campaign cycles, and cycles of expenses and revenues. Financial organizations are also more comfortable with BeninCajù's engagement in this value chain and are more open to providing credit to processors and producers engaged with the project than to others. In the case of nut processors, monitoring stocks and building their financial management capacity has had a positive impact on financial institutions' willingness to provide them with credit.

Public state actors and government officials recognize the important role BeninCajù has played in strengthening the cashew value chain in the country and consider BeninCajù a partner of strategic importance. It is clear that BeninCajù continues to assist public actors and government bodies to support the growth of the value chain and has had a positive impact. It is also clear that some of the government's decision-making is for unclear or political reasons (such as to appease or appeal to specific segments of the population) rather than solely for strengthening the value chain. BeninCajù has limited influence over decisions of this nature, although the institutional and political reforms it is promoting will limit the possibility of such political decisions taking place.

4.1.2 Alignment of Project with Government

United States Government and USDA

The project strategy and activities are aligned with the development goals, objectives and strategies of the United States Government and USDA. Through its work with smallholder producers, with the private sector to increase trade and markets, and with the Beninese government to shape policies, BeninCajù aligns with some of the United States government's goals,[39] specifically "promoting healthy, educated and productive populations in partner countries to drive inclusive and sustainable development, open new markets and support [United States] prosperity and security objectives;" "advancing [United States] economic security by ensuring energy security, combating corruption, and promoting market-oriented economic and governance reforms;" and "transitioning nations from assistance recipients to enduring diplomatic, economic, and security partners." In addition, BeninCajù aligns with USDA's strategic goals of "facilitating rural prosperity and economic development" and "strengthening the stewardship of private

[39] USDA and USAID. 2018. *Joint Strategic Plan Fiscal Year 2018-2022*.

lands through technology and research" through the training provided to cashew producers.[40] Additionally, the project addresses the strategic goal "maximizing the ability of American agricultural producers to prosper by feeding and clothing the world" directly through the sale of FFPr USDA products, and indirectly by increasing the resilience and purchasing power of the BeninCajù beneficiaries. Recently, two USAID reports and one USDA report specifically addressed the cashew value chain in West Africa (Trade Hub and African Partners Network. *Value Chain Assessment Report: Cashew Value Chain*; *West Africa Trade and Investment Hub: Final Report*; and *USDA/FAS FFPr LIFFT-Cashew SeGaBi Value Chain Study*).[41]

More specifically, FFPr funding is designed to develop market-focused agricultural projects, focusing on new and emerging markets, expanding agricultural trade, and enhancing sustainable agricultural production.[42] Working through the entire spectrum of the cashew value chain in Benin—from producers to processors, as well as with the regulatory framework—the BeninCajù project is facilitating the modernization and strengthening of the Beninese agricultural sector, with a particular focus on the cashew industry. The KIIs with TNS and USDA showed that BeninCajù is seen as a project to increase value-added processing activities in the country, as well as to expand international trade and export markets, particularly in processed nuts. In turn, CRS, an organization traditionally engaged in humanitarian relief and smallholder farmer rural development programs, is focused on improving the quality of life and food security of producer households by implementing the production elements of the program.

Benin Government

The Beninese government sees the cashew value chain as a strategic guiding value chain (*filière phare*; flagship sector) that is widely seen as the country's second most important sector, after cotton. All public actors and Benin government representatives of the Ministry of Agriculture, Livestock and Fisheries (MAEP) and the Ministry of Industry and Trade (MIC) recognize the important role TNS has played in raising the profile and potential of the cashew value chain. TNS played this role before the BeninCajù project, starting in 2008 with the BeninGold initiative, but it is clear that the larger scope and resources made available to BeninCajù have increased TNS' influence.

Government officials recognize BeninCajù's role in the institutional reforms that led to the establishment of the Territorial Agency for Agricultural Development (ATDA4) and the *Programme national de développement de la filière anacarde 2017-2021*, a regulatory and strategic framework for the cashew value chain developed and currently in the process of being approved in Benin. The document recognizes the support of BeninCajù and other technical and financial partners of the government in strengthening

[40] <https://www.usda.gov/our-agency/about-usda/strategic-goals>, accessed September 28, 2018.
[41] USAID. 2014. *Trade Hub and African Partners Network. Value Chain Assessment Report: Cashew Value Chain*. <https://pdf.usaid.gov/pdf_docs/PA00KMTC.pdf>; USAID. 2018. *West Africa Trade and Investment Hub, Final Report*. <https://pdf.usaid.gov/pdf_docs/PA00T1GT.pdf>; Kahlmann and Kohn. 2018. *USDA/FAS Food for Progress LIFFT-Cashew: SeGaBi Cashew Value Chain Study* (USDA, Shelter for Life International, TechnoServe).
[42] *USAID/USDA Fiscal Year 2016 International Food Assistance Report*: "FFPr is a tool in the [United States] Government strategy to develop new and emerging markets, expand agricultural trade, and enhance sustainable agricultural production. Enacted by the *Food Security Act* of 1985, most recently re-authorized by the *Agricultural Act* of 2014, and funded through the Commodity Credit Corporation [...], FFPr assists developing countries and emerging democracies to modernize and strengthen their agricultural sectors. Rural, agrarian countries rely on smallholder farmer income to fuel economic growth; the more money farming families make the more they will add additional small businesses and hire labo[u]r in farming communities."

the cashew value chain and has four strategic objectives: growth in cashew nut production; growth in the processing of the cashew nut and its shells; growth in the processing of cashew apple; and improvement of the mechanisms for trade and export of cashew nut. These objectives are clearly aligned with the activities and objectives of BeninCajù.

> "BeninCajù is a strategic partner. The state can't do everything; TNS/BeninCajù help a lot to promote the value chain. We would recommend that BeninCajù's intervention is strengthened if possible." – *KII MAEP Director of Cabinet (translated)*

4.2 Effectiveness

This section of the report discusses whether the BeninCajù project is achieving its expected results. It provides evidence that speaks to whether the project is on track to achieve its targets, as well as the degree of achievement of specific results associated with strategic objectives to improve production capacity and increase trade.

Take-Away Points – Effectiveness

- BeninCajù is making good progress towards indicator targets, with 12 final targets already surpassed, although behind on 13; some indicators and targets should be revised.
- Producers are using improved techniques and technologies, although lack of financial resources is a limiting factor.
- SILC groups are an important mechanism for accessing credit and providing wider access to financial products and services.
- Financial institutions are somewhat more comfortable engaging with BeninCajù cashew producers, although they are reluctant to lend to processors.

4.2.1 Progress Towards Targets

Generally, BeninCajù is making good progress towards its indicator targets. For the 40 indicators[43] examined for the midterm evaluation, BeninCajù has already surpassed 12 of the final targets, is on track to achieve 13 targets, is somewhat behind for six indicators, and is relatively far from achieving seven targets[44] (see Table 8). The targets for two indicators, "average production cost per unit of output for selected agricultural commodities" and "average margin between farm gate price and end product price for selected agricultural value chains," may be inappropriate and should be revised.

For some total targets that are on track (such as direct beneficiaries and applying new best practices, technologies or techniques) or somewhat behind (such as employment creation and applying new farmer management technologies or techniques) the current values for male beneficiaries are much more on track than those for female beneficiaries.

[43] Most are at the Output and Outcome levels. Some disaggregation is provided, but not always.
[44] Note that the indicator for "installed storage capacity" (1.1c) is not included as it is not part of the USDA-TNS contract.

Table 8

Table of BeninCajù Indicators Including Yearly and Final Targets, Baseline, Semester and Midterm Values and Whether Results are on Track

Indicators	Baseline	Fiscal Year					Target	Semester					Midterm	Progress
		2016	2017	2018	2019	2020		1	2	3	4	5		
(Expected result) IMPACT/GOAL: Sustainably reduce global poverty and hunger														
a) Progress out of Poverty Index	20.46					15%							27.40	On track
b) Number of individuals benefiting directly from USDA-funded interventions *(Standard #17)*, disaggregated by sex		5,337	13,404	17,686	16,326	613	53,366 (m: 37,356, f: 16,010)	0	4,116	14,079	18,603	27,117 (m: 20,405, f: 6,712)		On track
c) Number of individuals benefiting indirectly from USDA-funded interventions *(Standard #18)*		12,520	49,374	61,751	49,616	616	173,877	0	20,580	70,395	93,015	135,585		On track
d) Number of jobs attributed to USDA assistance *(Standard #15)*, disaggregated by sex		1,950	2,700	3,613	4,205	4,633	3,686 (m: 1,106 f: 2,581)	0	0	0	0	846 (m: 646, f: 200)	Processors: 300 (m: 10, f: 290) Producers: 28.5 (m: 25.4, f: 3.1) (No extrapolation to entire population)	Somewhat behind
(Expected result) OUTCOME 1: Increased agricultural productivity														
1.a) Number of hectares under improved techniques or technologies as a result of USDA assistance *(Standard #1)*, disaggregated by male/female, new/continuing, technique/technology type		5,906	22,313	43,969	64,313	64,313	64,313	0	0	30,556	30,556	38,569		On track
1.b) Number of hectares under sustainable agroforestry practices (Custom), disaggregation by male/female		4,430	16,735	32,977	48,235	48,235	48,234	0	0	30,556	30,556	38,569		On track
1.c) Volume of selected crops (cashew) produced per hectare (yield) (FFPr SO1 (#1) – Illustrative), disaggregated by size of farm	225						269	0	0	0	295	295	274	Surpassed final target
1.d) Number of policies, regulations and/or administrative procedures in each of the following stages of development as a result of USDA assistance *(Standard #12)*, disaggregated by stage		0	0	0	1	1	2	0	0	0	1	0		On track
(Expected result) OUTCOME 2: Expanded trade of agricultural products (domestic, regional, and international)														
2.a) Value of sales by project beneficiaries *(Standard 13)*, disaggregated by commodity (product) type – cashew apple/juice, RCN, kernel (USD)	7,802,352						124,741,187	1,178,118	9,195,449	18,488,037	46,019,949	67,337,795	Will use TNS cumulative values	On track
• Value of sales by project beneficiaries (cashew apple)							185,190	0	0	4,056	27,560	54,415		
• Value of sales by project beneficiaries (processed kernel)							81,950,577	1,178,1184	9,195,449	18,483,981	32,750,045	54,041,037		

Table 8

Table of BeninCajù Indicators Including Yearly and Final Targets, Baseline, Semester and Midterm Values and Whether Results are on Track

Indicators	Baseline	Fiscal Year					Target	Semester					Midterm	Progress
		2016	2017	2018	2019	2020		1	2	3	4	5		
• Value of sales by project beneficiaries (RCN)							42,605,420	0	0	0	13,242,344	13,242,344	7,452,402 (producers finished training)	
2.b) Volume of commodities (metric tons) sold by project beneficiaries *(Standard 14)*, disaggregated by commodity (product) type – cashew apple/juice, RCN, kernel							106,613	127	1,001	2,023	15,893	18,086	Will use TNS cumulative values	Somewhat behind
• Volume of commodities sold by project beneficiaries (processed kernel)							16,263	1278	1,001	2,021	3,494	5,659		
• Volume of commodities sold by project beneficiaries (RCN)							90,350	0	0	0	12,3874	12,387		
2.c) Number of agricultural regulations related to post-harvest handling procedures vetted or reviewed by the public/industry (FFPr 2.4.2 (#3) – Illustrative), disaggregated by subject area		0	1	1	2	0	4	0	0	2	4	4		Surpassed final target
(Expected result) OUTPUT 1.1: Increased use of improved agricultural techniques and technologies														
1.1.a) Number of individuals who have applied improved techniques and technologies as a result of USDA assistance *(Standard #2)*, disaggregated by male/female, new/continuing, technique/technology type		3,450	12,150	12,150	34,000	34,000	34,000 (m: 23,800, f: 10,200)	0	0	8,580	9,204	13,165 (m: 10,268, f: 2,897)	90.9% of surveyed individuals	On track
1.1.b) Number of seedlings sold by project-supported nurseries (Custom), disaggregated by male/female ownership		2,500	5,000	10,000	10,000	10,000	37,500	0	0	0	41,734	97,068		Surpassed final target
1.1.c) Total increase in installed storage capacity (dry or cold storage) as a result of USDA assistance *(Standard 11)*, disaggregated by type of storage (cold/dry), type of installation (refurbished/new)								0	0	0	0	0		Far from achievement; not in TNS-USDA contact
(Expected result) OUTPUT 1.2: Increased use of financial services														
1.2.a) Value of loans provided as a result of USDA assistance *(Standard #6)*, disaggregated by male/female/joint/not applicable; by type of institutions (SILC, MFI, banks, other); by loan size: micro (USD 0 to USD 1,000), small (USD 1,000 to USD 10,000), medium (USD 10,000 to USD 100,000), and large (USD 100,000 and above)							2,995,900	0	1,659,660	2,637,986	5,271,653	7,557,069		Surpassed final target

Table 8

Table of BeninCajù Indicators Including Yearly and Final Targets, Baseline, Semester and Midterm Values and Whether Results are on Track

Indicators	Baseline	Fiscal Year					Target	Semester					Midterm	Progress
		2016	2017	2018	2019	2020		1	2	3	4	5		
1.2.b) Number of individuals receiving financial services as a result of USDA assistance *(Standard #4)*, disaggregated by male/female		1,650	8,946	17,892	25,188	25,886	33,413	-	-	-	3,835	7,914		Somewhat behind
1.2.c) Number of loans disbursed as a result of USDA assistance *(Standard #5)*, disaggregated by gender; by type of institution (SILCs, banks, MFIs); by loan size: micro (USD 0 to USD 1,000), small (USD 1,000 to USD 10,000), medium (USD 10,000 to USD 100,000), and large (USD 100,000 and above)		1,650	8,946	17,892	25,188	25,886	33,413	-	-	-	6,215	13,634		Somewhat behind
1.2.d) Number of firms in target region that are accessing credit through any type of formal loan product (FFPr 2 2.3.1 (#1) – Illustrative), disaggregated by financial product	4	7	8	14	19	20	21	0	4	8	4	14		On track
(Expected result) OUTPUT 1 3: Improved farm management (operations, financial)														
1.3.a) Number of individuals who have applied improved farm management practices (i.e., governance, administration, financial management) *(Standard #3)*, disaggregated by male/female type of individual (agricultural producer, people in firms, people in government)		3,450	12,150	23,400	34,000	34,000	34,000 (m: 23,800, f: 10,200)	0	0	4,757	9,514	9,514 (m: 7,842, f: 1,672)	73.2% of surveyed individuals	Somewhat behind
1.3.b) Percent of agricultural producers in target region/area who can identify key characteristics of a well-managed farm (FFPr 1.3.1 – Illustrative), disaggregated by male/female	n/a						80%						50.2%	Somewhat behind
(Expected result) OUTPUT 1.4: Increased capacity of government institutions *(linked to both production and marketing)*														
1.4.a) Percent of producers satisfied with technical assistance services from INRAB and MAEP extension agents (Custom), disaggregated by commune							65%	-	-	-	-	- (no data)		Far from achievement
1.4.b) Number of international markets covered by government trade promotion agencies (i.e., buyer research reports, regulations and standards reports, etc.) (FFPr 2.4.1 (#5) – Illustrative), disaggregated by major market (North America, Europe, Middle East)		2	5	7	8	8		0	0	0	0	0		Far from achievement

Table 8

Table of BeninCajù Indicators Including Yearly and Final Targets, Baseline, Semester and Midterm Values and Whether Results are on Track

Indicators	Baseline	Fiscal Year					Target	Semester					Midterm	Progress
		2016	2017	2018	2019	2020		1	2	3	4	5		
(Expected result) OUTPUT 1 5: Increased access to market information														
1.5.a) Percent of producers (farmers) who have access to current market information through their cooperatives or producer associations (FFPr 1.4.3/2.4.3 (#5) – Illustrative), disaggregated by male/female	15%	9%	35%	68%	85%	85%	85%	-	-	-	68%	68%	73%	On track
(Expected result) OUTPUT 2.1: Increased value added to post-production agricultural products														
2.1.a) Average margin (USD/metric ton) between farm gate price and end product price for selected agricultural value chains (FFPr 2.1 (#2) – Illustrative), disaggregated by product		3,650	3,513	3,458	3,403	3,375	3,375	0	0	0	0	1,706	Apple juice: 2,053 (95.8%) RCN: 1,266 (51.7%)	Inappropriate target. Should have different targets by product. Should consider reporting as percentages.
2.1.b) Volume of product (metric tons) meeting international quality standards (FFPr 2.1.1 (#1) – Illustrative), disaggregated by quality type (AFI, HACCP, other)		12,331	16,874	22,538	26,137	28,733		127	620	1,101	1,999	3,074		Far from achievement
2.1.c) Percent of registered firms in target sectors that obtain certification with international standards related to product quality (FFPr 2.1.1.1 (#1) – Illustrative), disaggregated by quality type (AFI, HACCP, other)							75%			100%	100%	13 firms (100%) (does this include non-operational?)	4 firms (AFI, HACCP – 100%) (BRC – 50%)	Surpassed final target
(Expected result) OUTPUT 2 2: Increased efficiency of post-production processes														
2.2.a) Average production cost per unit (should be cost per USD 1 00 of product sales, target appears to be USD/metric ton) of output for selected agricultural commodities (cashew) (FFPr 2.1.2 (#2) – Illustrative), disaggregated by size/type of processor	USD 1.16	515	490	465	440	415	415	0	0	0	0	5,121		Inappropriate target. Should have separate targets by product. Need to follow indicator definition.
• Cashew apple juice												1,826	1,899 USD/metric ton USD 0.884	
• Cashew kernel												8,416	Limited info	
2.2.b) Percent of product loss due to spoilage or improper processing (Custom), disaggregated by end product	5%	20%	15%	10%	5%	5%	5%	-	-	-	-	4.4%	Not reported in survey	Surpassed final target
• Cashew apple juice												6.7%	Usually unknown	
• Cashew kernel												2 07%		

Table 8

Table of BeninCajù Indicators Including Yearly and Final Targets, Baseline, Semester and Midterm Values and Whether Results are on Track

Indicators	Baseline	Fiscal Year					Target	Semester					Midterm	Progress
		2016	2017	2018	2019	2020		1	2	3	4	5		
2.2.c) Percent of agricultural producers (farmers) in the target region that have access to quality storage and/or post-harvest processing facilities (FFPr 2.1 2.2 (#2/#3) – Illustrative), disaggregated by male/female							75%	-	-				17.9%	Far from achievement
(Expected result) OUTPUT 2 3: Increased access to markets to sell agricultural products														
2.3.a) Number of distinct markets to which selected agricultural products are exported (FFPr 2.2 (#2) – Illustrative), disaggregated by processor	9	4	7	9	11	12	12	0	5	18	22	15	9+ (information not provided by all nut processors)	Surpassed final target
2.3.b) Number of purchase contracts resulting from processor attendance at international trade fairs/conferences and trade missions (Custom), disaggregated by processor	6 (based on 5 years prior)	14	21	24	27	30	30	0	0	1	4	4		Far from achievement
(Expected result) Output 2.4: Improved transaction efficiency														
2.4.a) Number of private enterprises, producers' organizations, water users' associations, women's groups, trade and business associations and community-based organizations (CBOs) that applied new technologies or management practices as result of USDA assistance *(Standard #7)*, disaggregated by gender of ownership/membership; new/continuing; type of organization		8	26	25	11	1	72 (depends on type of organization)	0	0	39	166	182		Surpassed final target
2.4.b) Number of shared value initiatives identified and tested (Custom), disaggregated by value chain actor link; commune		2	4	7	10	10	33	0	0	0	0	0		Far from achievement
2.4.c) Percent of firms in selected value chains that actively use business/marketing plans (FFPr 2.3.2 (#3) – Illustrative), disaggregated by firm size	50% (based on four firms)	17%	36%	65%	83%	90%	90%	-	-	100%	100%	100%	78% (TNS should clarify if they are being actively used)	On track
(Expected result) Output 2.5: Improved capacity of key organizations in the trade sector and extension services														
2.5.a) Number of industry associations who are aware of international production and handling standards (FFPr 2.4.4 (#1) – Illustrative), disaggregated by standard type (AFI, HACCP, other)	1	1	3	3	3	3	3	1	2	2	2	4		Surpassed final target

Table 8

Table of BeninCajù Indicators Including Yearly and Final Targets, Baseline, Semester and Midterm Values and Whether Results are on Track

Indicators	Baseline	Fiscal Year					Target	Semester					Midterm	Progress
		2016	2017	2018	2019	2020		1	2	3	4	5		
2.5.b) Number of members of targeted producer associations/cooperatives (FFPr 1.4.4 (#4) – Illustrative), disaggregated by male/female; by length of membership (to understand turnover)							31,850	0	2,626	5,252	7,031	15,141		On track
2.5.c) Number of industry associations who are aware of international food safety standards		1	3	3	3	3	3	1	2	2	2	4		Surpassed final target
2.5.d) Percent of producers satisfied with technical assistance services from DEDRAS, FENAPAB, CRADIB extension agents													82.9% (m: 83.1%, f: 81.6%)	
(Expected result) Output 2.6: Increased leverage of private-sector resources														
2.6.a) Value of joint public/private initiatives aimed at improved agricultural productivity and production (FFPr 1.4.5 (#4) – Illustrative), disaggregated by subject area							Appears that no target defined						Not yet being reported	Far from achievement
2.6.b) Value of new public and private sector investment leveraged as a result of USDA assistance *(Standard #9)*, disaggregated by type of Investment (private/public) (USD) (cumulative)							1,000,000	0	0	7,189	495,336	537,271		On track
2.6.c) Number of public-private partnerships formed as a result of USDA assistance *(Standard #8)*		0	1	1	1	1	4	0	0	1	6	6		Surpassed final target
2.6.d) Value of new private sector investment leveraged as a result of USDA assistance, disaggregated by subject area, type of investor (public or private) (USD) (cumulative)							1,000,000	0	0	7,189	495,336	537,271		On track

Although the value for the indicator for application of new farm management technologies or techniques is slightly behind, training activities are fully underway and the target should be met. The indicator for new job creation is discussed in detail further below. The indicator for individuals who can name three key characteristics of a well-managed farm was not measured during the baseline, so it is difficult to assess progress. The current values for the indicators of loans disbursed and individuals receiving financial assistance are slightly behind but, because of the rapid increase in the number of individuals who are part of SILCs, these targets will likely be met.

No or little progress has yet been made for the indicators of "installed storage capacity" or "percent of agricultural producers (farmers) in the target region that have access to quality storage and/or post-harvest processing facilities." The evaluation team understands that this activity is just starting now; however, TNS has stated that they probably will not invest in infrastructure development. It should therefore be clarified that the indicator for "installed storage capacity" (1.1c in Table 8) is not in the USDA-TNS contract, but was added to the project PMP at some point during the first half of the project. Both quantitative and qualitative findings point towards BeninCajù producers having limited access to such infrastructure—only 17.9% of BeninCajù individuals stated they had access to a storeroom. The quantitative findings are lower than those of the BeninCajù yield survey, which reported that 32% of producers stored their crops in an appropriate storage warehouse (the 17.9% from the midterm also included some producers' rooms). For many producers, this lack of access is a result of geographical distance, as well as a lack of a governance structure/mechanism to manage the existing facilities. Producers participating in the qualitative exercises mentioned that there were no storage facilities for groups, which we see as lack of facilities at the village/community level. The consulting team has noted that there are storage facilities available, but these are limited and distant from many producers and villages.

TNS has reservations about investing in storage infrastructure at the community level, as this would entail maintenance and other costs that communities may not be willing or able to bear. Moreover, several other NGOs are already doing infrastructure development. TNS also does not know if the return on investment is enough to make it a valuable use of resources. A community participation element whereby communities make financial and in-kind contributions to this investment could perhaps generate sufficient buy-in and co-ownership to ensure that communities would continue investing in maintaining it. CVPAs could be responsible for managing the storage facilities and develop a governance process for it. TNS has indicated that they would prefer to focus on creating a manual for FENAPAB to promote storeroom use.

> "Why has BeninCajù not built storage spaces for the groups?" – *FGD CVPA (translated)*

No progress has been made on the "percentage of producers satisfied with technical assistance services from INRAB and MAEP extension agents," because the newly-formed government agency ATDA4, which was set up by MAEP to coordinate all cashew-related extension work and research, became operational only recently. Staff were only assigned in August 2018. During the midterm evaluation, the percentage of producers satisfied with technical assistance services from DEDRAS, FENAPAB, and CRADIB extension agents was examined and revealed a high degree of satisfaction (82.9%; male: 83.1%, female: 81.6%).

BeninCajù's first activities associated with the indicator "number of international markets covered by government trade promotion agencies" began in 2017 with APIEX, which is the only government trade promotion agency in Benin. Events focused on the global cashew industry, as APIEX had limited knowledge about it. Currently, BeninCajù is moving to the next phase of developing specific market guides. Similarly, for the indicator "number of shared value initiatives identified and tested," the project

just started the farmer-factory linkage activities related to this indicator last semester. Similarly, for the indicator "value of joint public/private initiatives aimed at improved agricultural productivity and production," the ATDA4 initiative is the first case where a defined amount of new public money (as opposed to in-kind or other contributions based on already committed resources) is being invested; it is now being finalized and will be included in the next project report.

Finally, for the indicator "number of purchase contracts resulting from processor attendance at international trade fairs/conferences and trade missions," relationships (and eventually contracts) between processors and buyers develop over long periods of time and from multiple interactions. This makes it difficult to attribute a contract to one specific interaction. The BeninCajù project prefers to report specific results against this indicator with caution, meaning it will unlikely reach the final target.

Producer Usage of Improved Techniques and Technologies

Generally, BeninCajù producers reported applying good agricultural practices and harvest and post-harvest practices more often than they did good farm management practices (see Table 9). Altogether, only 78.6% of surveyed BeninCajù producers reported implementing good farm management practices. Some producers said they had not applied these practices because they had not received training, even though project documentation indicated they had been trained. Simply asking if individuals applied the techniques in the previous year (as is currently being done in the yield survey) does not take into account whether a producer was already applying the techniques before the training—for example, if a producer pruned trees adequately before the training, project assistance has not improved the use of this technique. Therefore, questions in the yield survey should be reformulated to adequately address indicator values for applying improved techniques (1.1a and 1.3a; see Table 8).

Table 9

Percentage of BeninCajù Producers Reporting to have Learned and Applied Techniques in the Three Main Training Categories, by Silver and Gold Training

Practices learned and applied	BeninCajù		
	Gold	Silver	Total
Good agricultural practices			
Learned (% yes)	91.8	94.1	93.2
Applied (% yes of learned)	94.0	97.2	96.0
Applied (% yes of total)	86.3	91.4	89.5
Good harvest and post-harvest practices			
Learned (% yes)	95.1	94.7	94.9
Applied (% yes of learned)	94.3	97.2	96.1
Applied (% yes of total)	89.6	92.1	91.2
Good farm management practices			
Learned (% yes)	85.2	85.1	85.2
Applied (% yes of learned)	88.5	94.6	92.3
Applied (% yes of total)	75.4	80.5	78.6

For practices learned and applied, enumerators were instructed not to read potential answers aloud; the following are therefore the answers reported by BeninCajù producers. The questions were worded such that producers were supposed to name practices they did not apply or did not apply well before the training. However, it is likely that in some cases producers reported the best practices that they use, regardless of whether they were using them before the training.

Image 9
Tools and Chemicals for Plantation Management



For good agricultural practices, the most commonly reported applied practices (from 435 BeninCajù producers) were thinning out (83.0%), pruning (79.1%), and cleaning (73.8%), while some moderately applied practices were avoiding burning (37.0%), pest and disease control (26.2%), chemical treatment (19.5%) and improved choice of intercropping crops (14.0%) (see Image 9). Techniques that were very irregularly applied were plowing for water control (4.8%), using nursery seedlings (4.4%), 50-cm holes (3.9%), valuation of pruning and thinning products (3.2%), management of organic matter from the plantation (0.9%), and beekeeping practices (0.7%). Generally, findings from the qualitative exercises support the survey findings, with the techniques mentioned as most often used being weeding, pruning, spacing between trees, and fire breaks.

> "Pruning provides good results (improved yields) but the availability of a chainsaw for cutting larger limbs is a problem. Uptake for thinning and pruning seems to be limited by lack of appropriate tools." – *KII Demonstration Plot Owner (translated)*

For good harvest and post-harvest practices, the most commonly reported applied practices (from 443 BeninCajù producers) were collecting mature nuts regularly (92.8%) and drying nuts on an appropriate surface (54.0%), while some moderately applied practices were using jute bags (36.6%), removing impurities from nuts (32.7%), separating the nut from the apple with nylon string (30.5%; 69.0% of farmers said they were taught this technique), and storing nuts in a ventilated place (24.2%). Techniques that were applied very irregularly were graining (0.9%), and the kernel out-term ratio (KOR) (1.4%). Very few producers surveyed were able to give correct KOR values,[45] although some appeared to understand the concept as applied by buyers.

Table 10 shows the reported use of many of these good agricultural practices and harvest and post-harvest practices. Generally, the results are comparable to or greater than the commonly reported applied practices as a result of training discussed above. Usually, it is a lack of financial resources (such as for renting equipment or purchasing labour) or a lack of time that limits implementation of the practices learned. However, there is also an opportunity for some entrepreneurial agent or group of agents to meet the demand for support services by producers. This opportunity is elaborated further in Section 6, Recommendations.

[45] This was somewhat expected, as determining KOR values involves a rather complex sampling and mathematical calculation requiring specialized tools not readily available in Benin. TNS is currently assessing how to train and equip cooperative leaders, buyers and ATDA4 agents in regard to KOR determination.

For good farm management practices, the most commonly reported applied practices[46] (from 382 BeninCajù producers) were knowing expenses and income (62.0%) and calculating production costs (61.0%), while some moderately applied practices were participating in cooperative bundling (34.6%), selling nuts at least at market price (25.1%), investing in production (15.4%), saving and borrowing at the right time (13.6%), and participating in a cooperative group (11.3%). Techniques that were very irregularly applied were using a business plan (7.1%) and joining a SILC (4.5%).

It appears that practices that could lead to alternative incomes—such as sales of cashew apples and firewood (a by-product of orchard management) and beekeeping—are also not being applied regularly. This represents an opportunity for BeninCajù to further promote these income-generating activities (IGAs), although in some areas there may be a limited market for cashew apples and 46.3% of producers reported they keep the wood for personal use. Techniques that could help conserve and control water, and help mitigate the impacts of extreme climate and weather, also seem to have limited uptake. However, producers in Assantoun village mentioned digging a hole around a tree to capture rainwater and letting the vegetation collected from weeding rot at the base to improve the tree's nutrition. In addition, in Komiguea village, where Tolaro is providing extension services for farmers to help them reach "bio" and "fair trade" certification for their nuts, farmers also mentioned that they should not use fertilizers or other chemicals in the production of cashews.

The consultants also carried out an analysis of the Gold and Silver training packages that are delivered to cashew producers at the village level (see Appendix 25). Both packages provide training on topics that include farm and plantation management, cashew production and post-harvest handling, association-led access to finance for inputs and crop aggregation, other entrepreneurial activities, and CRS' "smart skills" package. Gold training is comprised of 28 days of training over a two-year period and Silver training is 10 days over a one-year period. The evaluation indicated that Gold training is essentially Silver training done twice. Moreover, although there were some differences between producers who completed the Gold and Silver training packages, there were no consistent trends showing that Gold training consistently provides greater benefits than Silver training. Therefore, instead of providing both levels of training, in the future BeninCajù may want to consider focusing on providing Silver training in the first year and refresher training in the second year to help reinforce the most important topics from the previous year.

Farm Gate to End-Product Price

RCN and Kernel

For the 2018 campaign season, producers reported selling their RCN for an average price of FCFA 660/kg, which was considerably lower than the prices reported by the processing plant that shared its figures, which were FCFA 860/kg (2017) and FCFA 926/kg (2018). The difference would account for the cost of logistics, handling, and supplies and the margins of wholesalers and traders. Both the baseline study and the midterm evaluation found very few farmers selling directly to processors. For example, the baseline study found that only 11 sales, for BeninCajù and control producers combined, were reportedly made to domestic cashew processors, whereas village buyers accounted for 1,423 of the recorded sales. Similarly, the midterm evaluation found that only 12 of 1,355 sales were reportedly made to domestic processing

[46] In terms of the practices learned and applied, enumerators were instructed not to read out the answers, so the following is what was reported by the BeninCajù producers. The questions were worded such that producer responses were supposed to be practices that the producer did not apply or did not apply well before the training. However, it is likely that in some cases producers reported the best practices that they use, regardless of whether they were doing this before the training.

units, while village buyers and merchants accounted for 958 and 239 sales, respectively. KIIs revealed that these intermediaries could be making between a 17% to 20% operational margin. This percentage has increased over the years and is too constraining for the value chain to support, putting downward pressure on the price paid to producers and upward pressure on the price paid by processors. Hence, having direct linkages with farmers could help processors' profitability if they are able to invest in an adequate procurement network. Currently, Fludor, with the help of BeninCajù, is starting to form direct farmer linkages. KIIs also revealed that Tolaro has links with farmers in some 20 villages in the communes of Bante and Bassila, and Afokontan in some 10 villages in the commune of Tchaorou.

Cashew Apple

Apple processors said they buy cashew apples for between FCFA 15/kg and FCFA 35/kg, with FCFA 20/kg to FCFA 25/kg being the most commonly cited. Ultimately, it appears that processors will pay an extra FCFA 5/kg if apples are brought to the factory, as this is cost-advantageous to both parties. Examining the potential net revenue from cashew apple juice and the capacity utilized in metric tons of cashew apple, it appears to range between FCFA 28/kg and FCFA 313/kg, with the average being FCFA 105/kg.[47]

Only 0.4% of producers (4 of 986 individuals) reported they had sold their cashew apples.[48] Overwhelmingly (91.9%), farmers reported not selling apples because they are difficult to sell. Considering that some cashew apple processors reported having difficulty obtaining raw product, improving farmer-processor linkages could be beneficial to both parties. Currently, apple processors report only having indirect linkages with farmers to procure cashew apples. However, considering the large volume of cashew apple production (approximately 100 kg per person in 2018), the scope would likely be limited to areas close to cashew apple processors. Further processing of cashew apples into jams, jellies, and especially alcohol are also promising areas of growth. Additional information on the cashew value chain is supplied in Appendix 26.

Measuring the Income Generated by Cashew Production

Even in September, well after the end of the cashew season, producers were able to provide detailed descriptions of their cashew sales (although 236 producers provided a value for "combined sales," payments in nuts, and expenses for cashew plantation management). This suggests that they are paying relatively close attention to their expenses and revenue from cashew production and can provide realistic estimates of cashew income. However, there can be a lot of stealing from plantations and only rough estimates of the value lost can be made. The survey found that individuals estimated an average of 107.5 kg being stolen, ranging from 0 kg to 1,500 kg. The threat of stealing can also influence when farmers harvest, and potentially whether they follow recommended best harvest practices, since they will try to harvest earlier to minimize theft.

The question asking cashew farmers to state their cashew income provided values that were quite close (BeninCajù males 1.9%, females 19.9%, total 3.5%; control males 4.3%, females 8.9%, total 4.2%),[49] in the majority of cases (with the exception of Silver BeninCajù females), to the much more intricate calculations

[47] It should be noted that the estimates for metric tons of cashew apple used over a season appeared to be rough estimations. It was also noted during surveys that some processors are lacking in the areas of recording and accounting. These factors could account for the large range in values.
[48] Only one of the four producers provided both quantity and revenue, with reasonable values. That individual sold for FCFA 15/kg.
[49] These values are calculated using the formula: [(cashew revenue – direct question)/direct question] *100.

that include all cashew sales (see Table 10). Similar findings were found for net cashew income (see Table 10) and when results were standardized by hectare, number of trees and number of productive trees. Thus, a simple survey (indicating gender, location, training, cashew income and plantation characteristics) could be implemented via Short Message Service (SMS)[50] or in person to a very large number of project beneficiaries and would likely provide accurate results. The revenue from cashew apples (four of all survey respondents) and cashew wood (a by-product of orchard management; 29 of all survey respondents) was extremely limited and therefore was not included in the calculations, so as to maintain consistency with previous studies. If these additional cashew revenue sources become more common, they could be included in the calculations.

Also of note is that an average 56.9% of a producer's revenue comes from cashew production. This result is similar for both genders across both BeninCajù (57.6%; males: 57.4%, female: 58.5%) and control groups (56.1%; males: 56.4%, female: 54.3%).

Table 10
Comparison of Average Results by Gender for Net Cashew Income, Cashew Revenue and the Direct Survey Question on Cashew Income

Gender	BeninCajù			Control
	Gold	Silver	Total	
Net cashew income (FCFA) – Calculated from sales and uses and expenses				
Male	926,166	652,303	740,437	629,917
Female	391,196	793,131	523,929	282,160
Total	800,463	668,570	702,498	573,407
Cashew revenue (FCFA) – Calculated from sales only				
Male	933,357	669,246	752,611	616,187
Female	404,249	745,646	511,992	247,760
Total	809,031	678,071	710,583	556,317
Direct question on cashew income				
Male	897,183	670,738	738,520	590,559
Female	439,890	491,659	426,999	227,440
Total	793,022	650,028	686,497	533,918

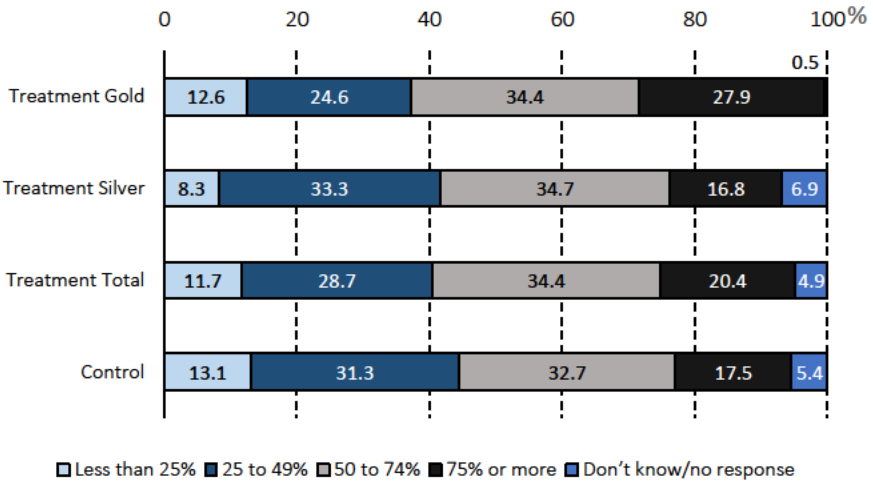
Another finding relates to the method used to standardize income among producers who have farms of different sizes. The two most common methods are to standardize by hectare or by the number of productive trees. The midterm survey asked producers to provide their plantation size in hectares (995 responses), and to provide the number of trees (843 responses) and of productive trees (673 responses) in their plantations. Producers appeared to be able to self-report the value for "trees" much more easily than for "productive trees." Therefore, the results for productive trees are less reliable because of the smaller sample size. In the BeninCajù villages, producers reported a 0.63 ratio of productive trees to trees, whereas control village producers reported a 0.70 ratio (numbers based on those producers that provided both values). Thus, BeninCajù producers report a lower percentage of productive trees than control producers, which could affect per-hectare measurements. All producers were able to estimate the size of their plantation(s).

[50] We recognize limitations such as literacy, various local languages, and not collecting cell phone numbers.

Producers were also asked the percentage of their plantation(s) that are productive, at intervals of 25%. Findings for each interval are very similar between BeninCajù and control producers, with 20.4% of BeninCajù producers and 17.5% of control producers saying that 75% or more of the trees in their plantation(s) were highly productive. There is a great range in the percentage of highly productive trees across the producers surveyed (see Figure 2). These findings should be taken into consideration for future studies that make extrapolations based on assessing the number of productive trees in a small area of a plantation; specifically, results should always be confirmed with the producer.

Figure 2

Percentage of BeninCajù and Control Producers Reporting on the Percentage of Trees in their Plantation(s) that are Highly Productive



SILC Groups and Financial Linkages Affecting Farm Investment

There are four ways for a producer to get a loan: from a SILC; if a SILC is legally registered, through an MFI;[51] from an MFI directly to an individual producer (must have a larger operation); and through an MFI providing loans to a registered CVPA. Only 17.1% of BeninCajù producers are members of SILC groups. As of March 2018, 224 SILC groups had been established, with a total of 6,686 members (69% female) across the project areas. Additionally, in a study conducted by CRS' BeninCajù M&E team,[52] 92% of the surveyed participants were cashew producers. All SILC members save money, a key requirement for participating in SILC groups, and 96% of participants have access to solidarity funds, a second contribution that is used by members in case of an emergency. During the last reporting period (Semester 5), SILC members used USD 402,161 worth of credit out of the total USD 608,727 that has been used since project inception, demonstrating a rapid increase in borrowing from SILCs.[53]

The consultants undertook an analysis of the savings and borrowing habits of surveyed producers (see Appendix 27), which revealed that producers are also accessing MFIs for credit with increased frequency. However, the majority of producers go to SILC groups for fast credit, albeit limited in scale. The process of

[51] To date, loans provided through a SILC legally registered through an MFI do not appear to have occurred (KII). There is no SILC registration legislation to the best of our knowledge.

[52] *Impacts du SILC/CECI sur les chaines de valeur de cajou et la qualité de vie des membres bénéficiaires – Rapport*.

[53] *Semester 5 Narrative Report. October 1, 2017, to March 31, 2018.*

securing credit from a SILC group can be immediate or very fast—groups are self-regulated, with some allowing for immediate loans and others requiring approximately a week to approve and disburse the loan. Getting a loan from a SILC is also significantly less complicated than securing one from an MFI. MFIs require a complex and cumbersome process with extensive document requirements and, perhaps more prohibitive, collateralization of assets to guarantee payments. Producers expressed concerns about losing land if they failed to repay an MFI loan, but no such concern was expressed about loans from SILC groups. However, there are some challenges with credit provided by SILC groups—namely, the short repayment schedule (two to three months), the lack of funds when multiple members want to borrow money at the same time, and the high interest rate charge (5% to 10% monthly). The first two challenges could be tackled by connecting the SILCs to MFIs to access capital for group loans.

> "When you borrow money and you can't pay, the creditor takes a portion of your land for his money he loaned from you. The area of this portion of land varies according to the amount borrowed." – *FGD CVPA (translated)*

> "We are forced to borrow money from the rich in the village sometimes. But this practice did not benefit us. For example, if you take FCFA 10,000 against a bag of 100 kg of cashew nuts, you are obliged to return the 100 kg—when this bag could be sold for FCFA 50,000 or even FCFA 80,000." – *FGD Female Producers (translated)*

In the quantitative survey, 20.0% of BeninCajù individuals (males: 19.6%, females: 21.8%) and 1.7% of control individuals said they had been part of a SILC (17.1% of BeninCajù individuals are still part of a SILC, compared to 0.0% of control individuals). When asked how the SILC improved their quality of life, 69.9% said they can buy basic necessities during the lean season, 18.4% that they can hold off selling cashews at a low price, and 22.3% that they can invest in cashew plantations, while 10.7% said that they do not need to borrow from tontines. This illustrates that the SILCs are helping to increase the resilience of project beneficiaries and, in some cases, lead them to invest in their cashew plantations. In fact, the qualitative exercises revealed that most producers who use credit to invest in their plantations accessed it through SILC groups. These findings differ somewhat from the quantitative findings, in that SILC group members reported that the primary purpose of SILC credit was to invest in productive activities (of which farms are an important part), whereas others stated that credit was used to manage the fields. Similarly, a study conducted by CRS' BeninCajù M&E team[54] showed that 46.4% of the 112 respondents to the SILC group survey stated that they used funds borrowed from SILC groups to manage the fields or harvest cashew nuts, while 82.5% reported they had accessed funds to address a health problem in their family.

> "Yes, we are all members of the SILC group. Better still, we had all already obtained loans from the SILC group. These loans have allowed us to maintain our plantation, to buy cashew nuts from other producers in order to sell them for more." – *FGD Female Producers (translated)*

> "As soon as we put in practice these elements, we obtain a lot of benefits. The internal savings allow us to easily make loans to manage our fields." – *FGD Female Producers (translated)*

It is the view of the consulting team that SILC groups represent a very important mechanism, not only for accessing credit for productive purposes, but also for providing overall access to financial services, including savings (the basis of the SILC groups) and insurance products (solidarity funds). These services

[54] *Impacts du SILC/CECI sur les chaines de valeur de cajou et la qualité de vie des membres bénéficiaires – Rapport*.

increase the resilience of producer families. Additionally, there have been some unintended benefits of the SILC groups. Members of some of the groups we met mentioned that families are more likely to stay together because the loans reduce financial stress and because a training module of the SILC program ("the Harmonious/Faithful Family") taught participants the importance of promoting a harmonious and positive environment at home, including improved communication between husband and wife.

Change in Attitude of Financial Institutions

Generally, BeninCajù works as a mediator and/or intermediary between processors and banks. The formal financial institutions the evaluation team visited were very satisfied with the support and training they received from the project. BeninCajù's engagement as an intermediary is also highly valued by financial institutions, particularly when working with a new sector/value chain, because it reduces their need to build internal capacity for this role, including the need to hire more human resources.[55]

The support the project provides can be divided into three areas:

- Raising awareness on the specificities of the cashew value chain, including about how producers, processors and off-takers operate, as well as opportunities and challenges.
- Preparation of loan requests and helping processors provide the necessary information and documentation to request a loan.
- Monitoring processors' RCN stocks, which allows the financial institution to know if the loans are being used for what they were requested for.

In general, BeninCajù's involvement has made financial institutions somewhat more comfortable engaging with processors of the cashew value chain. However, since the beginning of the project, a few nut processors have defaulted on their loans. From the KIIs the consultants conducted with *Société Générale Bénin* and Oikos Credit, it was clear that a substantial amount of the portfolio loaned to nut processors was at risk, although this is the case globally due to the cashew market crash. Thus, financial institutions are currently very reluctant to lend to processors, whom they see as a high-risk group. Recently, some financial institutions have asked BeninCajù to take the first loss and guarantee some of the loans given to processors. The project is in the process of studying this possibility.

FAGACE Guarantee Fund

The African Guarantee and Economic Cooperation Fund (FAGACE) is an international financial institution specialized in promoting public and private investments. Its main engagement with BeninCajù has been providing guarantees for loans in the cashew value chain sector. The guarantees are provided directly to the national financial institutions and cover up to 50% of the loan principal borrowed.

FAGACE is in the process of signing a Memorandum of Understanding with BeninCajù. It is generally satisfied with the exposure the project has given it to the sector. FAGACE would also welcome the opportunity to provide guarantees against international loans, provided they were channeled through a national financial institution. The ideal scenario would be a 75% foreign and 25% national loan through a national bank to which FAGACE would provide a 50% guarantee on the entire loan.

[55] In the consultants' view this does not pose sustainability issues, as it represents an initial support for a new industry. If the processors perform well, then these costs will be absorbed by the financial institutions. If processors default on their repayments, it is not this support that will make financial institutions more likely to provide loans.

Traditionally, FAGACE provides guarantees for loans for capital and infrastructure projects but, in the case of BeninCajù, the loans are mostly to finance operations, particularly acquisition of RCN. FAGACE would be open to providing guarantees to loans that would cover part capital/infrastructure investment and part operational funding. This opens the possibility of multilateral arrangements among processors, off-takers, national banks and BeninCajù to develop innovative financing products resulting in lower interest rates for processors. FAGACE is also open to providing guarantees for funds operated by MFIs directed at producers and apple processors.

MFIs

The representative of the MFI interviewed said the bank is much more comfortable and open to providing credit to cashew producers if they are members of a CVPA or similar group working with the BeninCajù project. Being a participant in the BeninCajù project reduces an MFI's due diligence requirements for a producer because of the perceived lower risk and higher quality and quantity of production. BeninCajù producers also generally belong to formal or informal CVPAs and MFIs consider them less risky than non-organized producers. Survey findings also suggest that more surveyed BeninCajù producers have accessed MFI loans than those in the control group. Apple processors have been able to access more loans than before the project, primarily through MFIs. A few apple processors noted that securing these loans will likely help them access financing again; however, this will depend on their ability to repay the loans, which could be compromised by the difficulty they have been having selling their juice. Generally, MFIs continue to trust cashew producers and are willing to support them financially; however, they are less keen to support cashew apple processors because of the perceived risk of payment default.

General Finance Access

None of the processors mentioned the co-investment IEDF set up by BeninCajù, which seems not to have been used yet. Perhaps unique opportunities to use these matching fund grants can be pursued. As of the last reporting period, a total of USD 5,417,495 has been mobilized in loans from banks, MFIs and SILCs since the project's inception, benefitting 7,914 people (4,940 women).[56]

Institutional Reforms in the Agricultural Sector

ATDA4

The establishment of the ATDA4[57] is seen as an important institutional reform, although it is still in the initial stages of implementation. It will still take some time for its activities to gain traction and momentum—for instance, training of extension agents for cashew production just finished this September. However, while the effectiveness of the extension services remains to be seen, the ATDA4 is an important institution that may be able to assume many of BeninCajù's activities when the project ends, helping to ensure the sustainability of project impacts.

[56] *Semester 5 Performance Report. October 1, 2017, to March 31, 2018.*

[57] ATDAs are government bodies coordinating agricultural activities in specific geographic areas. The various areas correspond to the products referred to as guiding value chains (*filières phare*). ATDA4 covers the centre of the country, and is considered the body in charge of the cashew value chain. ATDA4's roles include the selection of priority sectors/value chains for the cluster; interventions on the relevant links of the sectors/value chains to be developed/strengthened; the strengthening of relations between the different categories of actors; the establishment of strategic partnerships to address the problems of producers, processors, financial services, traders in agricultural products and their derivatives, and consumers; the promotion of hydro-agricultural development; and the development of agricultural mechanization and the construction of structural infrastructure in the cluster.

ATDA4 values BeninCajù's support and provides additional resources to leverage investments made by BeninCajù. For instance, ATDA4 has 32 extension agents and, if an agreement is signed, BeninCajù would train 16 of them. ATDA4 requested that BeninCajù train the additional 16 (to include all agents in the training), with ATDA4 covering the expenses.

Regulatory Framework on the Cashew Value Chain (Including Export Taxes)

The National Plan for Development of the Cashew Value Chain 2017-2021 is currently seeking approval by the Council of Ministers. This plan has four key objectives: an increase in the production of cashew nut; an increase in the transformation of the cashew nuts and shells; an increase in the transformation of cashew apple; and improvement of the trade and export mechanisms for cashew nut.

In 2018, the Inter-Professional Body of the Cashew Value Chain (IFA)—with representation from processors, producers and the government—recommended setting a minimum price for RCN.[58] In 2018, processors and producers had agreed to set the price at FCFA 500/kg. This price was seen as a compromise between the processors, who had established FCFA 400/kg as their goal for sustainability, and the producers, who wanted the price to be as high as possible. After coming to this agreement, the government counterparts raised the minimum price to FCFA 650/kg in an attempt to mobilize a greater number of producers to this strategic value chain. This created some reservations among processors, who think the government fails to value their role in the national economy and the employment they create. All stakeholders hope the National Plan for the Cashew Value Chain will promote the entire value chain more effectively through a governance body composed of processors, producers, and government representatives[59] that will be responsible for setting the minimum price for the RCN in a more structured and stable way.

All the nut processors view the regulatory framework and export taxes positively, although they are not entirely sure they are sufficient or effectively implemented. For example, one nut processor stated that the reforms are inadequate, and another that it is very difficult to make a profit. In 2017, the government established an export tax on RCN of FCFA 60/kg. This is a welcome development, although there were other recommendations—namely, to establish a preferential window for processor buying, as in Mozambique, or a maximum amount of RCN to be exported, such as is fixed at 85%[60] in Côte d'Ivoire. However, in spite of the export tax put in place, the international market price still has an enormous impact on the availability of RCN for processors.

> "We need to create fiscal barriers for export. National processors need preferential buying, and a preferential window for buying. It is important to discourage the export of RCN." – *KII Processor (translated)*

The FCFA 60/kg export tax on RCN was developed with the objective of funding some of the key stakeholders in the value chain—processors were to receive FCFA 10/kg of nuts exported, as an incentive for processing. An additional FCFA 25/kg from the tax was earmarked for the IFA and the cashew campaign monitoring committee. According to the stakeholders interviewed, the collected taxes have not been disbursed to the relevant stakeholders, but have instead been absorbed by the National Treasury.

[58] KII with the MIC. IFA made the recommendation but has no statutory authority to set the level yet.
[59] KII with the MIC and referred to in the *Programme national de développement de la filière anacarde 2017-2021.*
[60] The maximum fixed export rate was not beneficial for Côte d'Ivoire in 2018, making the preferential window a better option.

An interview conducted with the MIC suggested that BeninCajù could support the government in overseeing the use of these funds.

Ultimately, the reforms appear to be moving in the right direction; however, during the next cashew campaign it will be important to see how these changes have been implemented.

Non-State Actors

BeninCajù has provided support to the CNTC and the IFA. Both groups are in the initial stages of development and will require support to become efficient and representative organizations:

- *CNTC* – BeninCajù began working with CNTC in 2016. It assisted CNTC in developing a resource mobilization strategy, and in developing links with the government and other stakeholders in the value chain, such as FENAPAB and IFA.

  When midterm data was being gathered, most members of CNTC were nationally-owned processors and CNTC was having challenges in mobilizing internationally-owned processors. Ultimately, CNTC needs support to be able to coalesce as a strong lobby group that meets regularly with government and other important stakeholders. Since the midterm fieldwork, BeninCajù organized a conference with all the nut processors, there have been elections and a change in leadership at CNTC, and BeninCajù is currently conducting a SWOT analysis to develop a strategic plan for strengthening the organization. As with all professional organizations, it will take time for an organization of this nature to mature and gain influence and solidity in its work. BeninCajù is providing relevant support to the organization, attempting to make it a body that is representative of all cashew nut processors.

- *IFA* – IFA is the governance body that represents the stakeholders in the cashew value chain. BeninCajù signed a cooperation agreement with IFA in 2017 and, in March of 2018, supported it to develop a draft resource mobilization strategy. BeninCajù also plans to develop a formal market information system with IFA for the entire value chain. IFA is still in its early years, but it is already an important actor in the cashew value chain. It developed minimum price recommendations for 2018 in collaboration with processors, producers and the government. As a new entity, it will take some time to become a solid organization, although it is already recognized as a representative body of the actors in this value chain.

Business Skills of Processors

The baseline survey asked processors if they had received business management skills and marketing training, whether they found this training to be sufficient, and how many of the practices promoted by the training they had applied. However, the nut processors who reported receiving training and had applied practices are no longer operational, and no cashew apple processors were interviewed. Also, the survey did not ask if processors had a business/marketing plan and if they were using it. Thus, comparisons with the baseline cannot be made effectively.

Qualitative findings revealed that nut processors were satisfied with the business skills imparted, although the support they required varied, depending on whether they were a nationally-owned or internationally-owned processor. National processors appreciated learning financial management skills, including how to develop business and marketing plans. Foreign-owned processors generally had stronger management resources and skills and most valued the support they received for certification and quality

assurance, and managing human resources. Most nut processors chose not to respond to specific survey questions about using business and management skills learned.

> "Best elements of our work with TNS are the farmer development program, the [CNSL] power plant, and the food safety certification support." – *KII Nut Processor*

Most processors of both cashew apple and RCN[61] said they had actively used business and/or marketing plans. However, when asked if they had enacted the strategies articulated in these plans, there seemed to be some confusion about the business vocabulary and a lack of adequate planning to reach targets. Most processors surveyed, for example, mistakenly identified targets as strategies. The question "how can your business plan be improved" solicited very few responses, and those who did respond identified a specific weakness that needed to be resolved, rather than a roadmap to resolving it. Only one nut processor responded, perhaps because internationally-owned processors make decisions at the headquarters level.

It also became apparent that many cashew apple processors could not provide reliable information on topics like transformation efficiency, transformation losses and costs, and quantities of raw product used. Thus, there seems to be ample room for apple processors to improve the management and recording of their day-to-day operations in order to identify inefficiencies and improve their processing operations. There is also a gap in these processors' marketing abilities. Although cashew apple processors appreciated the management training they received from BeninCajù, future business and marketing training is required. BeninCajù is planning to put apple processors through the BeninBiz accelerator training program, which should help to address these deficiencies.

As none of the nut processors were willing to share total RCN procurement or kernel sales figures, is it difficult to draw conclusions about the effectiveness and viability of their processing operations and the true impact of the project. Nevertheless, 50% of the nut processors surveyed attested that the project reduced their costs slightly, thanks primarily to more effective employees and the use of new technologies, as a result of training.[62]

Facilitation of Private-Public Partnerships (PPPs)

In the widest sense, a PPP can be seen as a governance mechanism, an agreement or understanding around the management of a particular issue or implementation of a specific program between private and public actors. Traditionally, PPPs have been identified as mechanisms for infrastructure development or large capital investments involving the intervention of private and public stakeholders. USDA uses the following definition:

> "A public-private alliance (partnership) is considered formed when there is a clear agreement, usually written, to work together to achieve a common objective. There must be either a cash or in-kind significant contribution to the effort by both the public and private entity. A private entity can be a for-profit entity, an NGO using private funds, a private company, a community group or a state-owned enterprise which seeks to make a profit

[61] Eight of the 10 cashew apple processors reported having a business/marketing plan (the two who said "no" likely said so because the direct owner was not present for the survey), and 6 of these 8 reported making use of this plan. Of the four nut processors, two did not respond and two stated having a business/marketing plan, but only one is making use of this plan.

[62] The one processor that did provide processing costs had a slight increase in costs from 2017 to 2018.

(even if unsuccessfully). A public entity can be donor-funded program participant, a national or sub-national government or state-owned enterprises which are non-profit."

Three PPPs have already been facilitated during the first half of BeninCajù: APIEX (Government of Benin Investment and Export Promotion Agency), the Sweet Benin Cashew Apple Group (now with 10 members), and CIPB (Benin Private Investors' Association). BeninCajù partnered with CIPB to launch *Cajou Demain* in May 2017, a national movement to raise the awareness of the general population, and investors in particular, of the incremental income benefits of cashew production. The goal of this movement is to support the government in its commitment to increase annual RCN production by three times the current production level by 2022. Through this effort, BeninCajù was responsible for drafting the most comprehensive strategy on raising the national RCN production for the whole of Benin.

When processors were asked if they felt that the BeninCajù project helped facilitate PPPs, most were not able to comment on any developments in this area and those who thought there had been interventions did not know if any milestones had been reached. Their responses revealed a significant lack of awareness, since all of the apple juice processors are part of Sweet Benin.

Assessment of Generation of Employment Opportunities

To date, the project has not been correctly calculating the indicator[63] for the number of jobs attributed to USDA assistance. The Semester 5 narrative report stated that the indicator was calculated by taking "the average number of jobs throughout the year at partner processing facilities." It showed that, as of March 31, 2018, the project had generated 423 jobs in processing facilities, of which about 100 (24%) were for women.[64] That report also stated that the indicator would be recalculated using the definition provided in the USDA manual for the next report.

The consultants feel this indicator needs to be recalculated for the life of the project, taking into account the entire indicator definition. However, this will require retroactive calculations. Although the USDA reporting mechanism says this information should be reported biannually, it would be more effective to collect it annually because of the seasonal character of sector activities. Each year, the project should ask processors for the minimum and maximum number of employees they had over the year. This would have to be done retroactively for the period September 2016 to September 2017; midterm data could be used for the period September 2017 to September 2018, although the project may want to reconfirm nut processor data. The project should also then ask processors whether and how BeninCajù activities had an effect on job creation.[65] Answers could include that the project accelerated job creation or that job

[63] FFPr Indicator 15 (Number of jobs attributed to USDA assistance) is defined as follows: "Jobs are all types of employment opportunities *created* during the reporting year in agriculture- or rural-related enterprises (including paid on-farm/fishery employment). Jobs lasting less than one month are not counted in order to emphasize those jobs that provide more stability through duration. Jobs should be converted to full-time equivalents (FTEs). Thus, a job that lasts four months should be counted as 1/3 FTE and a job that lasts for 130 days should be counted as 1/2 FTE. Number of hours worked per day or per week is not restricted as work hours may vary greatly. Each job created *should only ever be reported once* in order to add the total number of jobs across years."

[64] TNS' approach is to take the average who showed up at work per month and then take the average for 12 months to arrive at the total number of FTE jobs. This does not address the USDA indicator, which requests jobs created during the reporting year and that each job created should only ever be reported once. It is not appropriate to assume that all jobs in the processing plants are "attributed to USDA assistance," especially if the jobs were already there is in the past.

[65] Processors will know all the other factors that may be contributing to their job creation, which an outsider does not.

creation would not have been possible without project assistance—in the midterm survey, processors who said BeninCajù activities had led to job creation included reasons such as strengthened production capacity, strengthened human resources, entrance into the formal sector, and an improved economic and financial situation. Finally, the number of new jobs created and their duration should be provided—for the midterm evaluation, the consultants provided 3-, 6-, 9- and 12-month options to estimate FTE creation.[66] This figure can be cross-referenced[67] with the minimum and maximum numbers of employees over the years to ensure accurate values and that new jobs are only reported once. For example, information from apple processors[68] revealed 6 of the 10 reporting that BeninCajù had a direct impact on employment, creating a total of 300 FTE jobs (female: 290, male 10) over the last 12-month period.

It has been communicated that BeninCajù is not assessing whether producers have been able to provide additional employment as a result of BeninCajù activities. This is apparently because the target for this indicator was derived from processor job targets and because it might be too complicated to calculate FTE for producers, since those jobs are highly seasonal. The midterm survey assessed whether producers had hired employees and whether, for BeninCajù producers, they believed this was a direct result of BeninCajù assistance. Overall, a total of 19.8% of BeninCajù producers and 10.1% of control producers reported hiring employees over the last 12 months (X^2=17.16, df=1, p<0.001). Of the 101 BeninCajù producers, 21 (20.8%) reported hiring as a direct result of BeninCajù activities and a total of 28.5 FTE jobs (females: ~3.1, males: ~25.4) were created over the last 12-month period.[69] This number could be extrapolated to the entire BeninCajù trained population. The consultants recommend that BeninCajù assess additional employment created by the producers in the future.

4.2.2 Internal and External Factors

Two of the most important external factors affecting project success are related to the fluctuation and uncertainty of the price of RCN and the final price paid by off-takers of processed nuts. These two factors have a critical impact on the entire value chain, and fluctuations in price for raw or processed nuts have a tremendous impact on the profitability and sustainability of various stakeholders. The fluctuation of the price of RCN in the international market this year has influenced the capacity of the project to attain its objectives. Not all processors have been able to buy RCN at a viable price that would allow them to process RCN and sell the nuts to off-takers.

Producers are also heavily affected by the fluctuation of the RCN price, and some engaged in speculation in 2018. Some producers either chose not to or have not been able to sell all their produce in the 2018 campaign (see Image 10) as it was expected that, similar to the 2017 campaign, the price would go up later in the year (note that some producers may have meant "have not" at the price they desired). The price has, in fact, gone down (average price 2018[70] – February: FCFA 620/kg, March: FCFA 667/kg, April: FCFA 673/kg, May: FCFA 697/kg, June: FCFA 636/kg, July: FCFA 636/kg, August: FCFA 540/kg,

[66] Note that "jobs" should not be considered as "individuals." This will account for turnover and regardless of if one person or 10 people have filled that position for one year it would be considered 1 FTE job.
[67] This is not something to be included in the calculation, but is to make sure that processors are providing accurate numbers of jobs created during the year (and retroactively across years).
[68] Nut processors indicated that no job creation occurred as a result of BeninCajù assistance, which the consultants would recommend confirming.
[69] Note that for farmers it was asked the number of days that they hired new employees, and any responses that were less than 30 days were excluded. FTEs were calculated and added together to arrive at the final values.
[70] Not included "combined sales" values.

September: FCFA 602/kg) and some producers had not sold their nuts up to the time when data was gathered, as per both the qualitative and quantitative exercises.

If the National Plan for the Cashew Value Chain is passed, and some strategic measures are taken to ensure vertical integration of the value chain, then some of the uncertainty with regard to the fluctuation of the price of RCN may decrease, as processors would have secure access to RCN and producers would have a constant and viable channel to sell their produce. Producers would lose some of the gains in high-priced RCN years, but would stand to gain in years when the price of RCN is lower in international markets.

Image 10
Unsold RCN



One other factor that may be affecting producers' sales is their lack of trust and confidence in group selling which, under certain price conditions, could help them obtain higher prices for their product. Overall, a total of 12.3% of producers (BeninCajù: 17.9%, control: 6.3%) said they have access to storage facilities (some on their farm) and 7.6% (BeninCajù: 10.7%, control: 4.4%) are actively using them. Only 6.2% of BeninCajù producers surveyed stated they store their nuts through cooperative groups which, although greater than the 0.1% of control producers, is still very few.[71] Qualitative exercises found that producers have mixed feelings about group sales. Some have only recently begun practicing group sales, and in general the sales in 2018 have not met the expectations of producers or groups after abnormally high sales in 2017. The disappointing sales from what was for many the first time they had conducted group sales, has damaged the credibility of the groups and exacerbated the lack of confidence in some of them. If more durable arrangements that include incentives and extension services are made with producers, group sales will become more relevant and secure for producers.

BeninCajù has noted that one of the challenges for processors is identifying and recruiting skilled local management personnel, particularly for national processors. This has an impact on the capacity of processors to manage their operations, production, and finances, which can also have an impact on their profitability.

While increased mechanization of processing plants can lead to greater productivity, it can also mean fewer individuals employed, as well as a need for more skilled workers. BeninCajù is developing an apprenticeship program to fill these higher skilled jobs. According to TNS, job creation has been lower than forecasted because of increased mechanization of processing plants—Tolaro is an example of this. However, survey results only showed a decrease when considering the minimum number of employees, which may be explained by further reported plant expansion. The survey also found that increased processing capacity at TSF Djougou led to fewer permanent jobs, but allowed the cashew apple juice processor to hire more people to collect the cashew apples.

[71] Note that these values are taken from the questions on storage access and usage; the section on good harvest/post-harvest practices found 4.2% of BeninCajù producers and 0.2% of control producers using a cooperative for nut storage.

4.2.3 Unintended Project Effects

SILC Groups

Participants in the qualitative exercises identified a few positive unintended effects of the project. The SILC group methodology includes training on family values and family solidarity. The participants in SILC groups mentioned that, due to participation in the groups, there has been a decrease in family tensions because couples have less financial pressure. Group solidarity has also increased due to the social bonds reinforced by participating in the SILC groups.

> "Belonging to this group (project) allows all members to better manage financial problems through SILC. When there is less financial problem, everything else is easy. With SILC, no one in our village is ashamed anymore." – *SILC FGD (translated)*

> "We have a more fulfilling life, more financial resources and we face our daily problems." – *SILC Female FGD (translated)*

CVPA Groups

Some producers believe the leadership of the CVPAs have better access to resources and payments than other members, particularly due to lack of clarity on per diems and other elements. Other projects that support cashew producers normally provide greater support for farmers, giving them per diems to attend trainings. Because BeninCajù does not give such support, some producers mistakenly think CVPA leadership are taking the per diems for themselves. This misperception may need to be consistently corrected by project staff.

Cashew Apple Juice

The cashew apple juice process includes caramelization, which entails heating the juice for more than 12 hours. The vast majority of apple processors use firewood for this process, which could lead to deforestation depending on how it is collected. Additionally, the process of adding gelatin means that the juice may no longer be considered organic. BeninCajù has indicated that organic gelatin is currently being used, so awareness of this needs to be created among buyers. However, gelatin is typically derived from pork, meaning that the apple juice would no longer be halal or kosher, or suitable for vegetarians or vegans.

Advice and Miscommunication

Several times project beneficiaries told the consultants that they had received advice and promises from BeninCajù that had not been fulfilled. Apple juice processors frequently mentioned this in relation to marketing and sales of their product and a limited number of producers made similar reports in terms of selling their cashews.

> "Last year, after the storage of our products, BeninCajù asked us not to sell our products early but that they would tell us when to sell them. Why did BeninCajù no longer come back to us? We had huge losses for taking their advice and waiting so long." – *SILC FGD (translated)*

Although these situations appear to be relatively rare, they are important to bring to light to decrease further incidence.

It may also be important for BeninCajù to refrain from making sales forecasts or at least to develop them in collaboration with processors to ensure co-ownership. Cashew apple juice has experienced a significant growth in sales year-on-year, but the bullish forecast promoted by BeninCajù that 200,000 bottles could be absorbed by the market increased the expectations of processors, who made decisions and commitments based on these projections. In the future BeninCajù should share the information that has led them to make such a forecast and let producers develop forecasts in a participatory manner.

BeninCajù has also noted that there were some challenges within Sweet Benin on the mechanism for and logistics of sales. For example, the processor 2LB offered to manage transport and warehousing (which could have meant higher sales), but other processors were reluctant to give up control to one member. In another case, a larger company offered to buy all the processors' cashew juice to resell under its own label, which was not advantageous for Sweet Benin in the long run. The group at one point also wanted BeninCajù to manage and pay for sales in Cotonou, but that was not sustainable. Perhaps BeninCajù should have applied different selection criteria when recruiting processors, including entrepreneurial spirit and commitment to the Sweet Benin label.

M&E and Control Groups

In regard to the M&E system and the use of DID methodology it is important to note that control producers consistently expressed that they would like to be part of the BeninCajù project. In discussions with program implementation staff, the consultants noted that even in cases where all other conditions had been met, these villages were not chosen because they had initially been selected as control villages. This poses an ethical question about equity and suggests it may be important to look into ways of compensating control farmers.

4.3 Efficiency

This section of the report discusses whether the BeninCajù project used the right process to achieve and measure its expected results. It provides evidence that speaks to the timely achievement of objectives, implementation efforts and coordination between project partners, and monitoring of project activities. Some of these issues have already been discussed in the effectiveness section.

Take-Away Points – Efficiency

- Some indicators in the M&E system need to be re-examined and revised.
- Implementing a shared M&E system that provides both CRS and TNS with real-time access to data would improve coordination.
- The project needs to develop specific strategies to improve female participation.

4.3.1 Strategies to Improve Female Participation

The project works with a variety of stakeholders at various levels of the value chain. Female participation in BeninCajù producer trainings is much lower than for men—the BeninCajù villages selected for the survey had only 21.6% female beneficiaries. For both nut and cashew apple processors, however, there

are considerably more female employees than men, but women often perform the more menial labour roles.

Production

Benin is a primarily patriarchal society with patrilineal inheritance patterns, meaning that property is transferred from father to son[72] and property ownership is severely biased towards men. Culturally, if a tree is planted, the ownership of the land passes to the tree owner; therefore, women are not allowed or encouraged to plant trees.[73] Some respondents reported that land ownership is an important barrier to registering women in the BeninCajù producer training programs. Owning land is prerequisite to becoming a member of formal CVPAs. As originally planned, CVPA membership was to be a prerequisite for participating in BeninCajù trainings; however, this was changed with the implementation of new legislation that saw a substantial decrease in the number of formally recognized CVPAs.[74] Currently, producers must be organized either formally in a CVPA, or informally as a producer or SILC group in order to participate in the trainings.

As discussed in Section 4.1 of this report, despite the bias in property ownership, the surveys found only minor variation between the genders in land ownership patterns, with 47.9% of males and 46.0% of females saying they did not own land. Moreover, only about 75% of surveyed individuals reported that they were part of a producer group. Thus, it will be important to reassess the barriers that are preventing women from entering the trainings—for example, by reviewing the process of selecting participants. To the best of our knowledge (and after communication with CRS) it appears that the vast majority of individuals involved in selecting training participants are men.

Survey findings for BeninCajù participants in general, and for females in particular, indicate that having female-only activities (all: 67.1%, females: 73.9%), having female-only training (all: 66.9%, females: 67.8%), and making more effort to find female participants (all: 42.2%, females: 41.4%) could help to promote female participation. An examination of the list of agricultural advisors and supervisors reveals that most, if not all, appear to be male. It would be beneficial to have more females involved in leading some of the activities and trainings. Cultural and religious barriers may be preventing some women from participating, especially in predominantly male and male-led trainings. Additionally, trainings should take into account the additional domestic responsibilities that females often have when setting training schedules.

The BeninCajù gender assessment noted that not all TNS and CRS staff were equally aware of gender issues and their potential impact on the project. Even though some gender awareness training has been completed, there could be further reinforcement and training of agricultural advisors and supervisors who are directly responsible for implementing the trainings. As the assessment report noted, the gender assessment was conducted after the project identification and formulation phases, which posed great challenges in terms of budget allocation and monitoring. Moreover, the gender assessment did not appear to be followed up by a gender strategy and project documents do not indicate that gender is consistently mainstreamed in the project. Data collection is disaggregated; however, there is no strategy

[72] This was enforced by the law until about 20 years ago.
[73] Communicated through KIIs.
[74] With the implementation of the legislation on "cooperative societies," the number of formal CVPAs that abided by the new requirements was much lower. There was a decrease of formal CVPAs from 20,000 to 6,000 formal associations.

to ensure that stakeholders are equally engaged at the implementation level and/or to address gender issues that could affect project impact.

BeninCajù has implemented some measures to increase female participation, such as inviting husbands to bring their wives to training—since cashew production is a family business—and having a preponderance of women participating in SILC groups. However, if indeed BeninCajù wants to increase the amount and quality of female participation, a gender strategy should be developed and implemented.

Although fewer women are participating in the project, they may be benefiting more from project training activities than men. For example, the average real sales value of cashews was FCFA 738,520 for BeninCajù men and FCFA 426,999 for women; however, when values were standardized by hectare or tree women were found to earn more per hectare or tree than their male counterparts. This was not the case for women in the control group, who consistently earned less than men regardless of the unit of measurement. These trends were apparent for all measures of income and cashew production. Generally, in applying good agricultural practices and good harvest and post-harvest techniques, BeninCajù women scored slightly lower than their male counterparts; however, they scored higher when compared to control women. Thus, it appears that women may have experienced greater improvement than their male counterparts.[75]

Processing

Women generally represent the largest proportion of staff employed by both nut processors and cashew apple processors. A number of cashew apple processors are actually women's organizations in which women hold leadership roles or are the owners. Having females in management positions at the cashew apple plants is seen as beneficial, as many of these companies are trying to promote female participation. For instance, one female owner specifically buys apples from female producers. Eight of the 10 cashew juice companies mentioned having hiring goals for women in machine operation, supervision or management positions. Six of the 10 stated that there are barriers to women occupying these positions, with the most common response being that women do not have the necessary education/training for them. Those companies that said there are no barriers often mentioned that women already occupy these positions and less often that there are policies or a working environment conducive to women's participation. Similarly, all the nut processors mentioned having hiring goals for women and 75% stated they do not believe there are barriers to women's participation, using the same basic reasoning as apple processors. All the nut processors said they provided childcare, a free meal, and health support, and 50% also provided transportation and had flexible working hours. Having childcare and flexible working hours are especially important for mothers of small children, while the other measures undoubtedly help to make the work environment more attractive.

General Conclusion

Although the number of women participants in the project is only slightly behind targets, the consultants feel that women are underrepresented in terms of voice, ownership of resources, and influence on decision-making. With the exception of SILC groups and some cashew apple processors, all other activities were controlled mostly by men. There are a growing number of opportunities within the value chain that could be taken on by women, such as in management of the fields (including weeding, intercropping, pruning, harvest and post-harvest service provision), support to nurseries (including

[75] Note that it is difficult to make any comparisons with baseline and usage of techniques because of the very different values found.

grafting and selling seedlings), logistics (facilitating transportation from stores to processors or exporters), trading, training and extension services, and managing group sales, among others.

4.3.2 Climate and Weather Considerations in the M&E System

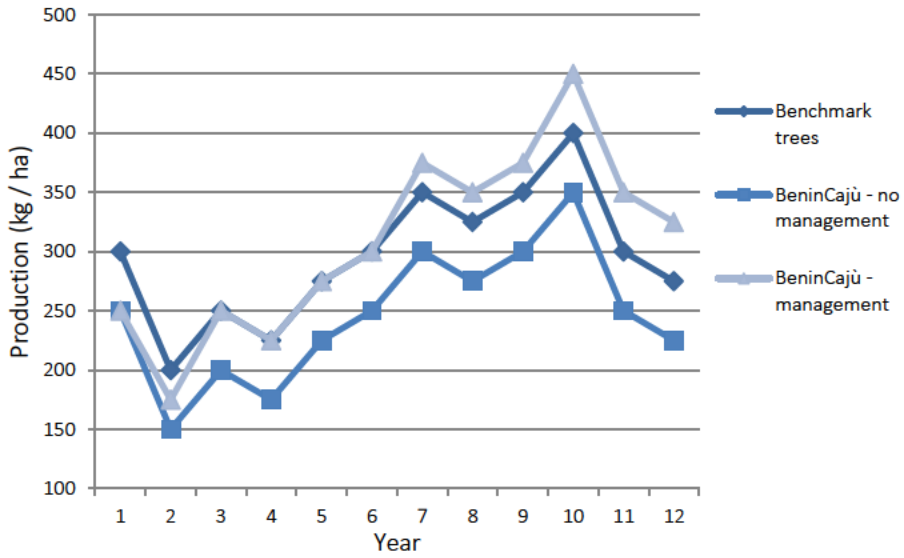
Both climate and weather-related variations can greatly influence cashew production over any given year. At the moment, the M&E system does not appear to take climate and weather-related impacts on yield into consideration, with the exception of making some general comments in the yield survey about production over the years (such as attributing the low yield found in the baseline to poor weather conditions in 2016).

There are a few different methods the project can use to take climate and weather-related variation into consideration. One method would be to aggregate values and present multi-year tendencies; however, if poor climate/weather conditions occur during several consecutive years, the project may still not show any associated improvements. Also, because the low productivity value at baseline has been attributed to poor weather conditions, comparisons against the baseline could show unfounded improvements in production. Using control individuals at the endline could help to control for climate/weather variation in yield. However, for internal M&E purposes (and even for external evaluation purposes) the best method would be to select a series of cashew trees for which yield has been measured over a series of years (and retroactive assessments can be made) or, if these are not available, trees that can be measured continuously. These trees can be used as a benchmark to indicate whether good climate/weather conditions or poor climate/weather conditions have affected cashew production (see Figure 3).[76] This is an activity that could be implemented with the help of INRAB (National Institute of Agricultural Research of Benin).

When producers were asked to compare their production between 2018 and 2017, of those who said they had higher production in 2018, 23.0% of BeninCajù and 78.4% of control producers said it was because of good climate and 73.0% of BeninCajù producers said it was because of training practices. Similarly, of those who said they had less production, 51.5% of BeninCajù and 70.4% of control producers said it was because of bad climate. Similar trends were found between the 2016 and 2017 seasons. The fact that producers reported both good and bad weather also shows the geographic variability in climate/weather patterns that can come into play, and the need to benchmark per region. The 2017 BeninCajù yield survey also found that 71% of BeninCajù producers attributed improvements in harvest to improvements in plantation maintenance, while 65% of those who did not see improvement attributed it to bad weather. The yield survey also found that whether farmers reported improved harvest varied greatly by commune, with those in the north being much more likely to report improved harvest than those further south, again illustrating the geographic variability in climate/weather patterns.

[76] Climate variables should be recorded, so trends between production and various climate variables can be analyzed. Management and maintenance of the trees should be recorded and remain stable over the years. After several years of data collection an average production could be calculated, and it would be possible to better assess if good or bad climate affected production and by how much. Subsequently, one could analyze line graphs and trends of these benchmark trees with data from BeninCajù producers. It would then be easier to say that increased production is because of good agricultural practices being used rather than solely climate. Ultimately, if long-term monitoring is already occurring it would be beneficial to make use of this data.

Figure 3
Visual on how Benchmark Trees could be Used to Assess Climate Variability



4.3.3 Efficiency and Accuracy of the M&E System

Currently, the BeninCajù M&E team feels that they are required to spend most of their time collecting and analyzing data to report on project indicators. Although BeninCajù is keen on big data, they feel that there is little time to do research and analyze data in order to make project recommendations and focus on learning. It is important to strike a balance between the time and resources used to capture data and the use of the data to inform decision-making and to demonstrate the project's impact. Appendix 23 provides details on the assessment of project indicators; the most important findings are highlighted below. Most of Advisem's suggestions should reduce the number of indicators and the time needed to measure them.

The indicators currently in place generally measure project progress accurately, with the exception of the issues of weather/climate mentioned above and mechanization of factories which could mean fewer jobs created. Additionally, there are a couple of indicator targets that appeared not to fully take into account the baseline values (such as percentage of product loss due to spoilage or improper processing and the number of distinct markets to which selected agricultural products are exported). BeninCajù has only two indicators that are measured exclusively by external consultants, which is likely placing an undue burden upon the M&E team. Also, some indicators—such as those for job creation and especially the use of new techniques and technologies—may be better measured by external evaluators, since project implementers could inadvertently bias respondents' answers.[77] Disaggregation of indicators should be closely analyzed; some disaggregation variables either cannot be adequately assessed or do not add value to project measurements, and thus they should be removed. Also, in some instances the overall target is the average of dissaggregations, such as with the indicators on margin and product spoilage for cashew apple juice and kernel production, which do not make sense.

[77] Perhaps the next and final measurements for these indicators could be at the final evaluation—although, as mentioned previously, retrospective calculations may be required for processor job creation. Other indicators, such as storage access by producers, could also be examined for external evaluation assessment.

The consultants also found that it was not clearly indicated whether yearly targets were cumulative or not, that not all indicators (that perhaps should) have yearly targets, and that there was repetition between the outcome, output and PMP tabs, with information for some indicators being entered two or sometimes even three times. The latter has led to some mistakes and inconsistencies between these tabs, as well as with the semester monitoring reports. Also, in some cases, indicator definitions were not being followed. Yearly and end-of-project targets should be combined in a tab and appropriate disaggregation should be included in all tabs. Having a cleaner and more streamlined indicator recording system could help to promote efficiency.

The consultants have suggested a few indicators that could be removed where there is significant overlap with other indicators (see Appendix 23). Also of note is the PPI indicator. The PPI index calculation method used in the baseline has been revised. The baseline used the 2010 scorecard methodology and now there is a 2015 scorecard methodology. The authors who created these indices have said that only the 2015 scorecard should be used. Although there is no harm in calculating the index and measuring progress at the endline, the consultants suggest that project success not be based on this indicator and that focus be placed instead on indicators that the project can better influence. This suggestion is made as a result of the problems associated with the 2010 index, the potential for problems associated with the 2015 index (see Schreiner and Sossou, 2017), and the fact that the BeninCajù project is not directly trying to influence many of the scorecard factors. In addition, Schreiner and Sossou (2017) find that the 2010 and 2015 indices are not comparable, because the 2010 index was not measuring changes in poverty correctly (scores were increasing when in fact poverty was getting worse).

The project is considering having TNS and CRS use the same technology to leverage data collection (CommCare), analysis and visualization (PowerBi). The consultants see this as a positive step towards more effective and efficient communication between the two organizations. Moreover, giving everyone access to project data through these tools should mitigate against delays in providing monitoring details and facilitating analyses. The consultants were also told that an extensive amount of effort was required to undertake the yield survey, involving monthly visits to more than 600 producers between February 1 and June 30, 2017. The consultants wonder if such frequent visits are warranted or if simply providing further training to these producers (or a literate family member) on how to record their cashew nut sales and uses could reduce the number of visits to two—once at the beginning of the season and once at the end. In addition, information recorded for producer training activities should include whether producers are part of a CVPA (and if so, which one), as well as the producers' phone numbers.

4.4 Sustainability

This section of the report discusses whether the results of the BeninCajù project will continue after project completion. It provides evidence that speaks to activities or outcomes most likely to be maintained, major contributing factors to sustainability, and the government's contribution to future sustainability.

Take-Away Points – Sustainability

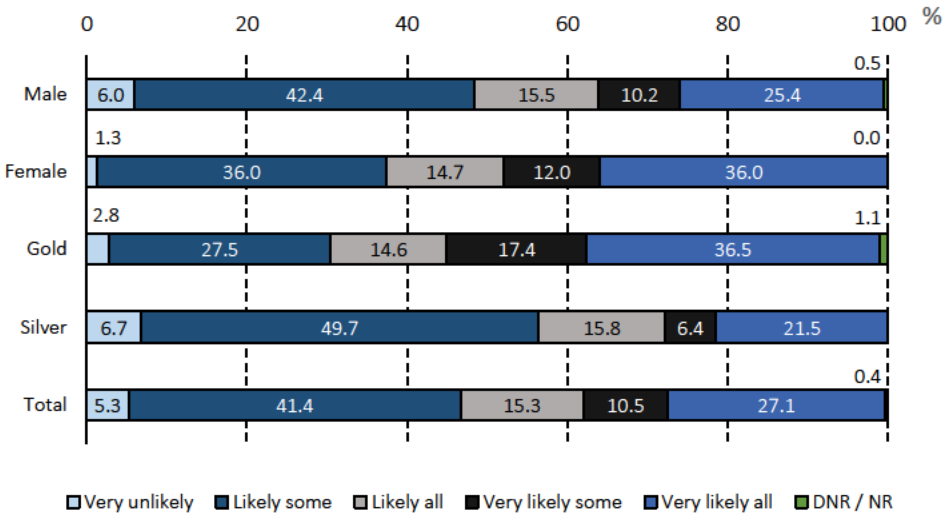
- Most producers say they will continue using some of the good agricultural practices, although some are cost-prohibitive.
- ATDA4 can play an important role in reinforcing the good techniques taught.
- SILCs help producers invest in their businesses and meet their general needs, making their prospect for sustainability high.
- Financial institutions require additional incentives or assurance to provide credit to cashew apple juice processors.
- The greatest risks to project sustainability are those related to international markets, RCN price fluctuation, the final price paid for processed nuts, and climate variability.

4.4.1 Prospects for Project Sustainability and Systems in Place

Producer Training and SILCs

BeninCajù producers were candid about their continued use of agronomic techniques, with the majority saying they would likely continue using some of the techniques (41.4%; males: 42.4%, females: 36.0%), followed by those who said they would very likely continue using all techniques (27.1%; males: 25.4%, females: 36.0%) (see Figure 4 and Images 11 and 12).

Figure 4
BeninCajù Producers Response on how Likely they are to Continue the Use of Good Agronomic Techniques, disaggregated by Gender and Gold/Silver Training



The few individuals (25) who stated they would be unlikely to continue using the techniques generally said it was because it was too much work (24.0%), they believed the techniques they were already using were better (24,0%), they did not think the new techniques/technologies had improved production (12.0%), and they did not feel they needed to produce more (12.0%). Qualitative exercises noted that agronomic, harvest, and post-harvest techniques were understood by producers and considered

important and impactful. Producers gave similar responses as to why they were using improved agricultural practices and harvest and post-harvest techniques—specifically, production increase (agricultural practices: 97.7%, harvest and post-harvest techniques: 92.8%), better quality (62.5%, 62.1%), less loss (35.4%, 36.8%), less disease (18.6%, 15.8%), and obtaining a better price (12.9%, 15.6%). Thus, if increased production and increased revenue are things that producers have actually witnessed, there is a high possibility they will continue to use these techniques. However, some of this will depend on whether producers have the human resources and financial means required to manage the fields, as well as access to the tools for pruning and spacing the fields, particularly chainsaws. These challenges may limit the implementation of some of the agronomic techniques.

> "The things we learned during this project will continue to have an impact on the capacity of our farm. Working the fields, weeding and pruning are things we know how to do today. No one can stop us from doing this and we will always do it for our own good." – *CVPA FGD (translated)*

Image 11
Good Agronomic Practices



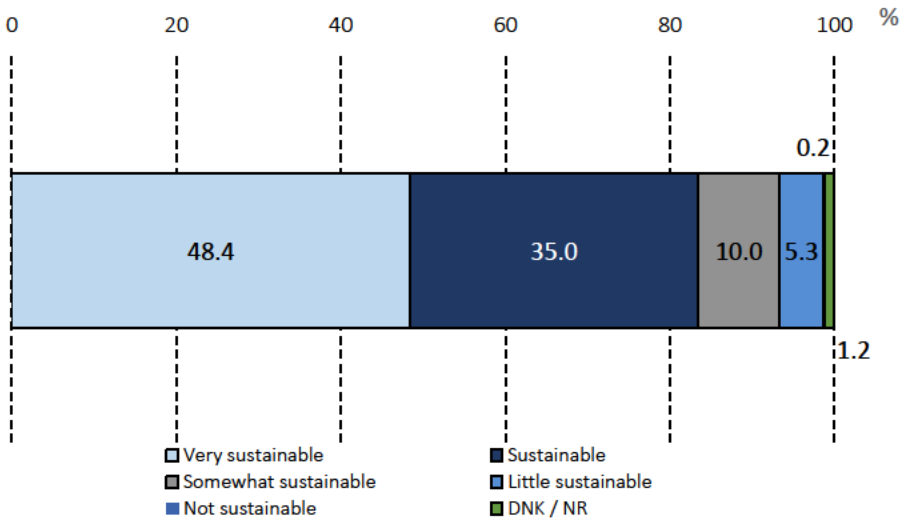
Image 12
Good Agronomic Practices



Generally, BeninCajù producers commented that they believe the benefits they have derived from the project are very sustainable (48.4%), sustainable (35.0%), or somewhat sustainable (10.0%), with much smaller percentages reporting little sustainable (5.3%) or not sustainable (0.2%) (see Figure 5). Males appear to see the benefits as slightly more sustainable than females, with 85.4% and 73.6% reporting very sustainable and sustainable, respectively.

The project has recently signed a cooperation agreement with ATDA4, under which all cashew-related extension work and research will be coordinated. Under this agreement, the project will provide technical advisory services to develop and implement a strategy providing critical extension services to cashew producers, particularly in scaling up access to high-yielding varieties and yield increasing practices. This government-led initiative will be critical for providing producers with updated knowledge and motivating producers to continue using the improved techniques once the project has ended.

Figure 5
Rating of BeninCajù Producers in Regard to the Sustainability of the Benefits they have Derived from the Project



Producer Groups and BDSPs

Most stakeholders engaged in the production aspects of the project see producer groups or CVPAs (formal or informal) as an element of community infrastructure that is critical for project benefits to be sustained. Currently, the project is structured so that all training and interactions with producers come through CVPAs and other informal groups. Surveys found a much higher percentage of BeninCajù producers (45.2%) compared to control producers (26.6%) are part of a cooperative group because of better access to trainings on cashew production. Although the majority (90.3%) provided additional reasons, it will be important for producers to find motivations other than training for remaining in the cooperative groups if they are to continue to participate in them over the long term. Other important reasons producers provided for being part of a cooperative group included to earn more money from cashews (BeninCajù: 50.9%, control: 50.0%) and to help with the marketing/sale of products (BeninCajù: 31.1%, control: 28.9%). The CVPAs and informal groups mobilize producers and act as the access point for group sales, and they will invariably be the community body that can advocate for producers' concerns. Some CRS staff mentioned the possibility that some SILC groups may convert into formal CVPAs at some point in the future. This is their operational plan to increase the number of community-based producer organizations that can potentially become formal CVPAs.

DEDRAS and CRADIB are doing a relatively good job of providing business development services, but they must continue to receive financial support in order to continue implementing activities. Although FENAPAB also receives financial support to implement training activities, its formal relationship with the CVPAs and other cooperative structures puts it in a better position to continue providing training and business development services to producers beyond the project, potentially in a different format. The ATDA4 will be one of the critical providers of business development services and producer training in the future, as this is a perfect fit with its current mandate, and it is appropriately resourced to continue to providing these services. The ATDA4 can produce even more substantial results if it collaborates with processors to develop and deliver extension services to producers.

There has been extremely low uptake of high-quality inputs of grafted seedlings by surveyed producers, although nursery managers have reported increased sales. The use of grafted seedlings could be an important mechanism to help ensure the sustainability of increased productivity for BeninCajù producers. Although a moderate proportion of producers said they re-invested cashew income back into their plantations to acquire seeds or seedlings from nurseries (see Appendix 27, Figure A27-3), it is still much more common to buy seeds or non-grafted seedlings than grafted seedlings.

The larger processors are beginning to understand the importance of vertical integration and deep procurement practices, and for this reason, Afokontan and Tolaro are expanding their own producer support programs, and Fludor is beginning to implement them. These programs will most likely continue for as long as the processors do.

Producers currently have a low level of confidence in group sales, as producers have only recently begun selling in this way and prices for RCN have fallen this year. However, if processors and other buyers focus more on purchasing RCN through CVPAs and other groups, producers will come to understand that group sales are the best way of selling to main buyers.

Access to Finance

Producers have a growing need for financial products. These can be partially supplied by SILC groups (particularly if the saving pools grow), and CVPAs (those that also have saving groups integrated in their functions), and either directly or through a formal link with MFIs. The current financial products are suitable for some production tasks, such as managing the fields or buying inputs, but not all, such as renewing a tree population.

Although financial institutions have been less reluctant to lend to both nut and apple processors, the fact that some processors are currently not able to pay back the loans they have received may reduce future lending prospects.

SILCs are contributing to producer resilience by allowing them to buy basic necessities during the lean season and to not have to sell their cashews at low prices. They also enable some to invest in their cashew plantations. Because the SILCs are useful, their prospect for sustainability is high. This is supported by the fact that, of those individuals still participating in a SILC (of the 92 individuals surveyed who entered a SILC through BeninCajù, only four indicated they are no longer part of the group), 52.7% believe the SILC to be very sustainable, 29.5% sustainable, 13.6% somewhat sustainable, and only 1.1% little sustainable. Generally, individuals who believed SILCs were sustainable did so because of good participation in the SILC group (44.3%), good management (34.1%) and good cohesion of members (17.0%). Also, as the 2017 financial services report indicated, SILCs have generally been very positive for stakeholders and they have continued to expand. SILC groups are initiated by private service providers (PSPs) trained by CRS, and these PSPs can continue creating and providing support to SILC groups after BeninCajù ends.

Processors

All nut processors require significant capital investment. The management capacity of nut processors varies, with national processors requiring greater managerial, operational, technical, and financial management support than internationally-owned processors. Internationally-owned processors require more support in managing a mostly national workforce. The three nationally-owned processors that began operating before the BeninCajù project—La Lumiere, Nad & Co and Kake 5—are not operational

this year, or are operating at very low levels, and will require additional investment or access to capital to be able to re-start their activities. With their stronger management and technical capacity, internationally-owned processors are more resilient than nationally-owned ones. However, all nut processors were having challenges with financial sustainability.

In Côte d'Ivoire, the government uses a tax on RCN exports to provide a FCFA 400/kg (USD 723 per ton) subsidy of processed nut to processors[78] which, if applied in Benin, would make nationally- and internationally-owned processors much more financially viable. Currently, the Benin government has been working to formalize RCN exports and has introduced an export tax of FCFA 60/kg per RCN. These are steps in the right direction to help ensure the sustainability of the sector.

Given the high levels of speculation over the previous two years/campaigns, during which time the prices of RCN have been too high and those of kernels too low to make a profit, it is challenging to see the potential for the sustainability of processing companies. Having said that, the next year is expected to be beneficial for processors, as producers will begin the season selling at lower prices due to this year's market performance. In order for processors to take advantage of this, they will need continued access to finance. Considering the last two years of processors' poor performance, financial institutions will require additional support to provide credit to them.

As discussed in detail in Section 4.1, some apple processors show great entrepreneurial spirit, making their sustainability and profitability appear likely. In contrast, other apple processors appear to require much more help with marketing and business management. However, 100% of those processors who answered the question felt that their business was or could become viable in the long-term. They believed this could be attained through cost reductions, quality improvements and increasing productivity. The surveys revealed that many apple processors had difficulties answering questions about processing, suggesting weak management practices, notably in accounting and costing. To ensure future sustainability, processors will require additional training in this area.

General Conclusion

The consulting team did not see a written exit strategy for the BeninCajù project, although it did see momentum being gathered by institutional partners (ATDA4, FENAPAB, government legislation, and processor and producer capacity) to enable the benefits of the BeninCajù project to continue, and the cashew value chain to gain further value in Benin. However, it will be important to develop an exit and sustainability strategy before the end of the project.

4.4.2 Risk Factors to Sustainability

The most pervasive risks to the sustainability of the benefits generated by BeninCajù are clearly those related to international markets and the RCN price fluctuation. These risks can be mitigated by an effective fiscal policy and incentive structure for processors and producers. The government has been relatively slow in reviewing and implementing a regulatory framework, and the fiscal incentives of FCFA 60/kg are likely not sufficient to establish competitive parity with Vietnamese and Indian buyers. Also, the incentives to processors are below what other countries in the region offer, notably Côte d'Ivoire.

[78] World Bank. 2018. *Project Appraisal Document for US$200 Million Loan to the Republic of Côte d'Ivoire for a Cashew Value-Chain Competitiveness Project*.

When producers were asked to identify the greatest risks to the benefits they were generating from BeninCajù, 69.6%% stated market, 45.7% climate and 18.4% no time to implement practices. Ultimately, these are risks that also fall in line with the views of the consultants. Typically, producers are able to sell all of their stock during a season. However, at the time of the survey (September 2018), 4.9% of BeninCajù producers and 7.7% of control producers still had cashew stock (average 557.8 ± 1633.5 kg, range: 1-10,000; note that the 10,000 may be a result of speculation). These producers said they were waiting for the price to increase (BeninCajù: 48.0%, control: 58.3%) or that there was no demand (BeninCajù: 16.0%, control: 13.9%), along with other responses (BeninCajù: 36.0%, control: 27.8%), which included poor quality of nuts, or needing to save them for consumption and for planting new trees. Additionally, climate change and more extreme weather patterns, such as drought and flooding, could negatively affect production. Some measures can be implemented to help mitigate more extreme climate conditions, such as buffering, mulching, and planting more resistant varieties; however, survey results showed very limited uptake of these measures.

Another risk identified by stakeholders is that financial institutions will stop believing that the cashew value chain is a viable sector to finance. Financial institutions currently believe that providing credit to processors is a very risky endeavour and they are asking BeninCajù to take first loss in future funding agreements. Innovative financing mechanisms need to be developed to ensure the sector remains viable and less vulnerable to price fluctuations for RCN and processed nuts. This can be achieved through implementation of a favourable regulatory framework; deep procurement agreements between processors, producers and international buyers of kernels; and financing of processors by off-takers.

Government stakeholders commented that, if the BeninCajù project does not continue beyond the current period, the sustainability of advancements in the cashew value chain would be at risk. They suggested it will take a minimum 10 years for the project to institute changes. Due to the size and influence of the project, ending it sooner than that could halt advancements throughout the entire value chain, notably due to the lack of an exit strategy.

BeninCajù staff identified the risk posed by other cashew projects in the area, particularly if these projects have a different approach to market intervention and incentives for producers and processors. For instance, if other organizations offer per diems, subsidies for purchasing RCN, inputs for producers, machines for apple processors, or any other financial support, it could undermine BeninCajù's policy of limited financial incentives and, consequently, the relationship the project has with stakeholders. A literature review of market analysis from previous years shows a recurring cycle of trends and actions that puts direct pressure on pricing. The advice support agencies give to value chain operators is often contradictory (for example, telling suppliers to hold stock while telling buyers to purchase quickly) and has a short-term, non-holistic view that does not takes into account the potential gains from value-addition to the full market chain. In fact, support agencies are often found to be distorting the market. As market information is not timely, much of the pressure on pricing comes from uninformed speculation.[79]

The capacity and sustainability of formal and informal CVPAs is also a potential risk. The CVPAs currently play an important role in mobilizing training participants, linking them to MFIs, and performing group sales. If CVPAs do not have enough capacity by the end of the project, these functions will be jeopardized. To mitigate this risk, it will be important to develop the following elements:

[79] *N'Kalo* and *Cashew Market* news bulletins.

- A set of functions a CVPA should be able to perform that would guide BeninCajù's capacity building and support to CVPAs. Currently, the main function of CVPAs is to mobilize training participants.
- The CVPAs could be the main point of interaction for producers, to identify challenges in production and implement solutions.
- The CVPAs should also be the first point of contact for all external stakeholders, including processors, ATDA4, BeninCajù and others.
- CVPAs could become the first point of call for producers to access technical expertise. Just as demonstration plots are developed to showcase techniques for farmers, a few CVPA members could receive specific and additional training to become technical experts.
- CVPAs could mobilize support and contributions, and serve as caretakers of any community infrastructure developed, such as community storage infrastructure.

4.5 Impact

This section of the report discusses what are the most important changes for beneficiaries and key partners of the BeninCajù project. It provides quantitative evidence that speaks to the degree of achievement of the project's desired effects in terms of overall, strategic and intermediate goals. The section also provides elements to inform a discussion of what all of this means.

Take-Away Points – Impact

- Learning by producers on best practices has occurred.
- Although trends were not consistent, productivity and income for BeninCajù producers were often higher than for control producers.
- Nut and cashew apple juice processors recognize BeninCajù's support in building business and technical capacity, and in accessing finance.
- The Government of Benin and other state actors recognize BeninCajù's important role in influencing the cashew value chain

4.5.1 Observed Changes Attributed to the Project

Producers

Despite the price fluctuation, which is a serious risk to the project, the project has brought about important and positive changes for all the stakeholders. Producers have indicated that they are using some of the best practices they learned from the training. For example, BeninCajù producers were found to have undertaken significantly more pruning, thinning and weeding than control producers in the last 12 months (see Table 11 and Image 13). The average percentage of the plantation pruned for BeninCajù farms (62.7%) was also significantly

Image 13
Good Agronomic Practices



greater than for control farms (57.8%) (df=599, t=1.85, p<0.05); however, there was no significant difference for the percentage thinned (BeninCajù: 59.3%, control: 56.2%). The values reported in the baseline appear to be very high and are greater than those obtained at midterm for both the BeninCajù and control groups, with the exception of intercropping which, compared to the baseline, has increased substantially among both BeninCajù and control groups. Compared to the 2017 BeninCajù good agricultural practices survey, the percentage of BeninCajù producers undertaking intercropping was higher at midterm, while the percentage of those making firebreaks was very similar. The number of producers reporting that they performed thinning and pruning was much higher in the midterm survey, suggesting that farmers have begun to see the benefit of these practices and are applying them more regularly. By contrast, the midterm survey revealed a lower percentage of individuals reporting to weed their fields.

Table 11

Percentage of BeninCajù and Control Producers, Stating to have Used various Good Agricultural Practices and Harvest/Post-Harvest Practices at Midterm, Baseline and Yield Survey Data Collection

Practices learned and applied	Midterm		Baseline		CRS yield survey 2016-2017
	BeninCajù	Control	BeninCajù	Control	Treatment
Good agricultural practices in last 12 months					
Percent undertaking intercropping	50.1	47.5	8	8	30.3
Percent undertaking pruning***	70.7	56.5	84	76	58.8
Percent undertaking thinning***	59.0	42.3			15.5
Percent undertaking weeding*	76.7	71.0	87	87	90.2
Percent making firebreak	74.8	74.6	87	84	70.1
Percent with presence of pests	54.2	49.0	77	80	
Percent with cattle intrusion	55.9	61.9			
Good harvest and post-harvest practices					
Percent collecting nuts from the ground*	97.9	95.4	97	97	94
Percent collection interval: < 3 days	40.8	42.1	23	28	
Percent collection interval: 4-5 days	20.0	14.2	34	35	
Percent collection interval: 6-7 days	11.5	11.0			
Percent collection interval: 7+ days	27.2	31.9	15	15	
Percent separate nut/apple with nylon string***	14.5	1.7	2	1	38
Percent drying nuts before storing***	81.7	64.2	56	56	74
Percent using sound to estimate dryness*	44.2	35.1			
Nut storage: Percent using a closed room	81.9	86.3			
Nut storage: Percent using roof	1.9	0.8			
Nut storage: Percent using outside	10.1	9.4			
Nut storage: Percent using cooperative***	4.3	0.2			
Package nuts: Percent using jute bags**	89.5	82.7	82	78	75
Percent knowing how buyers judge nut quality***	51.1	22.9	47	61	

Statistical tests comparing midterm BeninCajù and control (Chi-square): *** p<0.001, ** p<0.01, * p<0.05

Another consideration is whether there was any lag time in applying some of the good agricultural practices, especially pruning and thinning, and increased production. The consultants could not find project documentation specifically on this subject but were informed it generally takes one season. Other documentation shows that pruning can rejuvenate unproductive plantations; however, in productive trees the variety of cashew can also be important, with pruning enhancing the flowering and yield in varieties with an extensive branching habit, but having an adverse effect on varieties with an intensive branching habit.[80] Another study stressed thinning only unproductive trees.[81] As one survey respondent mentioned, "When pruning and thinning are applied in 2017, it will take a few years before the trees start to perform well." *(translated)*

BeninCajù producers were found to be significantly more likely to implement the majority of best harvest and post-harvest practices than control producers, including collecting nuts from the ground, separating the nut and apple using a nylon string, drying the nuts before storing, using a cooperative to store nuts (although the percentage was still very low), and using jute bags. A much higher percentage of BeninCajù than control farmers said they knew how buyers judge nut quality (see Table 11). Compared to the baseline, there has been much improvement among BeninCajù producers in using a nylon string to separate the nut and apple (although this is lower than the 38% found in the 2016-2017 yield survey) and increased frequency of dry nuts after harvest. The 2016-2017 BeninCajù yield survey also found four techniques that cashew farmers applied most frequently: correct collection of the nut, use of jute bags for conservation, proper nut drying, and use of units of measurement.

BeninCajù producers (50.2%) were also significantly more likely (X^2=22.9, df=1, p<0.001) to be able to name three practices for a well-managed farm than control producers (34.8%), suggesting that learning on best practices has occurred. Specifically, BeninCajù producers provided the answers of good density: 100 trees per hectare (10 meter spacing between trees) (BeninCajù: 81.0%, control: 40.6%); well ventilated and well drained (pruning, cleaning, tillage) (BeninCajù: 87.6%, control: 78.8%); improved water or soil fertility management (BeninCajù: 29.3%, control: 17.1%); and choice of good crops when combining crops (soybeans, groundnuts, corn, yams) (BeninCajù: 29.9%, control: 20.4%) more often than control producers.

The producers perceive that the project has had a significant impact on increase in yield and quality of the produce. Qualitative findings suggest that producers recognize that it has been particularly challenging to sell at a good price this year compared to last year but, in general, they see BeninCajù as having an important impact on their wealth, due to higher yields and better price. The average selling price (FCFA 660/kg) this year was higher than that found in either the 2016 baseline (FCFA 515/kg; FCFA 450-500/kg in late January/February to FCFA 450-500/kg) or the 2017 CRS yield survey (FCFA 588/kg), although the average price ranged from FCFA 356/kg in February 2017 to FCFA 723/kg in May 2017. Compared to the final selling price in 2017, the average price dropped in 2018.

> "The project has a remarkable impact on the capacity of each one of us. Those who have put into practice the trainer's instructions benefit from it. Their field produces a lot of cashew compared to the past (before the project arrived). But those who do not put it into practice do not benefit from it." – *CVPA FGD (translated)*

[80] Desai et al. 2010. *Techniques and Practices for Cashew Production*. Technical Bulletin No. 21. Indian Council of Agricultural Research.
[81] Martin et al. 1997. "Cashew Nut Production in Tanzania: Constraints and Progress through Integrated Crop Management." *Crop Protection*. 10(1). pp. 5-14.

In terms of production and income,[82] BeninCajù producers generally had significantly higher total values than control producers, which is likely explained by their larger plantation areas. No significant differences between the groups were found when standardized by either hectare or tree; however, when standardized by productive tree, BeninCajù producers generally had significantly higher productivity and income values (see Table 12). However, the same general trends were seen between the baseline BeninCajù and control groups, although the baseline had much lower values (see Table 12). Also, for some of the best practices being implemented, such as thinning and pruning, there may be a lag time before increased production is observed.

Table 12
Production and Income (by Hectare, Tree and Productive Tree) of BeninCajù and Control Producers, by Gender

Production and income	BeninCajù			Control			Baseline	
	Male	Female	Total	Male	Female	Total	Benin-Cajù	Control
Production (kg) – Calculated from sales, uses and in-kind expense payments								
Production (raw)*	1,451.8	799.9	1,339.1	1,242.7	518.8	1,125.0	697	466
Production by hectare	260.8	340.5	274.2	259.6	244.4	257.1	225	199
Production by tree	2.62	3.30	2.74	2.85	2.83	2.85		
Production by productive tree*	12.13	7.91	11.39	6.93	7.66	7.05	2.81	2.80
Cashew income (FCFA) – Value reported by farmer								
Cashew income (raw)***	738,520	426,999	686,497	590,559	227,440	533,918		
Cashew income by hectare	130,424	179,399	138,698	131,698	115,863	129,125		
Cashew income by tree	1,292	1,441	1,318	1,414	1,276	1,390		
Cashew income by productive tree**	5,353	3,968	5,109	2,994	2,915	2,981		
Cashew income (FCFA) – Calculated from sales only								
Cashew sales income (raw)***	752,611	511,992	710,583	616,187	247,760	556,317	220,770	157,090
Cashew sales income by hectare	138,740	188,305	147,113	134,743	118,242	132,062		
Cashew sales income by tree	1,360	1,569	1,396	1,436	1,337	1,419		
Cashew sales income by productive tree*	6,204	4,131	5,839	3,397	3,167	3,359		
Gross cashew income (FCFA) – Calculated from sales and uses								
Gross cashew income (raw)***	948,497	629,050	892,798	766,703	345,128	698,197	304,282	223,419
Gross cashew income by hectare†	175,496	240,913	186,547	167,838	159,559	166,492		
Gross cashew income by tree	1,724	2,171	1,800	1,830	1,829	1,830		
Gross cashew income by productive tree*	7,585	5,456	7,211	4,528	5,155	4,631		
Net cashew income (FCFA) – Calculated from sales and uses and expenses								
Net cashew income (raw)***	740,437	523,929	702,498	629,917	282,160	573,407	208,461	163,913
Net cashew income by hectare	143,696	192,694	151,974	141,213	131,231	139,590	75,389	79,238
Net cashew income by tree	1,385	1,656	1,431	1,521	1,427	1,505		
Net cashew income by productive tree†	6,291	4,043	5,896	3,897	4,002	3,914	862	1,014

Statistical tests comparing midterm BeninCajù and control totals (ANOVAs): *** p<0.001, ** p<0.01, * p<0.05, †p<0.1.
Note: The sample sizes by productive trees (673) are much smaller than by hectare (995) or total trees (843).

[82] Note that uses and in-kind expenses were converted to FCFA using the average sales value for the 2018 season (FCFA 660/kg).

Overall, 73.0% of BeninCajù producers in a cooperative group said they accessed market information through their cooperative, compared to 59.4% of control producers in cooperatives (X^2=7.83, df=1, p=0.005). However, this has not yet appeared to result in BeninCajù producers obtaining a significantly higher price for their produce (BeninCajù average: FCFA 664/kg, control average: FCFA 658/kg). The 2017 BeninCajù yield survey similarly found that 68% of BeninCajù producers had access to market information through their cooperative.

Processors

Nut processors recognize BeninCajù's support in strengthening financial and administrative capacity, implementing certification processes, accessing finance, and implementing extension services (Fludor, Tolaro), as well as in promoting innovative and energy-efficient technologies such as at the CNSL energy plant (Fludor). On a scale of 1 to 7, with 7 representing the highest impact, nut processors gave the BeninCajù project a 3 and a 5 (two chose not to respond). In turn, apple processors recognize BeninCajù's support in providing technical assistance for cashew apple juice production, strengthening production capacity and quality, improving business management practices, and accessing finance. On a scale of 1 to 7, with 7 representing the highest impact, six of the apple processors gave the BeninCajù project a 7, two provided a score of 3, and one processor each gave a score of 4 and 1.

Other Stakeholders

The government and other public sector actors feel that BeninCajù has played an important role in influencing the cashew value chain. They recognize the strategic value of BeninCajù's intervention and of TNS' interventions before the project began, as well as the project's influence on the development of and support for implementing institutional reforms and policies/regulations that have had a positive impact on the cashew value chain.

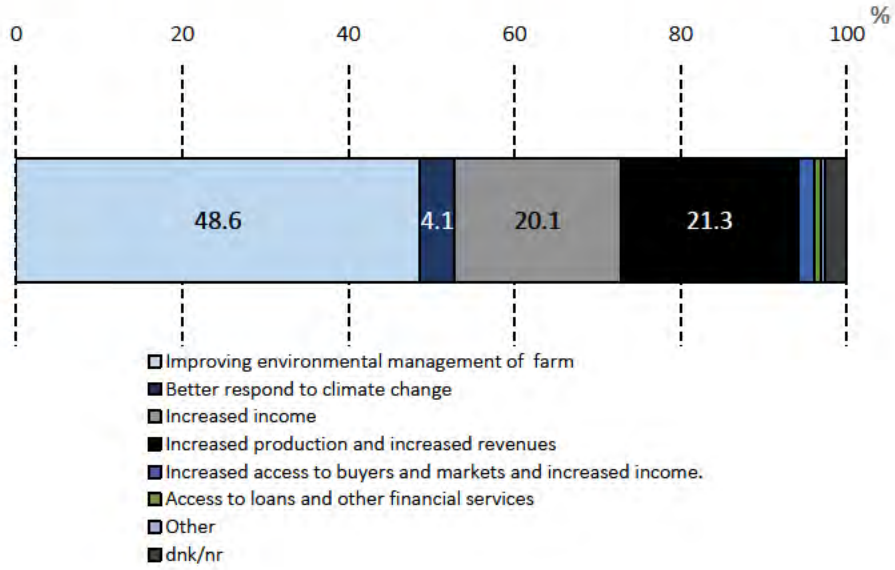
4.5.2 Most Important Impacts

When producers were asked what was the greatest impact of BeninCajù's work, the most common response was improved environmental farm management (which was supposed to represent improved techniques and technologies) (48.6%), followed by increased production resulting from training techniques and revenue (21.3%) and increased income (20.1%) (see Figure 6). Females were slightly less likely to report increased production resulting from training techniques and revenue (14.9%) than males (22.6%).

Even though respondents were meant to provide only one answer, very few individuals chose increased access to new markets/buyers or access to loans and finance, which is interesting because these are areas that individuals in qualitative exercises said were lacking.

When BeninCajù producers were asked how they believed the project improved the quality of their farm, individuals most commonly said greatly (60.7%; males: 62.6%, females: 51.7%), followed by significantly (24.2%; males: 24.0%, females: 25.3%), while some said somewhat (7.6%; males: 6.8%, females: 11.5%), a little (5.5%; males: 5.2%, females: 6.9%) and very little (0.4%; males: 0.2%, females: 1.1%). Females were slightly less likely to answer greatly compared to males, and more likely to provide less positive responses. This may be partly because women's productivity and income values still lag considerably behind those of males.

Figure 6
Percentage of BeninCajù Producers, Stating the Greatest Impact of the Project



The vast majority of respondents reported that the most important impact the project has had on the quality of beneficiaries' lives was increased revenue (82.0%), followed by prestige (7.4%) and better health (5.7%). When BeninCajù producers were asked how much the project had improved the quality of their lives, individuals most commonly said greatly (59.6%; males: 61.4%, females: 50.6%), followed by significantly (25.0%; males: 25.4%, females: 23.0%), although some answered somewhat (7.2 %; males: 6.1%, females: 12.6%), a little (5.7%; males: 4.9%, females: 5.7%) and very little (0.8%; males: 0.9%, females: 0.0%). Once again, females were slightly less likely to report greatly compared to males, and more often reported less positive responses.

Generally, through perceived increased revenue and greater access to finance, the project has enabled individuals to purchase assets, invest in IGAs, and invest in education and medical expenses. However, the average PPI was higher in the control group (28.5) compared to the BeninCajù group (27.4).[83]

> "With the project we were able to pay for the bikes, some of them did other things and even built houses, which was not the case when we were not in the group." – *SILC FGD (translated)*

> "The project had a great impact on us. Thanks to the project, we no longer make loans as in the past, we now have some money to get

Image 14
Intercropping



[83] Both groups' scores have increased since the baseline and show the same trend—BeninCajù (20.46) and control (20.60). However, as mentioned above 2010 and 2015 scores may not be directly comparable.

> through the dry season. It is thanks to cashew's money that our children go to school." – *CVPA FGD (translated)*

Intercropping (see Image 14), which is a best practice promoted in the trainings, also contributes to food security. The most commonly planted crops are maize (BeninCajù: 57.4%, control: 53.9%), manioc (BeninCajù: 34.1%, control: 36.8%), peanut (BeninCajù: 20.9%, control: 36.4%), beans (BeninCajù: 25.6%, control: 35.5%), and soya (BeninCajù: 42.2%, control: 24.1%).

> "We learned how to do the grafting, we also learned that bees must be kept in the cashew plantation, but that we must avoid sowing cotton, beans, okra, angolla hair and also avoid using herbicide in the plantation." – *Producers FGD (translated)*

Surveyed RCN processors from 2016 to 2018 reported having increased processing capacity, while the majority of apple juice processors reported producing more juice in 2018 than in 2017. This suggests that BeninCajù is helping processors expand their businesses.

5. Conclusions and Lessons Learned

Overall, the BeninCajù project is well on its way to meeting or almost meeting the majority of its targets. Most stakeholders have given positive feedback about the project, with the exception of a few cashew apple juice processors, who feel BeninCajù should give them more support in selling the juice they processed after the project made an aggressive sales forecast. Project participants also are generally satisfied with the assistance they have received, especially in training.

The project is significantly affected by key external factors, such as the international price of RCN and cashew kernels, and domestic and competitor country policies and regulations, including the export tax. These are important externalities that can affect the viability of the project. However, if the value chain is analyzed through a multi-year lens, it will probably show that this is a viable and valuable endeavour for all stakeholders involved.

For processors, sustainability will be achieved through financing mechanisms with low interest rates, diligent business/market development and plans, improved processing techniques, and efficient management of operations. It is critical that processors access international and even local markets and, for nut processors, that they are able to obtain RCN at a viable price (FCFA 400-600/kg). This can vary, depending on the price at which kernels are sold to the off-taker. If the price of kernels allows, RCN can be bought at a higher price and the processors will remain profitable.

In order to access international markets, processors will need to be certified (see Appendix 28). BeninCajù has supported processors (primarily nut) to implement HACCP processes, and all nut processors have received training from a Preventative Controls Qualified Individual (PCQI) in order to comply with the *Food Safety and Modernization Act* governing food imports into the United States. The most comprehensive and complete certification process is the BRC Global Standards, which BeninCajù is currently assisting nut processors to achieve.

Although there is a clear need for and benefit from certification for international quality standards to access international markets, there is also a need to support processors in optimizing productivity, business development, gaining access to financing, and improving market reach. The consulting team had difficulty accessing information from nut processors, who likely chose not to share data for competitive reasons. Cashew apple processors also had challenges in providing critical operational data to the

consulting team, most likely because it was information processors were not gathering and therefore could not share.

All nut processors in West Africa are facing very similar challenges and opportunities, and donor-funded programs often focus too much on external conditions, ignoring the importance of the core business strategy, management, and operations that make businesses viable and resilient. BeninCajù's intervention, by contrast, has been more holistic and nuanced, providing operational and management support to nationally-owned nut processors, and supporting access to finance, certification and innovation for all processors. This is a relatively innovative approach in West Africa and appears to be improving the capacity and resilience of processors.

Producers value the training they have received, but they are selective about which agronomic and farm management practices they implement. Moreover, they have challenges related to reporting productivity and income, particularly around factors such as tree density, tree age, plantation size estimates, geographic location and climate that influence the availability of data on production. This makes it difficult to attribute the use of good practices to improved production. However, increasing sample sizes and/or using "control trees" as benchmarks could help improve estimates. One important finding of the evaluation was that Gold farmers did not consistently demonstrate a greater degree of implementing best practices or higher productivity and income than Silver farmers.

The SILC groups are highly valued by participants, and they do appear to be having a direct impact on plantation management by providing credit to producers and increasing the resilience of the families participating in them. In addition to promoting access to finance, the SILC groups also promote savings and their solidarity funds serve as an insurance mechanism. The work BeninCajù has done with MFIs has made these institutions more confident in lending money to BeninCajù producers, compared to those not participating in the BeninCajù project. However, it is apparent that many individuals still lack access to finance. The continued growth of SILCs will help to address this, as well as the fact that MFIs appear more willing to provide financing.

Previously, a gender assessment was conducted that proposed key actionable items for BeninCajù to implement. The consultants were not able to determine if BeninCajù has implemented these actions, but it is important for the project to create a more enabling environment for female participation in the project. Section 6 outlines a limited number of recommendations to address this, including more active mobilization and creating a more conducive environment for women participation. One widely reported limitation for women's participation has been that women do not own land; however, this has not been conclusively demonstrated by the evaluation, during which almost half of both males and females reported not owning land. We are confident that if BeninCajù implements some of the recommendations we have made and those set out in the gender study, there will be improvements in female participation in the project.

The BeninCajù project is welcomed by all stakeholders. It is building important capacity at producer, processor, institutional and value chain levels. Most stakeholders see the project as a needed actor that can organize and influence the entire sector. To ensure sustainability, there are still some critical capacities that BeninCajù needs to ensure stakeholders build before the end of the project, but if this is done then the path BeninCajù has set will have a sustained impact on the cashew value chain in the foreseeable future.

6. RECOMMENDATIONS

Below are the main recommendations based on findings derived from this evaluation.

Producer Level Support

1) *Strengthen the capacity of CVPAs* – The CVPAs and other formal or informal community-based organizations are of strategic importance for BeninCajù to have sustained impact. These organizations mobilize producers and have served as the locus for training delivery. They also play a critical role in group sales, and serve as connection nodes with other critical stakeholders, such as processors, exporters, training providers, extension services and MFIs. We see the development of a clear roadmap for formalizing these organizations, and creating and/or strengthening links to other stakeholders (processors, training/extension services, MFIs) as being of critical importance. It will also be important to provide training to strengthen governance and management of these organizations.

2) *Strengthen technical capacity of CVPAs, so that the CVPAs can support producers* – The project could invest in creating a technical expert within each of the CVPAs to develop a cadre of community-based technical experts who can mentor and provide support to other producers in the community.

3) *Assess mechanisms for increasing the uptake of grafted seedlings* – Findings from the survey suggest very limited uptake of the use of grafted seedlings (3%-4%), although this may be different in other villages/geographic areas. Among the 995 producers surveyed, a total of only 1,287 grafted seedlings were reportedly purchased. It would be interesting for BeninCajù to dig deeper into determining who is actually purchasing these grafted seedlings and, if necessary, assess mechanisms for increasing uptake by trained producers. It is also important that there be a robust certified seedling production scheme that ensures the supply of true-to-type and disease-free planting material for cashews.

Gold and Silver Training

4) *Place emphasis on Silver training* – Although there were some differences between producers who completed the Gold and Silver training packages, the trends were not consistent. Thus, in the future, the project could place emphasis on providing the Silver training package (noting that Gold is Silver training twice), with some additional visits in the second year to help reinforce the most important training aspect from the previous year.

5) *Focus producer training on the requirements of the market* – The training program needs to be geared towards emerging needs, rather than standardizing it with respect to crop requirements only. Capacity building of producers and extension services should also be tailored to the requirements of the market. Each processor could train producers who produce for them. In addition to training in good agricultural practices and good harvest/post-harvest practices, capacity building should also include how best to manage production for quality, and emerging market demands for food safety and traceability.

Entrepreneurial Opportunities – Cashew Ecosystem

6) *Promote entrepreneurs to become service providers for the cashew value chain* – Producers mentioned on many occasions the challenges they had in accessing tools to prune trees or cut trees down[84] (thinning) in order to obtain the recommended density of 100 trees per hectare. Producers and CVPA members also mentioned the lack of transportation (tricycles) and of storage facilities. There are several entrepreneurial opportunities within the cashew ecosystem that could be leveraged to further strengthen income-generating opportunities. Other support services required by apple processors, such as access to bottles, could be examined to determine the feasibility of local entrepreneurs providing these services. The project should also provide training on specific functions, and access to credit to PSPs, who could then address some of the current deficits in the cashew value chain deficits.

Processors

7) *Ensure access to finance for processors in the next campaign* – BeninCajù will have to act swiftly to ensure processors secure funding for the next campaign. The project will have to confer with financing institutions to see how they can continue supporting cashew processors. Financing institutions may ask for guarantees, and BeninCajù will need to judge whether this is possible. BeninCajù staff mentioned that they were in the process of negotiating off-taker loans (or pre-paying agreements for up to 30% of contract values), and this would be a welcome, innovative approach to processor financing. This amount of funding, particularly if funneled through financial institutions, could bring the exposure of these institutions to 20% or less (including FAGACE guarantees) of the total loans disbursed, and provide the required confidence.

8) *Strengthen deep procurement links between processors and producers* – It would be interesting to further explore deep procurement models that will strengthen vertical integration and ensure access to RCN for processors. Our exercises revealed that this had not worked well in the past, as producers would always sell to the highest bidder and receive payment in cash. We also noted that there is a lack of appropriate financing mechanisms for producers to cover multi-campaign investments. This could be an interesting entry point for processors, who could provide finance in exchange for binding agreements or pre-agreed prices for RCN from producers.[85] In order to reduce the potential loss that could be generated by a favourable market, the pre-agreed buying formulas should not exceed 30%-50% of the total production of any group or producer, in order to let producers benefit from positive price fluctuations. In addition to nut processors, some cashew apple processors reported having difficulties obtaining raw product. Generally, further work should continue to facilitate more farmer-processor linkages.

9) *Further marketing and business training for cashew apple juice processors* – The consultants believe that BeninCajù should continue to provide training and assistance to develop the Sweet Benin marketing strategy and to support its efforts to increase sales and identify or expand markets. Cashew apple juice processors also require further training on business management practices, such as accounting and costing, which were noted as areas where skills were lacking. Work to increase communication, trust, and coordination among Sweet Benin members is also required.

[84] Although it should be emphasized that the proper government approval be obtained before cutting any trees.
[85] If these pre-buying agreements are made in conjunction with the extension services, they are more likely to work. Processors may also choose to involve an MFI in this agreement, and producers would agree that if they do not supply the RCN agreed, the funds disbursed will become a loan to be repaid to the MFI.

Moving forward, BeninCajù will require at least one person from Sweet Benin be directly involved in the areas of support they are providing, which should help to promote these aspects.

10) *Work with Sweet Benin to ensure the standardization of cashew apple juice* – The consultants sampled juice from various processors and noticed a difference in the quality, sometimes because of the apples used, but also because of differences in the production process, such as the amount of time for caramelization. Some processors are using slightly different methods to produce the juice. The Sweet Benin label may have come a bit too early, before production could be standardized. This is an issue BeninCajù should raise with Sweet Benin.

Female Participation

11) *Re-examine the selection of female training participants and implement adjustments to increase female participation* – Despite the claim that women are being excluded because they do not own land, the survey found that similar percentages of men and women reported not owning land and that only three quarters of all individuals said they were part of a cooperative or producer group. BeninCajù needs to re-examine how participants are being selected. In addition, adjustments to increase female participation should be made, such as having female trainers and making sure training schedules accommodate women's domestic responsibilities. Ultimately, a gender strategy should be developed and implemented to help increase female participation and the quality of this participation.

12) *Promote access for women to higher value opportunities* – Women could benefit more from other entrepreneurial activities within the value chain, such as PSPs to other producers in managing the fields and undertaking harvest and post-harvest activities, supporting nursery managers, and traders exporters. Incentives could also be used to motivate processors to facilitate women's access to training, so they can assume administrative or supervisory roles within the factories (although illiteracy and lack of education could be a determining factor).

Institutional Actors

13) *Participatory design of ATDA4 training format* – The institutional reforms that have led to the establishment of ATDA4 are very relevant and stand to have a lasting effect not only on the cashew value chain, but also on all other priority value chains in the country. ATDA4 is still in its infancy, and despite the support it is receiving from BeninCajù, still requires considerable support to be able to deliver on its mandate. Currently ATDA4 is scheduled to deliver extension services. During the remainder of the project, BeninCajù should assess the impact of these services, and also facilitate a participatory methodology (in discussion with producers) to identify the best training format for producers. It may be that there are other training formats that would be more appropriate for producers and possible for ATDA4 to deliver.

14) *Expand services by FENAPAB* – FENAPAB is another institution of potential strategic importance for BeninCajù. Currently, FENAPAB operates as a training implementer, like DEDRAS and CRADIB, funded by BeninCajù. However, as the apex organization of producers' cooperatives, FENAPAB can have a larger role to play. It is currently entitled to a membership fee from all producer members of formal CVPAs. As the number of CVPAs and members grow, so will the resources available to FENAPAB. If FENAPAB wishes to remain an added value to CVPAs, it should explore ways of strengthening its role in providing training and market information without depending on donor funding to ensure sustainability.

15) *Transfer of key competences to relevant stakeholders* – Currently, BeninCajù is responsible for producers' training, access to finance, processor support, regulatory and institutional reform, and access to storage, among many other activities supporting the cashew value chain in Benin. The critical functions and capacities required for the cashew industry to continue to flourish should be identified, and stakeholders that can assume these functions should be mapped. In the remaining years of BeninCajù, these functions and capacities need to be tested in order to ensure their sustainability. CNTC, IFA and FENAPAB are all organizations that can assume larger roles to support the cashew value chain. Extension services can be delivered by ATDA4, FENAPAB and processors. Other critical support functions to processors producers and other value chain actors (such as access to finance, machine maintenance, business development services), and monitoring the implementation of the regulatory framework should be identified, leading stakeholders mapped, and their capacity strengthened so they can assume leadership in some of these roles.

16) *Facilitate access to community-based storage facilities* – In most qualitative exercises led with them, producers recommended that BeninCajù build storage facilities at the community level. Quantitative exercises also revealed that a low percentage of individuals reported access to storage facilities. Thus, it appears that solutions for community-level storage are required, at least in the communities that were visited for the midterm evaluation. Solutions could include a mechanism that helps CVPAs and other informal groups to build their storage facilities, mapping storage facilities that are within reach of producers, and other solutions, such as home or communal storage that would ensure the quality of the RCN for extended periods of time.

M&E Considerations

17) *Revise the recording system for producer training* – The consultants strongly recommend implementing a beneficiary identification system and, more important, collecting the cell phone numbers of all farmers trained (or of someone in their household) and including this information in the database. TNS can then make it clear they will be doing quality control checks to ensure training is being completed. Collecting phone numbers would also enable implementation of a SMS-based survey or providing information via SMS. Details on whether trained individuals are part of a CPVA (and if so, which CVPA) could also be collected. Considering identification data is entered into the system for each training session undertaken, there should be no barriers to starting to collect phone numbers and CVPA status immediately.

18) *Undertake revision of the M&E system* – Detailed suggestions for improving the M&E system can be found in Section 4.3 and Appendix 23 of this report. Generally, they include removing a few indicators that overlap significantly with others, examining the use of disaggregation, and revising some indicators to make sure they are being measured appropriately. A cost-benefit analysis could also be done in relation to the yield survey (including comparing findings from the 2018 yield survey with those of the midterm) to determine if a survey could be implemented in less time and for less money.

19) *Develop a theory of change for the BeninCajù project* – It would be advisable to set aside some time to develop a theory of change, based on the revised PMP (see Appendix 23), which contains the key elements to develop such theory. We recommend a team approach that includes individuals who are aware of all the program intricacies, and to consult with all stakeholders in a participatory process. Having a theory of change may also help to guide improvements within the project's M&E system.

20) *Develop a system to use "control trees" for assessing cashew production* – The use of "control trees" to assess the effects of weather and climate and even the success of training techniques (if retrospective data is available for trees that are not under "good practices") could be applied.

21) *Revise how BeninCajù will assess impact at the endline* – The baseline results for good agricultural practices usage seem uncharacteristically high, as they were above midterm values for both control and BeninCajù groups. Those for good harvest and post-harvest practices were more reasonable, although variable. Production and income baseline results seem uncharacteristically low, although it has been suggested this was a result of poor weather conditions; trends were also similar to those seen in the midterm evaluation. These trends are also evidenced when the baseline is compared with the 2017 BeninCajù yield survey. This may pose a risk to using the DID method at the endline for some indicators, such as good harvest practices. If poor weather was the reason for low productivity and income values, DID would help to control for this. It would not make sense to analyze the PPI values, as the index methodology has changed, or to look at the percentage of farmers who could state three good farm management practices, as this was not measured at baseline. Therefore, for the endline, we recommend that BeninCajù specify a limited number of indicators/variables that could be measured using DID.

Value Chain Development

22) *Value chain roadmap development* – A more extensive value chain analysis needs to be undertaken in consultation with all stakeholders related to the cashew value chain, including traders, intermediaries, and exporters, as well as an analysis of price at the final consumer level. The stakeholders should also be involved in developing a roadmap for value chain development that is based on a common vision among stakeholders and defined strategies geared towards enhanced competitiveness. Support by the government in the form of subsidies, taxes, pricing and extension services also needs to be evaluated in the regional and global context and realigned accordingly as part of the value chain roadmap.

Midterm Evaluation of TechnoServe's Food for Progress BeninCajù Project

APPENDICES TO THE FINAL REPORT



Presented to TechnoServe

Submitted by Advisem Services Inc.

Ottawa, Canada

November 2018

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ABBREVIATIONS, ACRONYMS AND SYMBOLS

ABSSA	*Agence béninoise de sécurité salinatire des aliments* (Beninese Food Safety Agency)
ACA	African Cashew Alliance
AFI	Association of Food Industries
APIEX	*Agence de promotion des investissements et des exportations* (Investment and Export Promotion Agency)
ANOVA	Analysis of variance (statistical test)
ATDA4	*Agence territoriale de dévelopment pôle 4* (Territorial Agency for Agricultural Development)
BDSP	Business development services provider
BRC	British Retail Consortium
CBO	Community-based organization
CIAP	Cashew Integration & Acceleration Program
CIPB	*Conseil des investisseurs privés au Bénin* (Benin Private Investors' Association)
CLCAM	*Caisse locale de crédit agricole mutuel* (local farm credit cooperative)
CNSL	Cashew nut shell liquid
CNTC	*Conseil national des transformateurs de cajou* (National Council for Cashew Processors)
CoNEC	*Conseil national des exportateurs de cajou du Bénin* (National Cashew Exporters' Council)
CRADIB	*Centre de recherche et d'action pour le développement des initiatives à la base* (Research and Action Centre for the Development of Field Initiatives)
CRS	Catholic Relief Services
CVPA	*Coopérative villageoise de producteurs d'anacarde* (village cooperative of cashew nut producers)
DAC	Development Assistance Committee
DEDRAS	*Organisation pour le développement durable, le renforcement et l'autopromotion des structures communautaires* (Organization for Sustainable Development and the Strengthening and Self-Promotion of Community Structures)
DID	Difference-in-difference
EMICov	*Enquête modulaire intégrée sur les conditions de vie des ménages* (Household Living Standards Survey)
FAGACE	*Fonds africain de garantie et de coopération économique* (African Guarantee and Economic Cooperation Fund)
FAS	Food and Agriculture Service
FBG	Farmer-based group
FCFA	*Franc de la Communauté financière africaine* (African Financial Community franc)

ABBREVIATIONS, ACRONYMS AND SYMBOLS (CONTINUED)

FENAPAB	*Fédération nationale des producteurs d'anacarde du Bénin* (National Federation of Cashew Nut Producers of Benin)
FFPr	Food for Progress
FGD	Focus group discussion
FTE	Full-time equivalent
GIZ	*Deutsche Gesellschaft für Internationale Zusammenarbeit* (German Technical Cooperation)
Ha	Hectare
HACCP	Hazard analyzes and critical control point
iCA	*Initiative du cajou africain* (African Cashew Initiative)
IEDF	Innovation and Development Enterprise Fund
IFA	*L'Interprofession de la filière anacarde du Bénin* (Inter-Professional Body of the Cashew Value Chain)
IGA	Income-generating activity (IGA)
INRAB	*Institut national des recherches agricoles du Bénin* (National Institute of Agricultural Research of Benin)
ISO	International Organization for Standardization
ITC	International Trade Center
Kg	Kilogram
KII	Key informant interview
KOR	Kernel out-term ratio
LCSSA	*Laboratoire central de sécurité alimentaire des aliments* (Central Food Safety Laboratory)
M&E	Monitoring and evaluation
MAEP	*Ministère de l'Agriculture, de l'Élevage et de la Pêche* (Ministry of Agriculture, Livestock and Fisheries)
MFI	Microfinance institution
MIC	Ministère de l'Industrie et du Commerce (Ministry of Industry and Trade)
MT	Metric ton
NGO	Non-governmental organization
ODK	Open data kit
OECD	Organization for Economic Co-operation and Development
PADA	*Projet d'appui à la diversification agricole* (Agricultural Diversification Support Initiative)
PCQI	Preventative Controls Qualified Individual

ABBREVIATIONS, ACRONYMS AND SYMBOLS (CONTINUED)

PMP	Performance Monitoring Plan
PPI	Progress out of Poverty Index
PPP	Public-private partnership
PPS	Probability-proportional-to-size
PSP	Private service provider
RCN	Raw cashew nut
SGS	*Société générale de surveillance* (General Monitoring Society)
SILC	Savings and internal lending community
SMS	Short Message Service
SWOT	Strengths, Weaknesses, Opportunities, Threats
TNS	TechnoServe
ToRs	Terms of Reference
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
USD	United States dollar
USDA	United States Department of Agriculture
VCA	Value Chain Analysis

APPENDIX 1 – TERMS OF REFERENCE

TechnoServe Inc. is seeking qualified firms to participate in this competitive solicitation for the following services for TechnoServe Benin.

These Terms of Reference (ToR) will guide the Midterm Evaluation process for the BeninCajù project, which is funded by the United States Department of Agriculture (USDA) and implemented by TechnoServe and Catholic Relief Services. The performance period to be evaluated considers 30 months, from September 2015 to March 2018. Its impact areas are four departments of Benin: Collines, Zou, Borgou, and Donga.

I. Program Overview

Program Name	BeninCajù
Program Location	12 communes in 04 departments
Program Budget	USD 23,650,000*
Program Start	September 2015
Issue Program Addresses	Improve returns for the major crop of cashew for smallholder farmers and for Benin's economy as a whole
Program Goal	Expand Trade of Agricultural Products and Increase Agricultural Productivity
Implementing Agency and Partners	TechnoServe's Bénin and global leadership teams, USDA and other USG agencies, CRS and local government and program partners
Evaluation Type	Mid-course
Evaluation time frame	June 25, 2018 to October 15, 2018
Final Report deadline	October 15, 2018 (Final Report Loaded to USDA-FAIS)

II. Background

TechnoServe is an international non-governmental organization that promotes business solutions to poverty in the developing world. TechnoServe's mission is to work with enterprising people in the developing world to build competitive farms, businesses and industries. It does this by linking people to information, capital and markets. Active in Benin since 2015, TechnoServe is registered in the US as a 501(c)3 nonprofit corporation and headquartered in Washington, DC. Its staff of over 1,000 employees operate from 30 country offices in Africa, Latin America and Asia. For more details on TechnoServe and its work see: http://www.technoserve.org/

Implemented by TechnoServe (TNS) in partnership with Catholic Relief Services (CRS), BeninCajù is a five-year program funded by the U.S. Department of Agriculture (USDA) Foreign Agricultural Service (FAS) Food for Progress (FFP) program. BeninCajù encompasses a sector-wide value chain approach that will grow the cashew sector in Benin into a more productive, diversified, and inclusive economic growth engine for Benin and its people, and set it on a sustainable course for continued growth.

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

Annex I presents the project results framework. The main overarching goal of BeninCajù is to increase financial benefits for cashew processors and farmers. Two specifics objectives are defined to achieve this goal:

- Increase Agricultural Productivity in cashew value chain by increasing the use of improved agricultural techniques and technologies through trainings and strengthening of producer groups, expanding producers access to credit for inputs and improving post-harvest handling techniques that will engage producers more directly with the market.
- Increase trade of cashew and cashew apple products by increasing investment and processing infrastructure and technologies, strengthening trade associations and public sector market actors and launching a real-time market information system specific to cashew.

TNS has outlined five main activities to achieve these objectives over the five-year program period:

- *Capacity building and improved access to finance for producer groups/cooperatives.* This Activity aims to improve producer yields and incomes and has 4 sub-activities:
  - Producer training & certification program;
  - Other tools/initiatives, including access to genetic resources, extension services, demonstration plots, and market information;
  - Increases producer access to finance through community groups, MFIs, and buyer (processor) financing;
  - Capacity building for farmer-based groups (FBG) especially at the communal level.
- *Trainings on improved farm management and improved post-harvest handling.* Modules on these themes are incorporated into the producer training and certification program described under Activity 1.
- *Infrastructure, capacity building and market development of processing sector.* The program will catalyze investment in physical infrastructure and improve the management capacity for three categories of market actors:
  - New and existing medium and large-scale industrial processors, mainly nut processors, but potentially also juice, cashew nut shell liquid (CNSL) and/or shell cake producers;
  - New small-scale satellite nut processors linked to industrial processors;
  - New small-scale cashew apple processors.

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

- *Increase access to finance and investment for processing sector.* This includes efforts to familiarize the financial sector with the needs and opportunities in the cashew industry as well as facilitating the capacity building of cashew value chain actors (1) to identify and connect with financial mechanisms and institutions most appropriate for a given finance need, and (2) to become creditworthy and the submit high-quality loan applications. BeninCajù will also set up an Innovation & Enterprise Development Fund (IEDF) as a co-investment mechanism whereby entrepreneurs across the value chain can apply for matching grants where investment capital is difficult to achieve.

- *Capacity building of trade associations and public sector agencies.* BeninCajù will work directly with the key trade associations and Government of Benin entities to implement organization strengthening initiatives that allow these entities to better support the development of an investment in the Beninese cashew value chain.

As its main audience, BeninCajù supports smallholder cashew producing households, producer groups, and cashew processors in the following 12 communes:

  - Department of Collines: all 6 communes;
  - Department of Zou: Djidja commune;
  - Department of Borgou: N'Dali, Parakou and Tchaourou communes;
  - Department of Donga: Bassila and Djougou communes.

In order to accurately measure program results, a baseline study was conducted from June to August 2016. The baseline study collected data from the three target beneficiaries of the program: cashew producing households, producer groups, and cashew processors. Details on how each of these beneficiaries were included in the baseline study are below:

- Cashew Producing Households made up the primary component of the BeninCajù Baseline Study. 900 smallholder cashew farmers were interviewed. These 900 farmers comprised of two distinct subgroups: 452 farmers were located in villages where BeninCajù intended to work (treatment) and 448 farmers lived in villages where BeninCajù did not intend to work (control). Data was collected using a questionnaire. Information collected included: demographics, cashew plantations and holdings, cashew production, yield and disposition, cashew expenses, cashew sales and income, cashew production training and good agricultural practices, changes in cashew harvest quantity and quality, producer associations/cooperatives, availability, access to, and use of credit, and a poverty score card. Given that a key component of BeninCajù 's interventions focus on female cashew producers and ensuring that they reach parity with male producers in terms of income from cashes, all income data was disaggregated by gender.

- Producer Groups: 403 members of producer groups were also interviewed during the baseline study. These 403 members comprised of two distinct subgroups: 205 members located in villages where BeninCajù intended to work (treatment) and 198 members lived in villages where BeninCajù did not intend to work (control). Data was collected using a questionnaire. Information collected included: demographics, member roles, and management.

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

- Cashew Processors were included in the baseline study in two distinct ways:
  - All six BeninCajù partner cashew processors were interviewed as part of the study. Information collected included: size, operations, etc.;
  - 150 employees from the six BeninCajù partner cashew processors were also interviewed as part of the study. Information collected included: demographics and satisfaction.

Details on sample sizes and sampling procedures, used during the baseline study, for each of these program beneficiaries is included in Annex II.

The major findings of the study pertaining to the first objective "Increase Agricultural Productivity in cashew value chain" include the following:

- Relative to income and productivity, the surveyed BeninCajù households derive, on average, 23.7% of their annual income from cashew. The average gross income received from cashew is USD 569 (304 282 FCFA) and the average net income is of USD 391 (208 461 FCFA) . The overwhelming majority (77%) reported they have formal access to credit and 40% have gotten at least once a credit since 2011. They have on average 4.1 ha of cashew plantation with 701 cashew trees. The average cashew yield is 225 kg per ha or 2.81 kg per tree. The producers' total estimated production of the campaign directly preceding the survey averaged 697 kg.
- Regarding good agricultural practices, 39% of surveyed producers reported receiving direct (face-to-face) and 63% indirect trainings on good agricultural practices (GAP) from 2010-2016. 84% of the plantations have been pruned at least once and 87% of them have been weeded in the last 12 months preceded the survey. Despite the producers reporting that over 40% of their total cashew plantations had been burned by bushfires at least once, only 87% of plantations were protected against bushfires. Relative to harvest and post harvest methods, 39% of the surveyed producers reported receiving training on harvest and post-harvest (HPH) methods and fifty-six percent (56%) reported drying their Raw Cashew Nuts (RCN) before packaging them, using differents methods to determine when the RCN are fully dry. Further findings on producers are presented in detail in the baseline reports.
- These results pertain to the 452 producers who formed the treatment group of the baseline survey sample. With few differences, the results obtained on 448 producers of the control group are roughly similar to those for the beneficiaries.

The major findings of the study pertaining to the second objective "Increase trade of cashew and cashew apple products" include the following:

- All six processors identified in the intervention area at the time of the baseline study were asked to provide key pieces of information about their processing capacities, staff size, sales volumes, operations, etc. The results suggested that these processors already had a strong base of training on processing techniques and technologies, meaning BeninCajù could start directly with more advanced training focused on addressing more sophisticated issues. In contrast to this, only three (50%) of the surveyed processors had received training on marketing. Similarly, while the processors had attended different numbers of international trade events, the numbers of

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

contracts resulting from these events were uneven and typically low. Also, four (67%) of the processors report that potential buyers had asked for improvements in the processors' (post-harvest) operations. Further findings on processors are presented in detail in the baseline reports.

It is important to note that the baseline study included some limitations:

- The study heavily focused on producers and production activities, which means there is a lack of baseline data and data analysis related to the processors (both cashew nut and cashew apple) and institutional actors.
- Project monitoring activities, such as the production yield survey conducted only a few months after the baseline study, produced findings that tended to contradict those of the baseline study.

In addition to the baseline assessment, BeninCajù has also collected routine monitoring data showing progress against program results. Emerging results, based on routine monitoring data, are listed below:

- Objective 1: "Increase Agricultural Productivity in cashew value chain":
  - In total, 15,669 farmers or farm workers, including 24.4% of female were trained on various main topics since the beginning of the project. At the end of 2017, 58,759 ha of cashew farms had already been impacted by the technologies and innovations promoted by the project.
  - The annual yield survey relative to the agricultural campaign 2017-2018 is ongoing. The report is expected by June 2018. According to the results of the yield survey on the last campaign (2016-2017), the average yield of cashew nuts achieved 295 kg per ha and 3.28 kg per tree. Each producer sold on average 703 kg of cashew nut for an average amount of USD 823 (438,465 FCFA). Note that in 2017 the market price of raw cashew nut (RCN) was particularly high. The yield survey revealed that several improved agricultural and post-harvest techniques and technologies were widely adopted by the producers trained through the project period. To date, 314 producers (including 60% female) obtained a total of USD 82,958.5 (FCFA 44,190,000) as formal campaign credit provided by microfinance institutions.
  - 1,705 trainings sessions were provided to BeninCajù producers. Demonstration plots (47 in total) were established across the 12 major cashew producing communes. These plots are used to demonstrate and ensure continued application of improved practices. To date, 188 Savings and Internal Lending Community (SILC) groups have been created with a total of 5,405 members, of which 73% (3,926) of females. Cumulative savings by them reached USD 273,053.10 (FCFA 150 179 200), which is available as credit to members. In total, 1,446 training sessions were organized for SILC group members since project inception. Several activities were carried out to promote linkages between the "Federation nationale des producteurs d'anacarde (FENAPAB), the national network of cashew producers' cooperatives, and microfinance institutions (MFI).

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

- Objective 2: "Increase trade of cashew and cashew apple products ":
  - Through December 2017, in total 2,585 metric tonnes of cashew kernel were exported by five processor partners of BeninCajù for a total amount of USD 24,795,922. In total, 10 processors of cashew apple juice were supported. They produced and sold juice for a total amount of USD 12,738.
  - Through this timeframe, USD 2,616,904 were mobilized as bank credit in benefit of two cashew kernel processors. Two others processors are in the process of obtaining credit for the current campaign.
  - Around 700 processor and business service provider staff were trained on various topics related to their needs: business and financial management skills, processing techniques and technologies, etc. Several events were organised or supported by the project in order to promote cashew sector development and trade:
    - the national workshop on cashew sector development organised by the Agence de Promotion des Investissements (APIEX);
    - the drawing up of a decree on cashew management and the national cashew development program;
    - the national plan for cashew sector promotion.

III. Purpose of the Evaluation

The midterm evaluation is primarily intended as an internal management tool to assess project progress to date and identify needed course corrections, thereby guiding project management to achieving project objectives and the most effective use of project funding. In addition, the midterm evaluation presents an opportunity to resolve any inaccurate or incomplete measurements produced by the baseline study, in order to provide a more complete and relevant baseline that will allow management to more accurately measure the program's impact.

The midterm evaluation will help TechnoServe (and USDA) staff optimizing the allocation of project funding to achieve BeninCajù results through the remaining implementation period. It will be consistent with the following criteria, as outlined in the USDA Monitoring and Evaluation Policy: Relevance, Effectiveness, Efficiency, Impact and Sustainability. TechnoServe and CRS will incorporate findings and conclusions from the midterm evaluation to refine and, if necessary, adjust project activities to affect mid-course corrections required to achieve project goals and objectives.

IV. Overall Key Questions and methodology

The evaluation is intended to measure progress against output and outcome indicators and address issues regarding efficiency of resource use and quality of implementation. Overall, reflecting the criteria noted above, the midterm evaluation will focus on the following key questions.

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

- Relevance:
  - To what extent is the program (as articulated in the results framework, indicators, assumptions, program design and project activities) responsive to the needs of the participants and local conditions?
  - How well aligned is the program strategy and activities with government strategies and with USDA and US. Government's development goals, objectives and strategies?
- Effectiveness: Questions around the extent to which the project is contributing to the expected results or objectives are outlined, by Objective, in section V.
  - To what extent are the program activities contributing to expected results (as outlined under Objective level questions and methodology)?
  - What internal and external factors have influenced the ability of the project to meet expected results and targets?
  - What key successes should be replicated or key improvements should be made to the implementation to maximize the results?
- Sustainability: Questions around the sustainability of the expected results or objectives are outlined, by Objective, in section V.
  - To what extent is it likely that benefits generated by BeninCajù will endure after completion of the project?
    - Producer level: Agronomic Techniques, Harvest and Post-harvest handling, SILCs, Farm and Plantation Management;
    - Producer Groups and BDS: Market information, group sales, availability of high-quality inputs;
    - Access to Finance: Institutional lending and financial management;
    - Processors: Financial and technical capacity, strategic vision and profitability;
  - What are the biggest risks to the sustainability of benefits generated by BeninCajù?

To answer these questions, the midterm evaluation will utilize a mixed methods, difference-in-differences, approach that includes: a program document review, quantitative and qualitative data collection.

Program Document Review

The midterm evaluation will be informed by a program document review, including planning documents, program documents, reports, annual monitoring surveys, other monitoring records, and baseline data.

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

Quantitative Data Collection

Quantitative data will be collected through household surveys of cashew producing households, producer groups and cashew processors to assess their current agricultural and post-harvest practices, crop productivity, use of inputs, use of financial services, and exposure to project activities.

The following approach will be refined and approved by USDA and TechnoServe in the final work plan. Participant households will be selected randomly from the list of participants at the time of the midterm assessment, ensuring a stratified sample that is spread across the target geographies proportionate to the number of participants. The sample size will be representative of each value chain at the 95% confidence level. The evaluator should review the sampling approach used for the baseline study (provided in Annex II). Since the midterm evaluation is using the difference-in-difference approach, comparison households will be selected from the same comparison group used at baseline. Comparison households selected and interviewed must meet the minimum selection criteria for project participation. The evaluator will use the Avoidance of Contamination Methodology (Annex III) documented at baseline to identify potential instances of contamination and implement measures to reduce contamination.

The project will compare the outcomes of the participants to that of the comparison households to demonstrate attribution of any change to the project using a difference in difference statistical approach. Specific outcomes of interest are: increased rate of applying improved practices promoted by the project, increased productivity and income for farmers; increased volumes and percentage of processed cashew kernel; and increased sales volumes of cashew byproducts. This approach accounts for external factors that may have affected both the participant and nonparticipant households by subtracting the change in key outcomes found in the comparison households from the change found in the participant household. However, the comparison households are likely to be different from the participant households. To account for this, the evaluation will add a regression to the difference of differences approach to control for key observable characteristics of the households. The selected evaluator will also articulate hypotheses and research questions for each specified outcome.

In addition to the primary quantitative data collection, the midterm will also use direct observations from visits to program sites, monitoring data and crop production survey data collected twice a year at planting and at harvest from a sample of participant farmer households.

Qualitative Data Collection

Qualitative data will be collected as part of an outcome mapping exercise through focus group discussions with farmers in the target geographies to understand their participation in the project, factors that influenced their change in agricultural and post-harvest techniques, and use of financial services. Given that a key component of BeninCajù 's interventions focus on female cashew producers and ensuring that they reach parity with male producers in terms of income from cashes, focus group discussion will include women-only focus groups to understand their perspective and experiences. Key informant interviews will be conducted with processors (including satellite processors, cashew apple processors, and larger cashew processors), producer group leaders and input suppliers; intermediaries and exporters; business development service providers; financial institutions; trade associations; and with government officials from agencies including APIEX and ATDA4, and public services (ministries of agriculture and trade) and local leaders. Qualitative data collection is especially important to evaluate the

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

program's impact on non-producer stakeholders as these groups tend to be too small to be appropriate for statistical analyses.

V. Objective-Level Questions and Methodology

To better understand the relevance and effectiveness of the program's design, the following questions and methodology have been identified. They are neither exhaustive nor fixed, and can be adjusted, as appropriate, by the evaluator.

Objective 1

Objective 1: Increase Agricultural Productivity in cashew value chain by increasing the use of improved agricultural techniques and technologies through trainings and strengthening of producer groups, expanding producers access to credit for inputs and improving post-harvest handling techniques that will engage producers more directly with the market

Key Questions to Answer

- Given the currents levels of results (farmers trained, hectares grown under improved techniques and technologies, volume of cashew produced etc.) is the project on track to achieve its targets?
- Which improved techniques and technologies are most readily adapted by producers? Which are least readily adapted?
- How likely are producers to continue using improved techniques and technologies in the absence of the project? What factors are contributing to or hindering the likely sustainability of these practices?
- What is the average margin between farm gate price and end product price for selected value chains and how is it shared along the value chain?
- How can the project better measure the income generated by cashew production?
- To what extent do the SILC groups and finance linkage facility (between producers and formal credit service providers) increase investment in farms?
- To what extent are the institutional reforms in the agricultural sector (Agence Territoriale de Développement Agricole, Direction Départementale de l'agriculture, taxes sur les exportations de noix de cajou) affecting the implementation and results of the project? Will the project strategy need to adjust to these reforms?

Suggested Methodology

The evaluator will measure the impact on adoption of improved practices, and yields on farmers who have received trainings compared with those who have not received training.

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

The sampling considerations used during the baseline study are included in Annex II. For the midterm evaluation, the hired evaluator will update this design as follows:

- Participants of the treatment group will be selected from the farmers who have actually received training.
- Participants in the comparison group will be selected from the same comparison group established at baseline. This is to ensure that the comparison households surveyed at midterm have the same characteristics (observed and unobserved) as the comparison households surveyed at baseline. Careful attention must be paid when selecting participants for the comparison group, as geographic proximity to the treatment group and other project factors create an environment susceptible to contamination.

The evaluator will use the baseline survey tools to develop comparable tools for the midterm evaluation, especially for questions that seeks to measure changes in outputs and outcomes over time. These tools will be used to test interim outcomes and early indicators of success. Data must be collected using ITC and digital tools (i.e. deploying forms on mobile devices connected to a server) and accessible to BeninCajù staff.

Midterm results of the treatment and control groups will be compared to provide an initial estimate of the impacts of different trainings, access to nurseries, finances, market information, and other inputs.

Objective 2

Objective 2: Increase trade of cashew and cashew apple products by increasing investment and processing infrastructure and technologies, strengthening trade associations and public sector market actors and launching a real-time market information system specific to cashew.

Key Questions to Answer

- Have the attitudes of actual and potential private sector financial institutions changed due to BeninCajù's financing support activities?
- How have processor business skills (management practices, use of business/marketing plan…) changed compared to the benchmarks established during the baseline?
- Are supported processors likely to remain financially viable absent project support?
- To what extent has the project been able to facilitate public-private partnerships for cashew sector development?
- Given the currents levels of results (volume kernel sale, expansion of processors markets, policies and regulations formed, application of new technologies or management practices etc.) is the project on track to achieve its targets?
- Given the seasonal character of the sector's activities, how can the project better assess the employment generated by beneficiary processors?

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

Suggested Methodology

The external evaluator will examine project records and survey participating processors to determine the extent to which firms have made investments in resources (personnel, technology, trainings, etc) necessary to extend their processing capacity and improve the quality of products. This progress will be compared against the benchmarks determined in the baseline (where possible). For this purpose, the evaluator will use both qualitative and quantitative methods as possible.

To evaluate access to finance, the evaluator should examine project records as well as surveying both processors and financial institutions to determine what financing has been achieved by the activities, how attitudes of financial institutions have changed (due to the trainings and sectoral informations received from the project), and how this compares against benchmarks.

The evaluator should also examine if the activities implemented with the public sector, institutional non governmental and private actors are able to strengthening their capacity to promote cashew sector. For these topics, qualitative methods of evaluation, such as focus groups and individuals interviews with keys informants, should be prioritized.

Additional Questions

- How can the strategies implemented improve female participation in project activities and benefits?
- How can the M&E system better account for the climate and weather-related impacts on yield, so as to better measure project impact?
- In its current design, is the M&E system able to efficiently and accurately provide relevant information needed to measure project progress? What tools and procedures could be improved?

VII. Audience

The main audiences for this midterm evaluation are TechnoServe Benin and global leadership teams, the USDA, CRS and other USG agencies, and local government and program partners (in particular, the Ministry of Agriculture, Livestock and Fish, APIEX, Ministry of Commerce and Industry)

VIII. Key activities and Dates

The evaluator should use the USDA Monitoring and Evaluation Policy as a guide for all activities. All activity should be led in consultation with TNS, specifically the BeninCajou M&E team. Key activities include the following:

- Develop the overall Midterm Evaluation Inception Report, including primarily:
  - Design of sampling activities, including definition of sampling methodology, frame and size
  - Quality Assurance Plan;
  - Data contamination avoidance measures;

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

  - Survey questionnaires;
  - Institutional assessment templates;
  - Process for Focus Group Discussions for relevant stakeholders;
  - Process for outcome mapping for relevant stakeholders;
  - Data collection, compilation, and analysis plan.

- If the evaluator has existing or proposed partners capable of providing local enumerators this should be included in the cost and technical proposal. If the proposal does not include this, the evaluator will be responsible to develop a Scope of Work for and assist in selection and oversight of a local Beninese M&E firm to undertake data collection, as outlined above. The SOW should specify the timeframe (which will impact the number of enumerators the Beninese firm will need to hire) and type of enumerators and their qualifications and the requirement that data will be gathered electronically for immediate uploading to an online database.
- Meet with USDA in Washington to discuss key elements of the MidTerm Evaluation SOW and any other M&E issues. This is subject to the request of USDA. If not possible to meet in person, the Evaluator will be available to discuss with USDA by teleconference.
- Prepare and plan for the evaluation, consulting with BeninCajù staff as necessary and appropriate, such as for sampling issues and avoidance of potential data contamination, operational issues regarding the evaluation, such as hardware and software, survey languages, etc.
- Prepare the enumerator training course syllabus for the various data collection and processing methods to be used in the midterm Evaluation.
- Deliver the enumerator training course, including pilot of data collection tools.
- Oversee data collection, including data quality checks.
- Manage data analysis and cleaning.
- Prepare and submit the draft midterm evaluation report.
- In collaboration with TNS, respond to any USDA comments or requests until USDA approves the report.
- Present the final evaluation report, if requested and approved by USDA, to USDA in Washington or by webinar, and/or to USDA-approved stakeholders in Benin.

The dates below present an approximate timeline. TechnoServe anticipates a total lead evaluator level of effort of approximately 45 workdays.

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

Estimated dates	Activity
June 25-July 13	BeninCajù document review, methodology planning, data collection tool design, fieldwork preparation, training of enumerators, piloting of tools
July 16-August 10	Primary research and data collection
August 13-August 24	Data cleaning and initial analysis
August 24	Presentation to BeninCajù key staff and feedback
August 27-September 7	Analysis, report-writing, remote interviews and secondary research as needed
September 7	Draft evaluation due to TechnoServe
September 7-September 21	Finalisation of draft report based on TechnoServe comments
September 21	Final draft evaluation due to TechnoServe and USDA
October 5	Response to USDA comments due (drafted in collaboration with TechnoServe)
October 15	Final midterm evaluation upload to FAIS

IX. Logistics

The external evaluator will be responsible for:

- Managing the evaluation process;
- Developing, testing and applying any instruments/questionnaires;
- Designing and conducting training for enumerators;
- Leading the interview process (TNS to provide field assistance); TNS/CRS staff will facilitate the process rather than assume direct involvement, i.e identify and introduce key individuals;
- Analysis of data;
- Preparing and presenting all draft and final reports.

The independent evaluator will be free to draw their own conclusions free from organizational or political pressure.

TNS-Benin and CRS staff will be responsible for:

- Providing the evaluator with copies of all TechnoServe background documents (proposal, grant agreement, reports, work plans, training materials, etc.);
- Identifying and introducing to the evaluator key stakeholders as needed;
- Assisting with logistics. Unless otherwise agreed, all travel and logistical arrangements will be arranged by TechnoServe business advisors and administrative staff, however TechnoServe will not accompany evaluators/enumerators on data collection.

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

TNS-DC MEL Advisor for East and West Africa will be responsible for:

- Providing technical support;
- Providing review of, and final approval of evaluation deliverables.

X. Deliverables

All deliverables shall be submitted electronically, in both MS Word and PDF files. As possible, all photographs or other graphics/figures in the reports will also be submitted as separate editable files. The evaluator shall also submit the final cleaned dataset used to inform the analysis.

Evaluation Report Structure

The evaluation report must include the below information, following the outline as appropriate. Modifications to report structure or content must be approved by TNS. The report must be provided in English:

- Title Page;
- Executive Summary (maximum three pages);
- Program description (including goals, objectives, and outcomes);
- Underlying program strategies that were used to achieve the program's goals;
- Maps of program geographies;
- Evaluation purpose, methodology and approach, including strengths, weaknesses, and limitations of the methodology;
- Evaluation findings, with reference to documented evidence. Use of exhibits and specific examples, anecdotes, and photographs to illustrate key points is desirable;
- Conclusions: insights into the findings, reasons for successes and failures, innovations;
- Lessons learned, barriers to success;
- Industry challenges and opportunities going forward;
- Recommendations (based on evidence and insights) for both the Project Team and the USDA. Recommendations should cover efforts to improve the project, midcourse corrections if necessary, and efforts to improve the project M&E framework, including indicators;
- Annexes to the evaluation report:
  - Terms of Reference for the evaluation;
  - Evaluation work plan with timetable;

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

- Sampling strategy;
- Data collection tools, including questionnaires, interview guides, and other tools as appropriate;
- List of individuals interviewed and of stakeholder groups and/or communities consulted;
- List of supporting documentation reviewed.

Final Dataset

All field data is to be collected electronically and finalized in a database accessible to TechnoServe on the platform used by the evaluator and as a clean dataset in MS Excel.

XI. Dissemination

With USDA approval, TechnoServe intends to disseminate key Midterm Evaluation (MTE) findings through: 1) direct email to key project stakeholders (local government, program partners, etc.); 2) posting of MTE findings on the TechnoServe website; and 3); an in-country presentation of MTE findings with key stakeholders, including a question and answer session. The disseminated reports will be free from proprietary and personally identifiable information.

XII. Selection Criteria/Profile of the Evaluator

The ideal candidate to lead the external evaluator will demonstrate:

- Strong relevant experience in designing and leading multi-faceted program evaluations with experience working in private sector agri-industry;
- Background in international development and poverty-reduction projects;
- Ability to facilitate and relate to stakeholders at multiple levels (e.g., TechnoServe leadership and field staff, private sector business owners and managers, senior and junior government staff, program participants, community leaders workers and farmers);
- Strong skills and experience in quantitative (econometrics/statistical analysis), qualitative and participatory evaluation methods;
- Experience planning and conducting quasi-experimental designs;
- Data analysis and presentation skills;
- Sensitivity to cultural/historical contexts. Additional training or expertise in anthropology, sociology or historical research viewed favorably;
- Knowledge of English necessary and French language helpful.

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

XIII. Criteria for Selection

The evaluation of each response to this TOR will be based on the requirements set out in the solicitation and any addenda thereto. At the sole discretion of TNS, the top proposals may be selected for follow-up questions or to provide an oral presentation.

The following weighting and points will be assigned to the proposal for evaluation purposes:

Technical Proposal – 60%		60 total points
• Project Approach/Methodology	30 points (maximum)	
• Quality of Work Plan	10 points (maximum)	
• Project Schedule	10 points (maximum)	
• Project Deliverables	10 points (maximum)	
Management Proposal – 30%		30 total points
• Project Team Structure and Internal Controls	10 points (maximum)	
• Staff Qualifications/Experience	10 points (maximum)	
• Experience of the Firm	10 points (maximum)	
Cost Proposal – 10%		10 total points
TOTAL		100 points

TechnoServe reserves the right to award the contract to the organization whose proposal is deemed to be in the best interest of and most advantageous to TNS and the Donor.

TechnoServe will not award a contract to any bidder where there is indication of a lack of business integrity.

The Organization with the winning proposal will be notified in writing. Those who were not selected may or may not be notified, at the sole discretion of TNS.

XIV. Terms and Conditions

- The Request for Proposal is not and shall not be considered an offer by TechnoServe.
- All responses must be received on or before the date and time indicated below in XVI. Schedule of Events. All late responses will be rejected.
- All unresponsive responses will be rejected.
- All proposals will be considered binding offers. Prices proposed must be valid for 60 days after the proposal deadline noted below in XVI. Schedule of Events.
- All awards will be subject to TNS contractual terms and conditions and contingent on the availability of donor funding.

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

- TNS reserves the right to accept or reject any proposal or cancel the solicitation process at any time, and shall have no liability to the proposing organizations submitting proposals for such rejection or cancellation of the request for proposals.
- TNS reserves the right to accept all or part of the proposal when award is provided.
- All information provided by TNS in this TOR is offered in good faith. Individual items are subject to change at any time, and all bidders will be provided with notification of any changes. TNS is not responsible or liable for any use of the information submitted by bidders or for any claims asserted therefrom.
- TNS reserves the right to require any bidder to enter into a non-disclosure agreement.
- The bidders are solely obligated to pay for any costs, of any kind whatsoever, which may be incurred by bidder or any third parties, in connection with theResponse. All responses and supporting documentation shall become the property of TNS, subject to claims of confidentiality in respect of the response and supporting documentation, which have been clearly marked confidential by the bidder.
- Bidders are required to identify and disclose any actual or potential Conflict of Interest.

XV. Form/Content of Response

All proposals shall:

- Be in the English language;
- Include an estimated evaluation budget, including the applicant's daily rate, required additional non-TechnoServe personnel, etc. Costs should be detailed in US Dollar, with applicable Tax/Charges clearly identified;
- Provide requested payment terms and conditions;
- Describe the qualifications, experience and capabilities of the firm in providing the type of services being request by this TOR. Resumes or CVs of "key personnel" shall be submitted as an attachment;
- Include a contact name, email address, and telephone number to facilitate communication between TNS and the submitting organization;
- A brief outline of the organization and services offered, including:
  - Full legal name, jurisdiction of incorporation and address of the company;
  - Full legal name and country of citizenry of company's President and/or Chief Executive Officer, and all other officers and senior managers of the company;
  - Year business was established;

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

- A descriptive of a proposed evaluation design, methodology and general evaluation approach;
- List of 2 referees who can attest to the applicant's experience and expertise as it relates to this project and this ToR;
- One to two examples of the applicant's work.

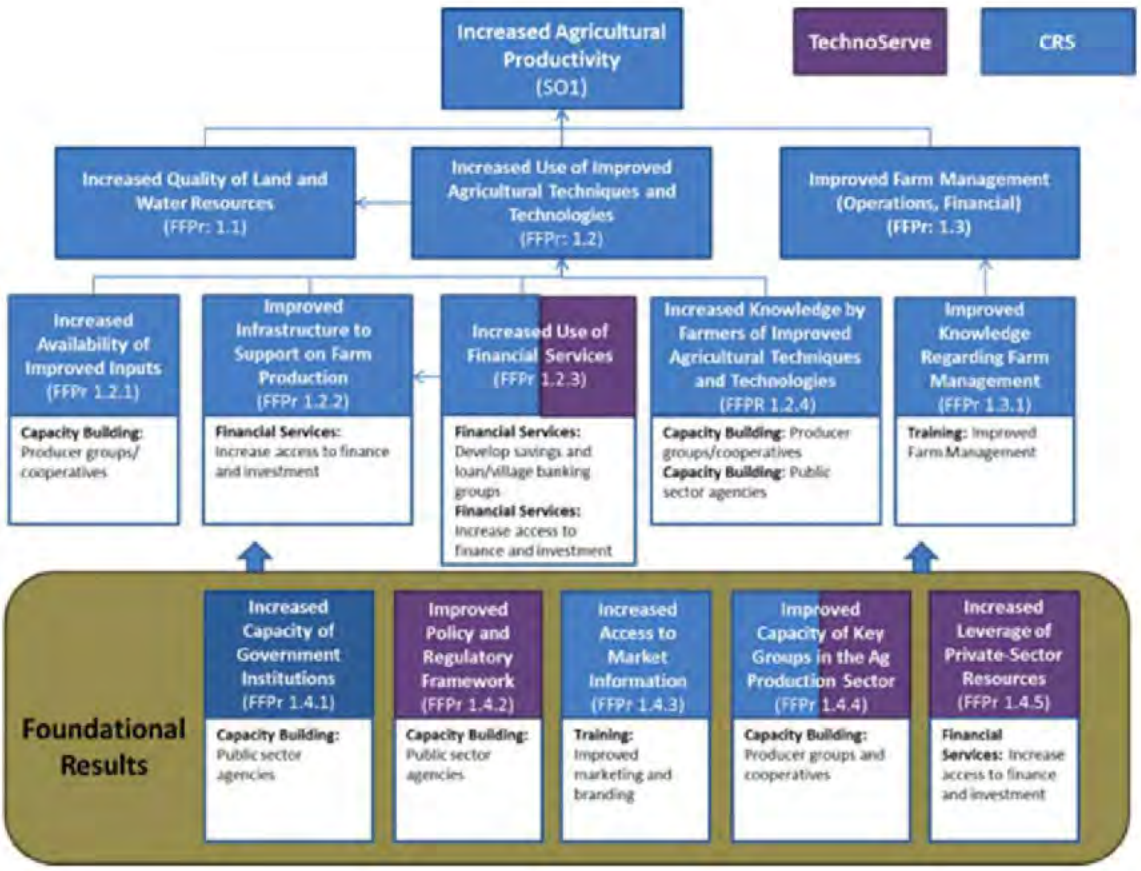
XVI. Schedule of Events

Evaluators meeting the above criteria are invited to submit a proposal via email to TechnoServe at offresbenin@tns.org (Use the subject line "Application and Proposal for Cashew Evaluation").

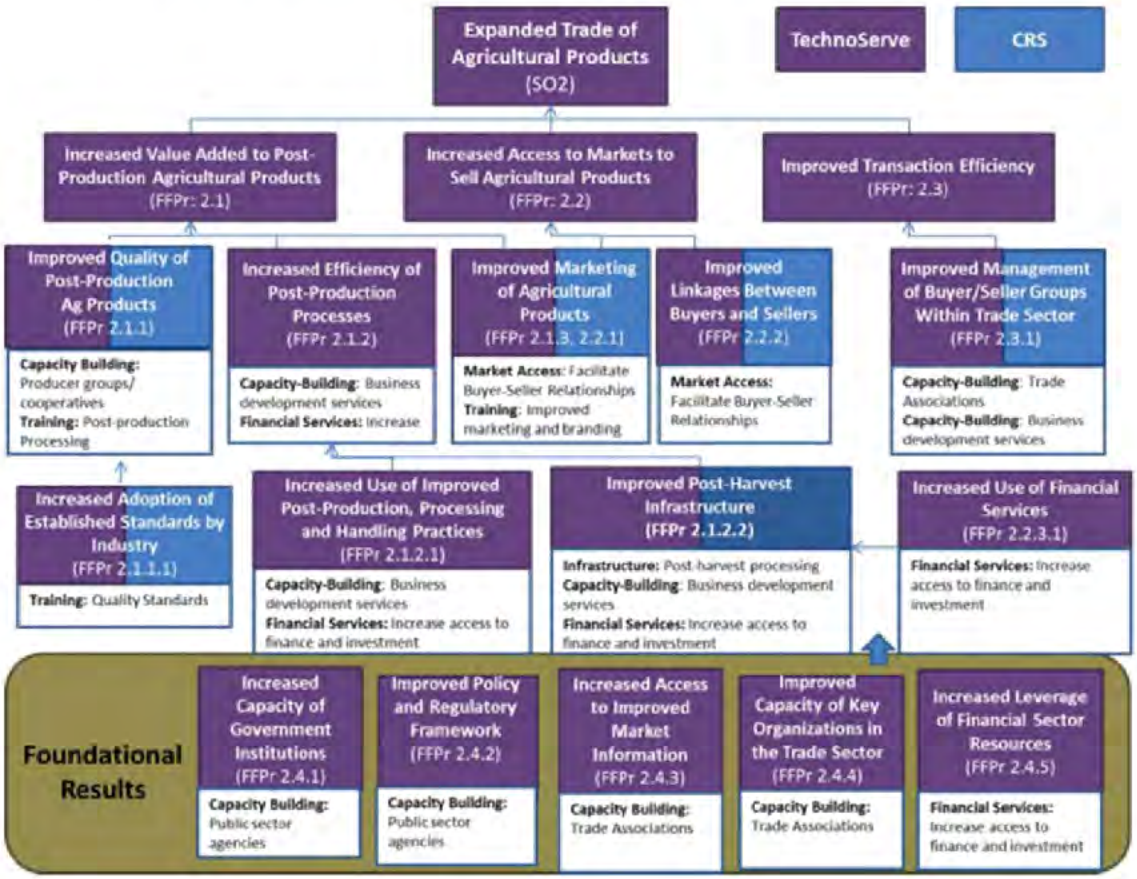
Questions regarding this request must be received no later than May 15, 2018. Responses to questions will be distributed to all interested parties no later than May 18, 2018.

Proposals are due from interested parties that meet the requirements by May 30, 2018.

Annex I: BeninCajù Results Framework



APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)



Annex II: BeninCajù Baseline Sampling Considerations

Background

The Baseline study (May-June 2016) of BeninCajù was primarily implemented using questionnaires developed from reviews of pertinent literature relating to other projects on cashew and other surveys of organizational management and employee satisfaction. Specifically, the producer questionnaire is largely based on the Baseline and yield survey questionnaires primarily developed by the baseline evaluator for the African Cashew initiative (ACi) and used in Benin, Cote d' Ivoire, Burkina Faso, Ghana, and Mozambique and on the assessments and analyses of the collected data by this same evaluator. The producer group questionnaire was derived primarily from other questionnaires and focus group discussions guidelines developed in large part by the baseline evaluator for ACi, the Competitive African Cotton Initiative (COMPACI), and the Coffee Partnership for Tanzania (CPT). However, the section of group management (good governance) borrowed heavily from *The Good Governance Test* found at: https://www.surveymonkey.com/r/The_Good_Governance_Test_Fall_2011. Finally, the processor employee questionnaire was developed in part by the baseline evaluator based on similar work on the above-named projects and also borrowed from The Employee Satisfaction Survey (Scott Smith PhD, February 2013, at: https://www.qualtrics.com/blog/employee-satisfaction-survey/).

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

The organization responsible for implementing these surveys (with in the field BeninCajù team oversight during the entire surveys) was Programme Analyse de Politique Agricole (PAPA), using enumerators from the Beninese cashew producers association (Federation Nationale des Producteurs d'Anacarde du Benin (FENAPAB)) and some additional enumerators familiar to PAPA. These organizations were selected by BeninCajù for these surveys because of their directly applicable experience in implementing the annual Africa Cashew initiative (ACi) yield surveys in Benin. The TNS BeninCajù team implemented the processor key informant interviews and the survey of processor employees.

The BeninCajù Baseline Study was, in its entirety, conducted through the use of quantitative surveys, key informant interviews, and Focus Group Discussions (FGD). This baseline study report details the findings of the quantitative surveys of producers, producer group members, and processor employees as well as the data collected from key informants regarding the processors.

Sampling Considerations

The sample sizes and sampling procedures for this Baseline Study varied according to the target population being considered and the available sample frame(s). The sample of producers selected for the producer part of this baseline study was selected as a true random sample. While it is currently expected that the BeninCajù Endline survey will interview the same producers that were interviewed at Baseline, this decision has not been taken by TNS and/or USDA. Therefore, in order to not burden the Baseline study with the much larger sample sizes that a longitudinal study with Treatment (BeninCajù) and Control groups using double-difference evaluation methods would require, the Baseline evaluator determined the sample size based on ensuring that with 95% confidence, for any continuous or pseudo-continuous variable such as yield, income, percentage of producers adopting any particular good agricultural practice, etc, the average value calculated from the sample of producer responses would be within + 7% of the "true" average value that would have been obtained if all possible producers had been surveyed. The value of 7% was selected as a compromise between 5% which would have required a much larger sample size with significant cost implications, and 10% which would have provided results deemed to be too imprecise. Two-stage sampling was used to minimize logistical and costs and survey implementation time. With these constraints, the minimum required sample size was determined to be 375 producers.

At completing of the baseline study, it was possible (although not yet decided) that, at Endline, the same BeninCajù and Control producers interviewed at Baseline would be interviewed again, therefore 20% oversampling was done to ensure that, with attrition, at least 375 of the same producers would be available for interviews at both Baseline and Endline. This led to an overall target sample size of 450 BeninCajù and 450 Control producers. Note that if the sample size had been designed for an assured double-difference evaluation, the overall sample size would have been roughly double this size. If at Endline, the decision is made to interview the same producers in both the Treatment and Control groups, a larger Endline sample size may be required.

As noted, for logistic and economic reasons, two-stage sampling was used, meaning that a subset of villages was first selected from the list of all possible target villages in the target communes. The Baseline evaluator decided that the 450 interviews for both BeninCajù and Control producers would be generated by selecting 15 producers from 30 of the appropriate villages. The specific villages were selected using probability-proportional-to-size (PPS) where the "size" of each village was determined by the number of agricultural households in that village as given in a Government of Benin report. (Prior to selecting the

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

villages to be surveyed, the numbers and names of cashew producers in each village were not known, so the number of agricultural households in the villages was used as a proxy for the number of cashew producers.)

Once the BeninCajù and Control survey villages were selected, lists of names of the cashew farmers in each selected village were obtained and the farmers to be included in the survey sample were chosen by random selection. Finally, 10 "replacement" farmers were also randomly selected for each survey village to be interviewed if any of the planned sample farmers were unavailable or preferred to not participate in the survey.

In order to have the possibility of correlating results from the producer survey with those from the producer group survey, and in the interests of cost-effectiveness, the decision was made to conduct the producer group survey with group members in villages already selected for the producer survey. It was not possible to get lists of producer group members in advance to select a random sample of producer group members. Therefore, the sample of producer group members to interview were selected by asking interviewed producers if they were members of any producer groups and, if so, to name the other group members in their villages who were then identified and approached for the group member survey. This resulted in a non-random total of 205 group members in BeninCajù villages and 198 group members in Control villages being interviewed for the producer group survey.

Because only six (6) cashew processors are working with BeninCajù , all six of them were approached to provide key data about their size, operations, etc.

Finally, employees of all six of the BeninCajù-related cashew processors were surveyed. Again, it was not possible to get advance lists of employees and managers in each section of the processor factory, so instead, for each processor, in each section the first employee encountered was interviewed. A form of "nearest neighbor selection" with suitable skips was used to randomize the selection of the next employee to interview throughout that processor section was then used to select a total of ten (10) workers in each section (that had at least 10 employees) including the manager of that section. The manager of each work section in each processor was systematically included in the sample.

Annex III: BeninCajù Baseline Study Avoidance of Contamination Methodology

Executive Summary

In early planning for the BeninCajù baseline study, it was decided that the collected baseline data should capture all cashew production, yield, and income data for the 2016 season. This required that the USDA-funded TechnoServe Benin (TNSB) BeninCajù project baseline survey be delayed until the end of the 2016 cashew harvest and sales period. This in turn raised the possibility that startup of BeninCajù activities and interventions is some villages might occur before the baseline survey in those villages was conducted.

USDA's justifiable concern about this plan was the possibility that implementation of any BeninCajù activities in any selected village before the survey might affect the surveyed producers' (farmers') responses to questions about their cashew farming practices, their knowledge of Good Agricultural Practices (GAP) for cashew, and their responses to other questions or even the 2016 harvest, thereby "contaminating" the baseline data by farmers reporting knowledge, opinions, or cashew farming practices that were solely due to the startup of the BeninCajù activities.

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

TNSB, together with the BeninCajù Baseline Coordinator, developed a plan to schedule startup and other activities in the surveyed BeninCajù villages after the baseline survey was completed in those villages. This plan, which was correctly implemented, ensured that no BeninCajù activities of any kind were undertaken in any of the surveyed BeninCajù villages. In fact, as of 29 September, 2016, to further ensure that baseline contamination from any project activities could not possibly take place, all project producer activities thus far undertaken have occurred in other project villages.

Background

The BeninCajù baseline data collection recall timeframes described were selected to produce the best and most valid starting points for BeninCajù based on annual production, processing and institutional reporting cycles. Using these recall timeframes will give the best picture of BeninCajù 's impact and will help to inform implementation adaptations during the Life of Project (LOP).

Under USDA M&E policy, projects are normally not allowed to initiate activities before the Baseline Evaluation is approved. The timing of the start of BeninCajù between two cashew seasons has required some adjustment both to have the best baseline data and simultaneously not to delay project activities. For this reason, USDA originally agreed that project activities can start once baseline data has been collected (scheduled for the end of July, 2016) and before the Baseline Evaluation report has been fully approved. However, for BeninCajù to meet the project goals, it was critical to begin some key project activities even before the end of baseline data collection. BeninCajù carefully examined what activities were critical to begin and how implementation could be undertaken to avoid data contamination. In addition, in order to avoid data contamination, BeninCajù developed some methods for the Evaluator to use to adapt the geographic rollout of project activities so that the sample of producers selected to be part of the sample for the Baseline survey was not included in any BeninCajù activities nor otherwise impacted by them until after completion of the Baseline data collection activities in their villages

While actual implementation of the selected project activities before collection of the baseline data required USDA approval, this approval was ultimately granted and was, to a very large extent, based on USDA'a acceptance of the ability of BeninCajù and the Evaluator to work together to ensure that no contamination would take place. In any case, the Evaluator was responsible for ensuring that data contamination does not occur.

The proposed select project activities fall under three categories:

- Producer support activities: begin training and access to finance;
- Processor support activities: begin technical assistance, access to finance, food safety, product diversification;
- BeninCajù communication activities: develop BeninCajù communication plan.

1. Producer Support Activities: Begin Farmer Training and Access to Finance

BeninCajù collected producer baseline data collection starting in April 2016 and completed collection by the end of June, 2016. BeninCajù proposed to USDA that they approve starting two producer support activities in March, 2016. Although there might have been some risk of contamination, BeninCajù and the

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

Evaluator planned and implemented the measures necessary to ensure that there was no contamination by either the start of SILC training/facilitation or the start of Gold and Silver farmer training. Following is a description of each of the two producer activities proposed, with information on how contamination of the baseline data was avoided.

- Gold and Silver farmer training programs, which are the "flagship" (i.e., most comprehensive and intensive) farmer training programs. Both of these programs will extend over many months and begin with 10 days of agronomic training, including information on weeding, spacing, grafting, etc. BeninCajù asked USDA to allow starting the Gold and Silver packages with the first 2-3 day training session in July, 2016, which, in the event, turned out to be after the last baseline date were collected. This schedule was necessary to ensure that the farmers can receive the 10-days of agronomic training followed by the harvest/post-harvest contents of the course in time to impact cultivation and harvesting for the 2017 harvest season.

  Anti-Contamination Strategy and Update: To ensure that there was no risk of contamination, the consultant and BeninCajù team identified the list of 30 Intervention villages and 30 control villages for the baseline survey. Each village was then mapped with a radius of 10km for intervention villages and 5km for control villages. Trainings did not begin until August 2016. No activities have been done in any of the baseline villages (intervention or control) to date or within the respective radius set. No activities will take place within 5km of the control villages for the duration of the project.

- Savings and Internal Lending Community (SILC) training and facilitation, to provide better access to capital for farmers during the cashew season.

  BeninCajù requested that USDA approve starting the initial training and organization for the SILCs in March, 2016. This was agreed by USDA. Most of the time during which the baseline survey was conducted through the completion of baseline data collection in June involved forming the initial SILC groups and training and recruiting stakeholders.

  This approval was granted because it was known that the SILCs would not be in a position to actually provide financing until well after the baseline. In addition, it was not anticipated that farmers would seek financing at that time, since they would have recently received their revenues from the recently completed cashew harvest. As such, the SILC training was not expected to have an effect on the results of the 2016 harvest or on the BeninCajù baseline survey and evaluation.

  Anti-Contamination Strategy and Update: There have been no SILC training or groups organized to date as staff is still being recruited and trained, thus there was no opportunity for any contamination to occur from these activities.

2. Processor Support Activities: Technical Assistance, Access to Finance, Food Safety, Product Diversification

BeninCajù collected baseline data for the six existing processors based on their status as of December 31st, 2015. These data captured the results of the 2015 harvest and post-harvest processing. The processor data were collected and processed by the end of May, 2016. USDA approved BeninCajù starting two processor-support activities before the completion of all baseline data.

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

The two processor support activities with their starting month(s) are:

- Food safety technical assistance (April);
- Diversification into cashew juice (August).

Following is a description of each proposed processor activity to provide information to the Evaluator for designing the Baseline Evaluation to avoid any contamination of baseline data.

- *Food safety.* BeninCajù hired a consultant to conduct an initial assessment for one of the factories. This report was received in July. While the assessment was done prior to baseline collection, no specific actions were put into place. The full time Food Safety specialist started in September and will be moving forward with the action plan proposed by the consultant.
- *Diversification into cashew juice.* BeninCajù began the process of developing juice processing by bringing an international volunteer consultant in August, 2016. The volunteer's focus is on analyzing the market for cashew apple-based products in Benin and the region. This has no impact on the processor baseline data.

3. BeninCajù Communication Activities

With USDA approval, BeninCajù began the following specific communication activities before completion of the baseline data collection:

- Hiring of local Communications Specialist;
- Development of annual Communications Plan;
- Development of BeninCajù branding & marking policy compliant with USDA requirements;
- Preparation of BeninCajù communication materials, including logo, flyers, banners, website, social media, etc.;
- Implementation of certain communication initiatives in support of approved project activities, including launch events in Cotonou and Parakou;
- Participation in key national, regional, and international cashew industry conferences and events.

These actions had no impact on baseline data collection, as these activities do not directly relate to any of the agreed project indicators.

Contamination Avoidance

The principal risk of contamination was posed by BeninCajù startup activities and interventions changing the knowledge, attitudes, and practices (KAP) and, as a remote possibility, the cashew harvest results (production, income) of the surveyed project cashew farmers. As noted above, the geographic rollout of any and all BeninCajù activities was carefully planned and scheduled to avoid any activities in any survey

APPENDIX 1 – TERMS OF REFERENCE (CONTINUED)

villages until after all survey activities in those villages were completed. In fact, as of this date, all project activities of any kind have taken place in non-surveyed villages at the greatest possible distance from the survey villages as a conservative measure to further ensure that no contamination could take place.

Table 1, below, presents the start and end date of baseline survey activities in the surveyed BeninCajù villages. This table shows that the survey was completed in all selected villages prior to the end of June, 2016.

Table 1
Survey Dates in Surveyed BeninCajù villages

BeninCajù survey villages	Survey Dates (DD/MM/YYYY)	
	Start	End
ADJANTE	05/06/2016	09/06/2016
AFFIZOUNGO	04/06/2016	06/06/2016
AMOU	03/05/2016	04/05/2016
AOTRELE	05/06/2016	05/06/2016
ASSANTE	03/06/2016	06/06/2016
ATCHAKPA	05/06/2016	05/06/2016
BIGUINA	05/06/2016	07/06/2016
BOUYEROU	03/06/2016	07/06/2016
DARINGA	02/06/2016	06/06/2016
DOKOUNDOHO	31/05/2016	03/06/2016
EKPA	03/06/2016	04/06/2016

APPENDIX 2 – EVALUATION MATRIX

Questions and sub-questions	Performance indicators	Data source	Data collection method
1. Relevance (are we doing the right thing with the right people at the right place?)			
1.1 To what extent is the program (as articulated in the results framework, indicators, assumptions, program design and project activities) responsive to the needs of the participants and local conditions?	• Level of satisfaction of stakeholders with their participation in the project • Number and type of stakeholders' suggestions on how the program can serve them better • Level of improvement in stakeholders lives and businesses as a result of the project	• Producers (demonstration plot producers, producer groups), Processors • TNS/CRS staff • Financial institutions • Public sector market actors • SILCs • Input Suppliers/Nursery managers • FENAPAB/DEDRAS/CRADIB	• Surveys • Focus group discussions • Document reviews • Key informant interviews • Value Chain Analysis (RCN, kernels, Cashew Apple/Juice)
1.2 How well aligned is the program strategy and activities with government strategies and with USDA and the US government's development goals, objectives and strategies?	• Number/Example of national/USDA/US Government strategies/policies to which the project contributes • Perception of stakeholders regarding the alignment of the program with Beninese government strategies and USDA/US government goals and strategies.	• USDA staff • TNS/CRS staff	• Document review • Key informant interviews
2. Effectiveness (are we achieving our expected results?)			
2.1 To what extent are the program activities contributing to expected results (as outlined under Objective-level questions and methodology)? • Given the current levels of results (farmers trained, hectares grown under improved techniques and technologies, volume of cashew produced, etc.) is the project on track to achieve its targets? (Objective 1) • To what extent is the project on track to achieve its targets given current results achieved (volume kernel sale, expansion of processors markets, policies and regulations formed, application of new technologies or management practices, etc.)? (Objective 2)	• Expected results vs actual progress • Perception of various stakeholders on the quality of activities being implemented.	• Producers (demonstration plot producers, producer groups), Processors • TNS/CRS staff • Financial institutions • Public sector market actors • SILCs • FENAPAB/DEDRAS/CRADIB • Input Suppliers/Nursery managers	• Project M&E data • Surveys • Focus group discussions • Key informant interviews • Value-chain analysis RCN, kernels, and cashew apple/juice analysis
2.1a Which improved techniques and technologies are most readily adapted by producers? Which are least readily adapted? (Objective 1)	Types/number of improved techniques and technologies readily adapted by producers	• Project records • Producers (demonstration plot producers, producer groups), Processors • TNS/CRS staff • Input suppliers/Nursery managers	• Project M&E data and document reviews • Surveys • Focus group discussions • Key informant interviews

APPENDIX 2 – EVALUATION MATRIX (CONTINUED)

Questions and sub-questions	Performance indicators	Data source	Data collection method
2.1b What is the average margin between farm gate price and end-product price for RCN, kernels and cashew apple/juice value chains and how is it shared along the value chain? (Objective 1)	Farm gate prices and end-product prices	• Producers, Processors • Public sector market actors (Ministry of Industry and Commerce, Ministry of Agriculture, IFA)	• Surveys • Farm budgets (prepared during focus groups and case studies) • Processors' balance sheet • VCA
2.1c How can the project better measure the income generated by cashew production? (Objective 1)	Recommendations of relevant stakeholders on how to measure income generated by cashew production	• Producers, Processors • TNS/CRS staff • FENAPAB/DEDRAS/CRADIB	• Focus group discussions – household income and expenditure profile • Key informant interviews • Transmission slips (from harvest to transport to sale/export) • Analyze the revenue calculation method in the yield surveys and baseline study
2.1d To what extent do the SILC groups and finance linkage facility (between producers and formal credit service providers) increase investment in farms? (Objective 1)	• Percentage of producers borrowing from SILC groups who state they use loans to invest back into their farms • Details on how producers borrowing from SILC groups (or other financial institution) invest back into their farms	• Project records • Producers • TNS/CRS staff • SILCs • Financial institutions • FENAPAB/DEDRAS/CRADIB • Public sector market actors • Input suppliers/Nursery managers	• Surveys • Focus group discussions • Key informant interviews
2.1e To what extent are the institutional reforms in the agricultural sector (Agence territoriale de développement agricole, Direction départementale de l'agriculture, taxes sur les exportations de noix de cajou) affecting the implementation and results of the project? Will the project strategy need to adjust to these reforms? (Objective 1)	• Number of reforms that could be affecting project implementation • Perception of stakeholders on how reforms are affecting their businesses	• Project records • Producers, Processors • TNS/CRS staff • Financial institutions • Public sector market actors	• Surveys • Focus group discussions • Document reviews • Key informant interviews
2.1f Have the attitudes of actual and potential private sector financial institutions changed due to BeninCajù's financing support activities? (Objective 2)	• Perception of stakeholders regarding changes in attitude • Number of private sector financial loans provided to producers and processors	• Producers, Processors • TNS/CRS staff • Financial institutions • Public sector market actors	• Project M&E data • Surveys • Focus group discussions • Document reviews • Key informant interviews

APPENDIX 2 – EVALUATION MATRIX (CONTINUED)

Questions and sub-questions	Performance indicators	Data source	Data collection method
2.1g How have processor business skills (management practices, use of business/marketing plan, etc.) changed compared to the benchmarks established during the baseline? (Objective 2)	• Number of processors stating to use business/marketing plans • Perception of stakeholders on how their business skills have improved	• Project records • Processors • TNS/CRS staff • Financial institutions • BDS Providers • Public sector market actors • Yearly accreditation package of processors • BDS Providers	• Project M&E data • Surveys • Focus group discussions • Document reviews • Key informant interviews
2.1h To what extent has the project been able to facilitate public-private partnerships for cashew sector development? (Objective 2)	• Number of public-private partnership • Perception of stakeholders on the functionality of these public-private partnerships	• Project records • Processors • TNS/CRS staff • Financial institutions • Public sector market actors	• Project M&E data • Surveys, • Focus group discussions • Document reviews • Key informant interviews
2.1i Given the seasonal character of the sector's activities, how can the project better assess the employment generated by beneficiary processors? (Objective 2)	Comparison between TNS values and midterm evaluation values	• Project records • Processors • TNS/CRS staff	• Project M&E data • Surveys • Focus group discussions • Document reviews • Key informant interviews • Review of human resource logs and yearly business plans of processors
2.2 What internal and external factors have influenced the ability of the project to meet expected results and targets?	• Expected results vs. actual progress • Number of internal and external factors mentioned by stakeholders	• Producers, Processors • TNS/CRS staff • USDA • SILCs • Financial institutions • Public sector market actors	• Surveys • Focus group discussions • Document review • Key informant interviews
2.3 What key successes could be replicated? What key improvements should be made to the project implementation to maximize the results?	• Number of best practices/success reported by stakeholders • Perception of stakeholders on the key success and limiting factors for the project • Expected results vs. actual progress • Comparison of Treatment and Control groups • Comparison of Processors in Benin vs. International	• Producers (demonstration plot producers, producer groups), Processors • TNS/CRS staff • SILCs • Financial institutions • Public sector market actors	• Surveys • Focus group discussions • Document review • Key informant interviews • Value-chain analysis cashew nut and cashew analysis

APPENDIX 2 – EVALUATION MATRIX (CONTINUED)

Questions and sub-questions	Performance indicators	Data source	Data collection method
2.4 What are the unintended effects of the project (positive or negative)?	• Number and type of positive and/or negative unexpected results stemming from the implementation of BeninCajù programming • Perception of the relevant stakeholders regarding the unintended effects of the project.	• Producers (demonstration plot producers, producer groups), Processors • SILCs • TNS/CRS staff • Financial institutions • Public Sector market actors • FENAPAB/DEDRAS/CRADIB • BDS providers • Input Suppliers/Nursery Managers	• Surveys • Focus group discussions • Document reviews • Key informant interviews • Value Chain Analysis
3. Efficiency (i.e., implementation of program and delivery of services)			
3.1 How can the strategies implemented improve female participation in project activities and benefits?	• Number and type of current strategies being implemented • Perception of stakeholders, especially women, on how project activities have supported the participation of women	• Project records • Producers (demonstration plot producers, producer groups), Processors • TNS/CRS staff • Financial institutions • FENAPAB/DEDRAS/CRADIB	• Surveys • Focus group discussions • Key informant interviews
3.2 To what extent does the current M&E system take into consideration climate and weather-related impacts on yield, so as to better measure project impact?	• Perception of various stakeholders (TNS, CRS, USDA, farmers, public actors) • Degree to which current M&E data and tools allow for the measurement of impact of climate and weather on yields	• Project records • Analysis of the effectiveness of M&E system • TNS/CRS staff • USDA staff • FENAPAB/DEDRAS/CRADIB • Producers	• Analysis of Project M&E data • Document Review • Focus group discussions • Key informant interviews • Environmental accreditation package of processors
3.3 In its current design, is the M&E system able to efficiently and accurately provide relevant information needed to measure project progress? What tools and procedures could be improved?	• Perception of various stakeholders (TNS, CRS, USDA) • Degree to which the current M&E system allow for the timely provision of relevant data to demonstrate the project effects and impacts	• TNS/CRS staff • USDA staff	• Analysis of Project M&E data and tools • Key informant interviews

APPENDIX 2 – EVALUATION MATRIX (CONTINUED)

Questions and sub-questions	Performance indicators	Data source	Data collection method
4. Sustainability (is it going to last after program completion?)			
4.1 What are the prospects of project benefits being sustained beyond project completion? What are the systems put in place to ensure the long-term benefits of the project in terms of: • The agronomic techniques, harvest and post-harvest handling, SILCs, farm and plantation management? • Producer groups and BDS – Market information, group sales, availability of high-quality inputs • Access to finance – Institutional lending and financial management • Processors – Financial and technical capacity, strategic vision and profitability	• Perception of relevant stakeholders on the sustainability of activities and outcomes (e.g., financial viability, factors affecting their continued use of improved techniques and technologies) • Degree to which loans are effectively used • Number and type of factors that could limit or enhance program sustainability • Degree to which results/outcomes associated to the various components of the program are to remain after program completion • Number and type of strategies/mechanisms in place to ensure long-term sustainability • Perception of consulting team on the potential success of these systems/mechanisms • Existence of an exit strategy for the project	• Producers (demonstration plot producers, producer groups), Processors • TNS/CRS staff • USDA staff • SILCs • Financial institutions • Public sector market actors • BDS Providers • Input suppliers	• Surveys • Focus group discussions • Document reviews • Key informant interviews
4.2 What are the biggest risks to the sustainability of benefits generated by BeninCajù?	Perception of relevant stakeholders on the risks to the sustainability of benefits (outcomes) generated by the program	• Producers (demonstration plot producers, producer groups), Processors • TNS/CRS staff • Financial institutions • FENAPAB/DEDRAS/CRADIB • Public Sector market actors • SILCs • BDS Providers	• Surveys • Focus group discussions • Document reviews • Key informant interviews
5. Impact (what are the most important changes for our beneficiaries and key partners?)			
5.1 Are the observed changes attributable to the project? Did all the intended beneficiaries benefit from changes made by the project in the same way? If not, who benefited the most, who has benefited least, why?	• Types of impacts reported by stakeholders regarding their quality of life • Perception of stakeholders on the attribution and contribution of the project to the results. • Comparison with control group • Degree to which the project benefited equally or not all groups of targeted beneficiaries (women vs men, targeted regions, type of program (gold/silver/bronze)) • Comparison between Benin and other countries	• Producers (demonstration plot producers, producer groups), Processors • TNS/CRS staff • Financial institutions • BDS providers • Input Suppliers/Nursery Managers • Public Sector market actors • FENAPAB/DEDRAS/CRADIB • SILCs	• Surveys • Focus group discussions • Document reviews • Key informant interviews

APPENDIX 2 – EVALUATION MATRIX (CONTINUED)

Questions and sub-questions	Performance indicators	Data source	Data collection method
5.2 What are the most important impacts of the project for beneficiaries in terms of quality of life, improved livelihood, resilience to shocks, etc.	• Types of impacts reported by beneficiaries regarding their quality of life • Perception of beneficiaries on what are the most important impacts • Comparison with control group (producers) • Analysis over time (processors)	• Producers (demonstration plot producers, producer groups), Processors • SILCs	• Surveys • Focus group discussions
6. Lessons learned and best practices (what should we remember for a future program?)			
6.1 What are the key lessons that can be learned from the project to date? What implications for subsequent FFPr/BeninCajù activities can be extracted from those lessons learned?	• Number and type of operational lessons learned from the program • Number and type of developmental lessons learned from the program • Perception of stakeholders on the key lessons learnt from the project. • Comparison between Benin and other countries'	• Project records • Producers (demonstration plot producers, producer groups), Processors • TNS/CRS staff • Financial institutions • SILCs • Public sector market actors • FENAPAB/DEDRAS/CRADIB • BDS providers • Input Suppliers/Nursery Managers	• Surveys • Focus group discussions • Document reviews • Key informant interviews
6.2 What are the key recommendations for improving the effectiveness of the program?	Number and type of best practices or recommendations developed by the program/stakeholders	• Project records • Producers (demonstration plot producers, producer groups), Processors • TNS/CRS staff • Financial institutions • SILCs • BDS providers • Input Suppliers/Nursery Managers • Public sector market actors • FENAPAB/DEDRAS/CRADIB	• Surveys • Focus group discussions • Document reviews • Key informant interviews

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APPENDIX 4 – PRODUCER SURVEY

Evaluation à mi-parcours du projet BeninCajù – Enquête producteur individuel

INTRODUCTION ET CONSENTEMENT

Bonjour et merci pour cet entretien. Je m'appelle _____. Je travaille avec Advisem pour BeninCajù (CIAP: Cashew Integration and Acceleration Program) un programme qui vise à accroître le revenu des ménages producteurs d'anacarde. Les informations recueillies au cours de cette enquête sont importantes. Elles permettent d'améliorer la politique de soutien apportée aux producteurs de Cajou des communautés locales au Bénin.

Votre participation à cette étude implique que vous acceptez de fournir des informations démographiques, des informations sur votre participation au programme BéninCajù (si vous êtes impliqué), et des informations sur votre plantation de noix de cajou et sur la vente de noix au cours des dernières saisons.

Nous garantissons que votre nom et votre numéro de téléphone (si vous avez choisi de les fournir) ne seront pas partagés avec quiconque en dehors du projet BéninCajù. Les informations collectées seront gardées au moins jusqu'en 2020 dans le but de préparer des rapports sur les changements observés chez les producteurs de cajou. Votre participation est totalement volontaire. Vous avez le choix de ne pas répondre aux questions pour lesquelles vous ne vous sentez pas confortables de répondre et vous pouvez arrêter votre participation à notre enquête à tout moment. Si vous avez des questions concernant l'enquête vous pouvez contacter les services de CIAP: [redacted] au tél.: [redacted] ou [redacted] au numéro [redacted]

1. INTRODUCTION		
1.1	Coordonnées GPS de la résidence principale du producteur (ou lorsque l'enquête est terminée)	
1.2	Village Contrôle ou de Traitement:	
1.3	Nom du village	
1.4	Nom de l'arrondissement	
1.5	Nom de la commune	
1.6	Nom du departement	
1.7	Nom de l'intervieweur	
1.8	Numéro d'enumerateur	|__|__|
1.9	Date	|__|__|/|__|__|/|__|__|__|__|
1.10	Numéro de questionnaire	|__|__||__|__|
2. CONSENTEMENT		
2.1	Acceptez--vous de participer à cette enquête?	1. Oui 2. Non

1.11	Nom de l'agriculteur	
1.12	Numéro cel agriculteur (ou un membre de la famille)	(+229)
1.12a	Autre numéro de cel (membre de la famille)	(+229)

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

3. INFORMATIONS PERSONNELLES		
3.1	Sexe *Observez, ne demandez pas*	1. Homme 2. Femme
3.2	Age *Mettre 99 si la personne ne veut pas répondre*	|__||__| *(années)*
3.3	Niveau d'éducation le plus élevé atteint?	1. Aucune 2. Primaire 3. Secondaire 1 4. Secondaire 2 5. Technique et Professionnel 6. Université 7. Autres (préciser)
3.3a	Savez-vous lire et écrire en français (Niveau d'alphabétisation)?	1. Oui 2. Non 3. Pas de réponse
3.4	Votre ménage a combien de membres? *Nombre des personnes qui vivent dans le même ménage*	|__||__|
3.4a	Combien de membres de votre ménage participent activement à la production de noix de cajou (Dans votre plantation)? *(ce nombre doit être inférieur ou égal à Q3.4)*	|__||__|
3.4b	Combien de membres de votre ménage participent en formation directe de les bonnes pratiques agricoles ou méthodes de récolte et post-récolte de Animateur/Conseiller Agricole, BeninCajù/FENAPAB/CRADIB, DEDRAS?	|__||__|

4. INFORMATIONS PERSONNELLES – Questions PPI (Tableau de bord Simple de la pauvreté)		
4.1	Matériel principal du mur extérieur du bâtiment principal? (Enregistrez l'observation, Si possible)	1. Terre, bambou avec boue, bambou/cane/palme/tronc, bois de récupération, contre-plaqué, carton, ou pas de mur 2. Ciment, briques, pierres avec chaux/ciment, blocs de ciment, adobe (recouvert ou non), planche en bois/shingles, pierres avec boue, ou autre
4.2	Principal matériau du sol? (Enregistrez l'observation, Si possible)	1. Terre/sable, bouse, palmes/bambou, planches en bois, parquet ou bois ciré, bandes de vinyle/asphalte, ou autre 2. Ciment, moquette, ou carrelage
4.3	La femme chef/épouse du ménage sait-elle lire et écrire de manière fonctionnelle en français?	1. Oui 2. Non 3. Pas de femme chef/épouse
4.4	Combien des membres du ménage âgés de 6 ans ou plus ont-ils travaillé ne serait-ce qu'une heure au cours de la semaine dernière?	1. Aucun 2. Un 3. Deux ou plus
4.5	Quelle est la source principale d'énergie pour la lumière dans votre ménage?	1. Pétrole 2. Electricité, Gaz, Huile, énergie solaire, électricité par groupe électrogène (communautaire ou privé), ou Autre 3. Pas d'énergie

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

4.6	Quelle est la principale énergie utilisée pour faire la cuisine dans votre ménage?	1. Bois, paille/branchages/herbes, résidus agricoles, ou bouse 2. Charbon de bois, kerosene/petrole, charbon/lignite, ou pas de repas préparé dans le ménage 3. Gaz propane liquéfié (GPL), gaz naturel, électricité, biogaz, ou autre
4.7	De toutes les chambres disponibles dans votre ménage, combien utilisent les membres de votre ménage pour dormir?	1. Un 2. Deux 3. Trois ou plus
4.8	Quel type de toilettes les membres de votre ménage utilisent-ils habituellement?	1. Pas de toilette/nature, seau/tinette, toilettes à compostage, toilettes/latrines suspendues, chasse d'eau/chasse manuelle connectée 2. Fosses/latrines sans dalle/trou ouvert 3. Fosses/latrines avec dale 4. Fosses/latrines ventilées améliorées, ou chasse d'eau/chasse manuelle connectée à un système d'égout ou à une fosse septique
4.9	Est-ce qu'un membre de votre ménage possède une bicyclette, une motocyclette ou un scooter (tricycle), ou une voiture ou une camionnette?	1. Aucun 2. Bicyclette seulement 3. Motocyclette, scooter (tricycle), voiture, ou camionnette (peu importe bicyclette)
4.10	De combien de téléphones mobiles dispose votre ménage?	1. Aucun 2. Un 3. Deux ou plus
4.11	Dans ce ménage, avez-vous une télévision et un lecteur VCD/DVD?	1. Pas de télévision (peu importe lecteur VCD/DVD) 2. Télévision mais pas VCD/DVD 3. Télévision et VCD/DVD
4.12	Dans ce ménage, avez-vous un poste radio?	1. Oui 2. Non
4.13	Est-ce que le ménage a acquis (y compris en héritage) ou loué toute terre morcelée, développée ou irriguée au cours des 12 derniers mois?	1. N'a pas acquis de terres 2. En a acquis, mais la terre n'est pas morcelée, développée ou irriguée 3. En a acquis, la terre (une partie) est morcelée, développée ou irriguée

5. REVENUS ET DEPENSES		
5.1	Combien vous avez gagné (votre ménage) au cours des 12 derniers mois en argent comptant?	[ ] FCFA
5.2	Quel est votre revenu en argent comptant issu de la vente de cajou de la campagne passée (2017-2018)? *Inférieur ou égal au revenu*	[ ] FCFA
5.3	Avez-vous utilisé des revenus de la production de noix de cajou pour acheter des intrants ou de la main d'œuvre pour la production des cultures vivrières pendant les 12 derniers mois?	1. OUI 2. NON

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

5.4	Avez-vous utilisé le revenu de la production de noix de cajou pour acheter des intrants ou de la main d'œuvre pour votre production de noix de cajou?	1. OUI **Si Oui → Q 5.4a** 2. NON
5.4a	À quelles fins investissez-vous dans votre production de noix de cajou? *(Nommez les trois utilisations les plus importantes)*	1. Acquisition de semences ou plantules de pépinière 2. Achat de produits chimiques de traitement 3. Payer la main-d'œuvre (p. ex. pour la plantation, l'élagage) 4. Préparation à la commercialisation des noix (récolte, séparation de la noix & pomme) 5. Contrôle de la qualité 6. Sacs de jute 7. Collecte des noix 8. Autres (préciser)
5.5	Pour quelle autre fin avez-vous utilisé votre revenu provenant de la production de noix de cajou? *(Nommez les trois utilisations les plus importantes)*	1. Investissement dans d'autres cultures de rente (autre que noix de cajou) 2. L'investissement dans la réparation/construction de maison 3. Achat de moto(s) ou autre moyen de transport 4. Les dépenses de santé 5. Les dépenses pour l'éducation des enfants 6. Pour acheter de la nourriture 7. Pas de revenu de cajou 8. Autres (préciser)

6. INFORMATION SUR LES PLANTATIONS DE CAJOU			
6.1	Combien de champ de cajou (plantations de cajou) possédez-vous? *(Toutes les plantations y compris celles qui n'ont pas encore produit)*	|__||__|	
6.1a	Quelle est la superficie totale en hectares de vos plantations?	|__||__|	
6.1b	Combien d'arbres de cajou avez-vous?	|__||__|	*Peut être une approximation.*
6.1c	Combien d'arbres (entre 5 et 25 ans) avez-vous qui produisent encore? *La fourchette d'âge typique pour les arbres productifs.*	|__||__|	*Peut être une approximation. S'il vous plaît sauter si le producteur ne sait pas.*
6.1d	Quel pourcentage d'arbres produisent beaucoup dans vos plantations?	|__||__|	1. Moins de 25% des arbres 2. 25-49% des arbres 3. 50-74% 4. 75% et plus
6.1e	Les arbres qui produisent beaucoup dans vos plantations donnent combien (kg de noix par arbre)?	|__||__|	1. Moins de 3 kg 2. 3-4.9 kg 3. 5-9.9 kg 4. 10 kg et plus
6.1f	Quel âge a la plupart de vos arbres qui sont productifs? *Hypothèse que les plantations auront été établies à peu près à la même époque.*	|__||__|	*Ecrivez le nombre d'année*

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

6.2	Avez-vous pratiqué d'autres cultures dans votre plantation de cajou durant les deux dernières années?	|__|	1. OUI 2. NON **Si Non → Q 6.3**
6.2a	Quand avez-vous pratiqué la production d'autres cultures dans votre plantation de noix de cajou la dernière fois?	|__|	*S'il vous plaît notez l'année (2016, 2017 or 2018)*
6.2b	Quelles étaient les principales cultures que vous avez intercalées avec votre cajou durant les deux dernières années? *(Nommez les trois cultures les plus importantes)*	|__| |__| |__|	1. Mais 2. Manioc 3. Igname 4. Gingembre 5. Piment 6. Tomate 7. Arachide 8. Haricot 9. Coton 10. Sorgo 11. Mil 12. Riz 13. Egusi 14. Patate douce 15. Soja 16. Pastèque 17. Autres (préciser)
6.3	Quelles étaient vos principales sources de matériel végétal pour les arbres de cajou dans ces plantations? *(Peut nommer jusqu'à trois sources)*	|__|	1. FENAPAB 2. MAEP/CARDER (service de vulgarisation) 3. Pépinières des Eaux et Forêts/Ministère environnement 4. Recherche – INRAB 5. Pépinière privée 6. Initiatives des projets et programme Ex Padse, Pamrad, ProCGRN 7. Initiatives ONGs locales bénéficiant appuis des PTF 8. Propre production 9. Autre producteur 10. Autres (préciser)
6.3a	Quel type de plant avez-vous utilisé pour installer votre plantation?	|__|	1. Noix de cajou (semence) 2. Plants Non-greffés 3. Plants Greffés **→ Q 6.3b** 4. Noix de cajou (semence) et Plants non-greffés 5. Plants Non-greffés et Plants Greffés **→ Q 6.3b** 6. Noix de cajou (semence) et Plants Greffés **→ Q 6.3b** 7. Toutes les trois **→ Q 6.3b** 8. Autres (préciser) **→ Q 6.3b**

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

6.3b	Combien de plants greffés avez-vous achetés au cours des 12 derniers mois?	|__|	*Nombre*
6.4	En dehors de l'anacardier, conservez-vous d'autres arbres dans votre plantation?	|__|	1. OUI 2. NON **Si Non → Q 7.1**
6.4a	Quels sont les arbres que vous conservez? *Sélectionnez tout ce qui s'applique*	|__|	1. Karité 2. Néré 3. Manguier 4. Teck 5. Autre (préciser)
6.4b	Pourquoi conservez-vous ces arbres? *Sélectionnez la raison principale*	|__|	1. Vente/consommation des fruits 2. Vente/consommation du bois 3. Interdiction de coupe par la règlementation 4. Pas le temps de les couper 5. Autre (préciser)

7. DEPENSES (INTRANTS, EQUIPEMENT, MAIN-D'ŒUVRE)

NOTE POUR ENQUETEUR: Maintenant, je vais vous poser des questions sur les différents types d'intrants (chimiques/main d'œuvre, etc.) que vous avez utilisés pour aider vos anacardiers à pousser cette saison. D'abord, je vais vous demander si ces intrants ont été utilisés cette saison. Si OUI, je vais vous demander combien vous avez dépensé au cours de la saison et de quelle manière vous avez payé.

7.1 DEPENSES (INTRANTS, EQUIPEMENT, MAIN-D'ŒUVRE ACHETE)	TYPES D'INTRANTS, EQUIPEMENT, MAIN D'OEUVRE *(Considérer toutes les plantations présentement en production)*	Utilisé au cours des 12 derniers mois? 1. OUI 2. NON 3. NSP/PR	Comment avez-vous payé pour l'intrant? 1. En espèces 2. En nature 3. Tous les deux	Combien avez-vous payé? *(si en nature: estimation de la valeur)*
(a)	Herbicide pour éliminer les mauvaises herbes	|____|	|____|	|__|__|__|__|__|__|__| FCFA
(b)	Insecticides et fongicides contre les insectes et maladies	|____|	|____|	|__|__|__|__|__|__|__| FCFA
(c)	Main d'œuvre pour établissement des pare-feu	|____|	|____|	|__|__|__|__|__|__|__| FCFA
(d)	Main d'œuvre pour la taille et abattage des arbres	|____|	|____|	|__|__|__|__|__|__|__| FCFA
(e)	Main d'œuvre pour labour, buttage autour des arbres et enfouissement matière organique	|____|	|____|	|__|__|__|__|__|__|__| FCFA
(f)	Main d'œuvre pour le désherbage et pare-feu	|____|	|____|	|__|__|__|__|__|__|__| FCFA
(g)	Main d'œuvre pour la récolte de cajou/la collecte des noix	|____|	|____|	|__|__|__|__|__|__|__| FCFA
(h)	Autres dépenses (préciser) |_____|	|____|	|____|	|__|__|__|__|__|__|__| FCFA

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

8. FICHE ENREGISTREMENT DES RECOLTES ET DES VENTES

NOTE POUR L'ENQUETEUR: Veuillez enregistrer toutes les ventes effectuées au cours de la campagne.

8.1	Vente	Date (MM/AA)	VENDU A: 1 = Collecteurs bord champ (sous-pisteur) 2 = Acheteurs villageois (pisteur) 3 = Organisation de producteurs (coopérative) 4 = Unités de transformation 5 = Commerçants (magasin intérieur) 6 = Autre (à préciser)	Quantité de noix (kg)	Qualité (KOR, si connu)	Prix au kg (FCFA/kg)	Somme d'argent reçu (FCFA)
Combien de ventes ont été réalisées lors de la dernière campagne (2018)? *Si la personne ne connaît pas le numéro, veuillez sélectionner « Vente combinée ».*							
(a)	Premiere vente	__/__/18	__ (_____)	_____	___	_____	_____
(b)	Deuxieme vente	__/__/18	__ (_____)	_____	___	_____	_____
(c)	Troisieme vente	__/__/18	__ (_____)	_____	___	_____	_____
(d)	Quatrième vente	__/__/18	__ (_____)	_____	___	_____	_____
(e)	Cinquième vente	__/__/18	__ (_____)	_____	___	_____	_____
(f)	Sixième vente	__/__/18	__ (_____)	_____	___	_____	_____
(g)	Septième vente	__/__/18	__ (_____)	_____	___	_____	_____
(h)	Huitième vente	__/__/18	__ (_____)	_____	___	_____	_____
(i)	Neuvième vente	__/__/18	__ (_____)	_____	___	_____	_____
(j)	Dixième vente	__/__/18	__ (_____)	_____	___	_____	_____
(k)	Vente combinée	__/__/18	__ (_____)	_____	___	_____	_____

NOTE POUR L'ENQUETEUR: Maintenant, je vais recueillir des détails sur les noix qui n'étaient pas vendues mais utilisées à d'autres fins ou qui ont été perdues au cours de la campagne.

8.2	Indiquez la quantité de noix utilisée pour compenser les ouvriers	[ ] KG
8.3	Indiquez la quantité de noix utilisée comme cadeau	[ ] KG
8.4	Indiquez la quantité de noix utilisée pour rembourser des dettes	[ ] KG

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

8.5	Indiquez la quantité de noix utilisée comme paiement au propriétaire du terrain	[ ] KG	
8.6	Quantité estimée perdue par vol	[ ] KG	
8.7	Estimation de la quantité perdue à cause de l'intrusion des animaux (par exemple, les bovins qui sont entrés dans la ferme et ont mangé des pommes avec des écrous/noix attachés)	[ ] KG	
8.8	Estimation de la quantité perdue pour les mauvaises techniques de récolte	[ ] KG	
8.9	Estimation de la quantité perdue pour les mauvaises techniques de post-récolte (séchage, stockage, transport...)	[ ] KG	
8.10	Avez-vous eu des utilisations de votre cajou autres que celles mentionnées ci-dessus (SI OUI, veuillez préciser)	|__|	1. OUI 2. NON **Si Non → 8.11**
(a)		[ ] KG	
(b)		[ ] KG	
(c)		[ ] KG	
8.11	Avez-vous une quantité des noix restante dans le stock (pas encore vendue)	|__|	1. OUI 2. NON **Si Non → 9.1**
		[ ] KG	
(a)	Pourquoi avez-vous ces noix en stock?	|__|	1. Attendez-vous à ce que le prix augmente. 2. Faute de demande 3. Autre (préciser)

9a. POMMES			
9.1a	Avez-vous vendu vos pommes au cours de la dernière récolte?	|__||__|	1. OUI 2. NON **Si Non → 9.5**
9.2a	Quelle est la quantité (kg) de pommes que vous avez vendues?	|____|	*Nombre*
9.3a	A qui avez-vous vendu vos pommes? *Réponse multiple*	|__||__|	1. Acheteurs du village Coopératives (Organisation de producteurs) 2. Unités de transformation 3. ONGs 4. Autre (préciser)
9.4a	À combien s'élèvent environ vos revenus tirés de la vente de vos pommes?	|____|	FCFA
9.5a	Pourquoi ne vendez-vous pas vos pommes?		1. Personne ne veut les acheter. 2. Ils sont trop difficiles à stocker. 3. Ils sont trop difficiles à transporter. 4. Nous les donnons à manger aux animaux. 5. Autre (préciser)

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

9b. AUTRES SOUS-PRODUITS			
9.1b	Avez-vous vendu vos du bois ou du charbon de bois issu de cajou les 12 derniers mois?	|__||__|	1. OUI 2. NON **Si Non → 9.5**
9.2b	Quelle est la quantité (kg, bâchée) de bois, ou sac de charbon vous avez vendues (12 derniers mois)?	|____|	*Nombre*
9.3b	A qui avez-vous vendu du bois ou charbon de bois? *Réponse multiple*	|__||__|	1. Fabricant de charbon 2. Acheteurs du village 3. Transporteur 4. Autre (préciser)
9.4b	À combien s'élèvent environ vos revenus tirés de la vente de bois ou charbon de bois issu de cajou (12 derniers mois)?	|____|	FCFA
9.5b	Pourquoi ne vendez-vous pas de bois ou charbon de bois issu de cajou?		1. Personne ne veut les acheter. 2. Ils sont trop difficiles à transporter. 3. Nous utilisons a la maison 4. Autre (préciser)

10. FORMATION ET BONNES PRATIQUES AGRICOLES ET METHODES DE RECOLTE ET POST-RECOLTES NOTE POUR ENQUETEUR: Maintenant, je vais poser des questions sur les formations que vous avez reçues sur la production de noix de cajou.		
10.0	Avez-vous participez à des formations sur le cajou entre 2016 et 2018? *Si vous vous trouvez dans un village de traitement, assurez-vous que l'agriculteur comprend la question. Si l'individu dit qu'il n'a pas reçu de formation, demandez-lui s'il n'a pas participé à la formation BeninCajù. Inclure toute information à la fin de l'enquête.*	1. OUI 2. NON **Si Non → Q10.3**
10.0a	Pourquoi vous considérez-vous comme n'ayant pas reçu de formation? (p. ex. sur la liste BeninCajù, mais n'ont assisté à aucune séance). *Seulement BeninCajù et la formation'non'.*	
10.1	Avez-vous reçu une formation directe (face-à-face) sur les bonnes pratiques agricoles (comme l'élagage, désherbage, le traitement contre les parasites et les maladies, ou la fabrication de pare-feu) ou sur les méthodes de récolte et post-récolte ou pratiques de gestion agricole entre 2016 et 2018?	1. OUI 2. NON **Si Non → Q10.3**
10.1	Pourquoi vous considérez-vous comme n'ayant pas reçu de formation? (p. ex. sur la liste BeninCajù, mais n'ont assisté à aucune séance). *Seulement BeninCajù et la formation'non'.*	

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

10.1a	Avez-vous reçu une formation directe (face à face) sur les bonnes pratiques agricoles ou méthodes de récolte et post-récolte de Animateur/Conseiller Agricole, BeninCajù/FENAPAB/CRADIB, DEDRAS? *Lire les quatre noms:* Animateur/Conseiller Agricole, *BeninCajù/FENAPAB/CRADIB, DEDRAS. Ne devrait être qu'un traitement. Tous les agriculteurs des villages de traitement devraient dire oui.*	1. OUI 2. NON **Si Non → Q10.1 aa et 10.2**	
10.1aa	Pourquoi vous considérez-vous comme n'ayant pas reçu de formation de Animateur/Conseiller Agricole, BeninCajù/FENAPAB/CRADIB, DEDRAS? (p. ex. sur la liste BeninCajù, mais n'ont assisté à aucune séance). *Seulement BeninCajù et la formation 'non'.*		
10.1b	Quand avez-vous reçu votre premier formation premier (face à face) de Animateur/Conseiller Agricole, BeninCajù/ FENAPAB/CRADIB/DEDRAS sur les bonnes pratiques agricoles ou méthodes de récolte et post-récolte entre 2016 et 2018? S'il vous plaît notez l'année et le mois	*S'il vous plaît notez l'année y mois.* *Je peux estimer.*	
10.1c	Quand avez-vous reçu votre dernière formation directe (face à face) de Animateur/Conseiller Agricole, BeninCajù/ FENAPAB/CRADIB/DEDRAS sur les bonnes pratiques agricoles ou méthodes de récolte et post-récolte entre 2016 et 2018? S'il vous plaît notez l'année et le mois.	*S'il vous plaît notez l'année y mois.* *Je peux estimer.*	
10.1d	Ne pas demander. Sélectionnez la formation Argent ou Or dans votre liste.	1. Argent 2. Or	
10.1e	Quand avez-vous reçu votre dernière formation directe (face à face) de Animateur/Conseiller Agricole,BeninCajù/ FENAPAB/CRADIB/DEDRAS sur les bonnes pratiques agricoles ou méthodes de récolte et post-récolte entre 2016 et 2018? *Lire les quatre noms:* Animateur/Conseiller Agricole , *BeninCajù/FENAPAB/CRADIB, DEDRAS. Ne devrait être qu'un traitement. Tous les agriculteurs des villages de traitement devraient dire oui.*	|_____|	*S'il vous plaît notez l'année et le mois*
10.1f	Avez-vous reçu une formation directe (face à face) récemment sur ces bonnes pratiques ou méthodes de récolte et post-récolte entre 2016 et 2018 d'une autre source? *Si non, notez la réponse 1* *Si oui, veuillez vous référer aux autres choix? Multiple réponse* *Si FENAPAB/CRADIB/DEDRAS doit avoir été séparé du BeninCajù.*	1. Pas d'autre formation reçue d'une autre source 2. FENAPAB 3. iCA/GIZ 4. ProAGRI/GIZ 5. MAEP/CARDER (service de vulgarisation) 6. Recherche – INRAB 7. CRADIB, DEDRAS 8. Cooperative 9. ONG/autres projets (préciser)|_____| 10. Autre (préciser) |_____|	
→ Q. 10.3			

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

10.2	De qui avez-vous reçu votre dernière formation directe (face à face) sur ces bonnes pratiques agricoles ou méthodes de récolte et post-récolte?	1. iCA 2. FENAPAB 3. MAEP/CARDER (service de vulgarisation) 4. Recherche – INRAB 5. iCA/GIZ 6. ProAgri/GIZ 7. CRADIB, DEDRAS 8. Cooperative 9. ONG/autres projets (préciser)|_____| 10. Autre (préciser) |_____|	
10.2a	Quand avez-vous reçu votre dernière formation directe (face à face) sur les bonnes pratiques agricoles ou méthodes de récolte et post-récolte?	|_____|	*S'il vous plaît notez l'année y mois. Non BeninCajù/FENAPAB/ DEDRAS/CRADIB*
10.2b	Combien de jours a duré votre formation? *Une réponse approximative est acceptable.*	|_____|	*Nombre de jours*
10.3	Avez-vous appris sur les bonnes pratiques agricoles ou méthodes de récolte et post-récolte à partir des sources autres que des formations directes (face à face)?	1. OUI 2. NON **Si Non → Q11.1 (BeninCajù) ou Q12.1 (non-BeninCajù)**	
10.3a	A partir de quelles sources autre que la formation directe (face à face) avez-vous appris sur les bonnes pratiques agricoles ou méthodes de récolte et post-récolte? *(Nommez les trois sources les plus importantes)*	1. L'apprentissage auprès d'autres agriculteurs 2. Les programmes radio 3. Les SMS 4. Les journaux 5. Télévision 6. Visites de champs de demonstration 7. Participation aux foires communales 8. Demonstration grand public au niveau des villages 9. Autre (préciser)	
10.3b	Quelles bonnes pratiques agricoles ou méthodes de récolte et post-récolte avez-vous apprises de ces sources? *Sélectionnez tout ce qui s'applique*	1. L'élagage 2. L'éclaircissage 3. Le désherbage 4. Labour 5. Culture associée 6. Traitement contre les parasites et les maladies 7. Mise en place du pare feu 8. Récolte 9. Séparation de la noix de la pomme 10. Séchage 11. Contrôle Qualité (vérification du Outturn/KOR) 12. Emballage (sacs de jute) 13. Stockage 14. Autre (précisez)	

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

10.4	Etes vous propriétaire d'un champ de démonstration mis en place avec l'appui de *Animateur/Conseiller/*BéninCajù/FENAPAB/DEDRAS/ CRADIB? *Je peux demander: Avez-vous connaissance des parcelles de démonstration mise en place avec l'appui de Animateur/Conseiller Agricole BeninCajù/FENAPAB/DEDRAS/CRADIB*	1. OUI 2. NON *Seulement BeninCajù*
10.4a	Avez-vous visité un champ de démonstration?	1. OUI 2. NON **Si Non → Q11.1 (BeninCajù) ou Q12.1 (non-BeninCajù)**
10.4b	Qu'avez-vous appris lors de votre visite d'un champ de démonstration?	1. Que les bonnes pratiques agricoles augmentent la récolte 2. Que les bonnes pratiques récolte et post-récolte augmentent la récolte 3. Je n'ai rien appris 4. Autre (précisez)

11. FORMATION – (BENINCAJÙ ONLY) (treatment only)		
11.1	Sur quels sujets avez-vous reçu une formation de *Animateur/Conseiller* BeninCajù/FENAPAB/CRADIB/DEDRAS? *Réponse multiple. Attendre la réponse, si nécessaire, lire les options.*	1. Installation nouvelle plantation (INP) 2. Entretien et Gestion des plantations d'anacardiers (EGP) 3. Gestion des maladies et des ravageurs (GMR) 4. Association de cultures (AC) 5. Gestion de la récolte et post récolte (RPR) 6. Gestion de la qualité (GQ) 7. Marketing de Base ou comment bien vendre son produit (MB) 8. Education Financière ou comment bien utiliser son argent (EF) 9. Création et Gestion de Groupe ou comment être membre et vivre dans une coopérative (CGG) 10. Gestion des Ressources Naturelles ou comment bien gérer l'eau, la fertilité du sol, élevage des abeilles (GRN) 11. Développement de Gestion des innovations (DGI) 12. Communauté d'épargne et de crédit interne (CECI) 13. Autre (précisez)
11.2	Quelle formation vous a semblé la plus efficace/utile? *Une seule réponse.*	1. Installation nouvelle plantation (INP) 2. Entretien et Gestion des plantations d'anacardiers (EGP) 3. Gestion des maladies et des ravageurs (GMR) 4. Association de cultures (AC) 5. Gestion de la récolte et post récolte (RPR) 6. Gestion de la qualité (GQ) 7. Marketing de Base ou comment bien vendre son produit (MB) 8. Education Financière ou comment bien utiliser son argent (EF) 9. Création et Gestion de Groupe ou comment être membre et vivre dans une coopérative (CGG) 10. Gestion des Ressources Naturelles ou comment bien gérer l'eau, la fertilité du sol, élevage des abeilles (GRN) 11. Développement et Gestion des innovations (DGI) 12. Communauté d'épargne et de crédit interne (CECI) 13. Autre (précisez)

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

11.3	Quelle formation vous a semblé la moins efficace/utile? *Une seule réponse.*	1. Installation nouvelle plantation (INP) 2. Entretien et Gestion des plantations d'anacardiers (EGP) 3. Gestion des maladies et des ravageurs (GMR) 4. Association de cultures (AC) 5. Gestion de la récolte et post récolte (RPR) 6. Gestion de la qualité (GQ) 7. Marketing de Base ou comment bien vendre son produit (MB) 8. Education Financière ou comment bien utiliser son argent (EF) 9. Création et Gestion de Groupe ou comment être membre et vivre dans une coopérative (CGG) 10. Gestion des Ressources Naturelles ou comment bien gérer l'eau, la fertilité du sol, élevage des abeilles (GRN) 11. Développement et Gestion des innovations (DGI) 12. Communauté d'épargne et de crédit interne (CECI) 13. Autre (précisez)
11.4	Comment évalueriez-vous la pertinence/utilité/importance générale des formations dispensées, 1 étant très peu pertinente et 7 étant très pertinente/utile?	1. 1 2. 2 3. 3 4. 4 5. 5 6. 6 7. 7 8. Pas de réponse/ne sait pas
11.5	Comment évalueriez-vous l'efficacité générale des formations dispensées, 1 étant très peu efficace et 7 étant très efficace?	1. 1 2. 2 3. 3 4. 4 5. 5 6. 6 7. 7 8. Pas de réponse/ne sait pas
11.6	Avez-vous été formé aux techniques et technologies agricoles améliorées (Bonnes pratiques de gestion des plantations)?	1. Oui 2. Non **Si non → Q11.7** 3. NSP/PR **Si NSP → Q11.7**
11.6a	Quelles sont les techniques et technologies agricoles améliorées (Bonnes pratiques de gestion des plantations) auxquelles vous avez été formé par le promoteur et/ou le Animateur/Conseiller agricole de BeninCajù/FENAPAB/CRADIB/DEDRAS? *Ne lisez pas les réponses. Donnez à l'agriculteur le temps de réfléchir et de répondre. Réponse multiple.*	1. Élagage 2. Eclaircissage 3. Nettoyage 4. Lutte contre les ravageurs et les maladies 5. Éviter de brûler 6. Traitement chimique 7. Utilisation de plantules de pépinière 8. Choix de bonnes cultures à associer/culture intercalaire 9. Respect des itinéraires techniques 10. Recommandations pour la plantation de plantules de pépinière 11. Recommandations pour les écartements de plantation 12. Recommandations pour les trouaisons

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

		13. Labour ou butage pour la maitrise de l'eau 14. Recommandations pour la valorisation des produits d'élagage et éclaircissage (bois de feu, charbon) 15. Recommandations pour la pratique d'apiculture 16. Gestion de la matière organique de la plantation 17. Autre (précisez) 18. NSP/PR
11.6b	Avez-vous appliqué certaines de ces techniques et technologies agricoles améliorées (Bonnes pratiques de gestion des plantations) enseignées par Animateur/Conseiller Agricole/ BeninCajù/FENAPAB/CRADIB/DEDRAS? Il doit s'agir d'aspects que vous n'appliquiez pas ou n'appliquiez pas bien avant la formation.	1. Oui 2. Non **Si non → Q11.6e** 3. NSP/PR **Si NSP → Q11.7**
11.6c	Si oui, lesquelles de ces techniques et technologies avez-vous appliquées? *Ne lisez pas les réponses. Donnez à l'agriculteur le temps de réfléchir et de répondre. Réponse multiple.*	1. Élagage 2. Eclaircissage 3. Nettoyage 4. Lutte contre les ravageurs et les maladies 5. Éviter de brûler 6. Traitement chimique 7. Utilisation de plantules de pépinière 8. Choix de bonnes cultures à associer/culture intercalaire 9. Respect des itinéraires techniques 10. Recommandations pour la plantation de plantules de pépinière 11. Labour ou butage pour la maitrise de l'eau 12. Piquetage au moins 10 m x 10 m 13. Trouaison au moins 50cm x 50 cm x 50 cm 14. Labour ou butage pour la maitrise de l'eau 15. Valorisation des produits d'élagage et éclaircissage (bois de feu, charbon) 16. Pratique d'apiculture 17. Gestion de la matière organique de la plantation 18. Autre (précisez) 19. NSP/PR
11.6d	Quel était votre intérêt d'appliquer ces techniques et technologies (Bonnes pratiques)? *Ne lisez pas les réponses. Donnez à l'agriculteur le temps de réfléchir et de répondre. Réponse multiple.*	1. Augmentation de la production 2. Qualité de la noix de cajou améliorée à vendre 3. Je contrôle les maladies et les ravageurs 4. Réduction des pertes lors de la récolte 5. Pour avoir un bon prix à la vente 6. Autre (précisez) 7. NSP/PR

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

11.6e	Si non, pouvez-vous s'il vous plaît indiquer la raison principale de la non-application?	1. Manque d'équipement 2. Manque de main d'œuvre 3. Manque de temps 4. Manque d'argent 5. Je suis déjà vieux 6. Ne sais pas comment faire 7. Je ne suis pas convaincu 8. Le prix de vente n'est pas différent 9. Situation géographique 10. Autre (précisez) 11. PR
11.7	Avez-vous été formé aux techniques de récolte et de post-récolte améliorées des noix de cajou?	1. Oui 2. Non **Si non → Q11.8** 3. NSP/PR **Si NSP → Q11.8**
11.7a	Quelles sont les techniques et technologies, pratiques de récolte et de post-récolte améliorées auxquelles vous avez été formés par l'animateur/ Conseiller Agricole de BeninCajù/ FENAPAB/CRADIB/DEDRAS? *Ne lisez pas les réponses. Donnez à l'agriculteur le temps de réfléchir et de répondre. Réponse multiple.*	1. Ramasser régulièrement les noix matures 2. Séparer la noix de la pomme avec un fil de nylon 3. Sécher les noix sur tapis, bâche, dallage ou natte 4. Débarrasser les noix des impuretés (faire le tri) 5. Mettre les noix dans des sacs de jute 6. Stocker les noix dans un emplacement aéré 7. Notion de grainage 8. Notion de KOR (ouverture et mesure) 9. Autre (précisez) 10. NSP/PR
11.7b	Avez-vous appliqué certaines de ces techniques et technologies, pratiques de récolte et de post-récolte améliorées enseignées par l'animateur/Conseiller Agricole de BeninCajù/FENAPAB/ CRADIB/DEDRAS? Il doit s'agir d'aspects que vous n'appliquiez pas ou n'appliquiez pas bien avant la formation. *Ne lisez pas les réponses. Donnez à l'agriculteur le temps de réfléchir et de répondre. Réponse multiple.*	1. Oui 2. Non **Si non → Q11.7e** 3. NSP/PR **Si NSP → Q11.8**
11.7c	Si oui, lesquelles de ces techniques et technologies/pratiques avez-vous appliquées? *Ne lisez pas les réponses. Donnez à l'agriculteur le temps de réfléchir et de répondre. Réponse multiple.*	1. Ramasser régulièrement les noix matures 2. Séparer la noix de la pomme avec un fil de nylon 3. Sécher les noix sur tapis, bâche, dallage ou natte 4. Débarrasser les noix des impuretés (faire le tri) 5. Mettre les noix dans des sacs de jute 6. Stocker les noix dans un emplacement aéré 7. Notion de grainage 8. Notion de KOR (ouverture et mesure) 9. Autre (précisez) 10. NSP/PR

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

11.7d	Quel était votre intérêt d'appliquer ces techniques et technologies/pratiques? *Ne lisez pas les réponses. Donnez à l'agriculteur le temps de réfléchir et de répondre. Réponse multiple.*	1. Augmentation de la production 2. Qualité de noix de cajou améliorée à vendre 3. Je contrôle les maladies et les ravageurs 4. Réduction des pertes lors de la récolte 5. Pour avoir un bon prix à la vente 6. Autre (précisez) 7. NSP/PR
11.7e	Si non, pouvez-vous s'il vous plaît indiquer la raison principale de la non-application?	1. Manque d'équipement 2. Manque de main d'œuvre 3. Manque de temps 4. Manque d'argent 5. Je suis déjà vieux 6. Ne sais pas comment faire 7. Je ne suis pas convaincu 8. Le prix de vente n'est pas diffèrent 9. Situation géographique 10. Autre (précisez) 11. PR
11.8	Avez-vous été formé par l'animateur/Conseiller Agricole BeninCajù/FENAPAB/CRADIB/DEDRAS sur comment mieux gérer sa ferme et ses revenus?	1. Oui 2. Non **Si non → Q11.9** 3. NSP/PR **Si NSP → Q11.9**
11.8a	Si oui, quelles sont les pratiques de gestion agricole que vous avez été formées par l'animateur/Conseiller Agricole BeninCajù/FENAPAB/CRADIB/DEDRAS? *Ne lisez pas les réponses. Donnez à l'agriculteur le temps de réfléchir et de répondre. Réponse multiple.*	1. Calculer les coûts de production 2. Connaitre ses dépenses et ses revenus 3. Plan d'affaires 4. Vente groupée/Participer à la vente groupée de la coopérative 5. Vendre ses noix au moins au prix du marché 6. Épargner et emprunter au bon moment 7. Investir dans la production 8. Participer au groupe de la coopérative 9. Rejoindre un Communauté d'épargne et de crédit interne (CECI) 10. Autre (précisez) 11. NSP/PR
11.8b	Avez-vous appliqué certaines de ces pratiques de gestion agricole enseignées par l'animateur/Conseiller Agricole de BeninCajù/FENAPAB/CRADIB/DEDRAS? Il doit s'agir d'aspects que vous n'appliquiez pas avant la formation. *Ne lisez pas les réponses. Donnez à l'agriculteur le temps de réfléchir et de répondre. Réponse multiple.*	1. Oui 2. Non **Si non → Q11.8e** 3. NSP/PR **Si NSP → Q11.9**

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

11.8c	Si oui, laquelle de ces pratiques avez-vous appliquée? *Ne lisez pas les réponses. Donnez à l'agriculteur le temps de réfléchir et de répondre. Réponse multiple.*	1. Calculer les coûts de production 2. Connaitre ses dépenses et ses revenus 3. Plan d'affaires 4. Vente groupée/Participer à la vente groupée de la coopérative 5. Vendre ses noix au moins au prix du marché 6. Épargner et emprunter au bon moment 7. Investir dans la production 8. Participer au groupe de la coopérative 9. Rejoindre un Communauté d'épargne et de crédit interne (CECI) 10. Autre (précisez) 11. NSP/PR
11.8d	Quel était l'avantage des pratiques de gestion agricole apprises et appliquées? *Ne lisez pas les réponses. Donnez à l'agriculteur le temps de réfléchir et de répondre. Réponse multiple.*	1. Aide à la planification des activités 2. Aider à mieux allouer mes ressources 3. J'ai de meilleures informations pour la prise de décision 4. Je suis capable de vendre à un prix plus élevé. 5. Je me sens plus en sécurité financière grâce à l'accès à l'épargne et aux prêts. 6. Aucun 7. Autre (précisez) 8. NSP/PR
11.8e	Si non, pouvez-vous s'il vous plaît indiquer la raison principale pour laquelle vous n'appliquez pas les pratiques de gestion agricole améliorée?	1. Je ne peux ni lire ni écrire 2. Je n'y vois aucun avantage 3. Je ne comprends pas les pratiques 4. Je n'ai pas le temps 5. C'est difficile ou compliqué 6. Autre (précisez) 7. NSP/PR
11.9	Quelle est la probabilité que vous continuiez à utiliser les nouvelles techniques et technologies/pratiques que vous avez apprises dans le cadre du projet après la fin du projet?	1. Très peu probable que je puisse continuer d'utiliser aucune de ces nouvelles techniques et technologies apprises → **Q11.9a** 2. Probable que je puisse continuer à utiliser quelques nouvelles techniques/technologies apprises 3. Probable que je puisse continuer à utiliser toutes ces nouvelles techniques/technologies apprises 4. Très probable que je puisse continuer à utiliser quelques nouvelles techniques/technologies apprises 5. Très probable que je puisse continuer à utiliser toutes les nouvelles techniques/technologies apprises 65. NSP/PR → **Q11.10**

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

11.9a	Quelle est la principale raison pour laquelle vous ne continuerez pas à utiliser ces techniques/pratiques?	1. Trop cher 2. Trop de travail 3. Je ne pense pas que les nouvelles techniques et technologies ont amélioré la production 4. Les techniques que j'utilise maintenant me semblent meilleures 5. Je n'ai pas vraiment besoin de produire plus 6. Je ne sais pas 7. Pas de réponse 8. Autre (précisez)
11.10	Avez-vous terminé votre formation avec Animateur/ Conseiller Agricole BeninCajù/FENAPAB/CRADIB/DEDRAS?	1. OUI 2. NON 3. NSP/PR

12. UTILISATION DE BONNES PRATIQUES AGRICOLES ET METHODES DE RECOLTE ET POST-RECOLTES

NOTE POUR ENQUETEUR:

Je vais continuer maintenant avec les questions sur les pratiques de production que vous pourriez avoir utilisées dans vos champs de cajou.

		Plantations de cajou	
12.1	Avez-vous déjà élagué vos arbres de noix de cajou en enlevant les branches mortes et malades durant les 12 derniers mois?	|___|	1. OUI 2. NON **Si Non → 12.1c**
12.1b	Quelle proportion (%) de la plantation(s) a été élagué?	|__|	*(%)*
12.1c	Avez-vous fait l'éclaircissage (technique qui consiste à supprimer les arbres gênants ou non productifs) durant les 12 derniers mois?	|___|	1. OUI 2. NON **→ 12.2**
12.1d	Quelle proportion (%) d'arbres de la plantation(s) a été éclaircie/supprime?	|__|	*(%)*
12.2	Avez-vous désherbé ou coupé les mauvaises herbes dans votre plantation(s) de cajou durant les 12 derniers mois?	|___|	1. OUI 2. NON
12.3	Avez-vous protégé votre plantation contre les feux de brousse en faisant des pare-feu au cours des 12 derniers mois?	|___|	1. OUI **Si Oui → Q12.4** 2. NON
12.3a	Pourquoi n'avez-vous pas fait de pare-feu *(Elagage, éclaircie)* au cours des 12 derniers mois?	|___|	1. Représente trop de travail 2. Coût élevé de la main d'œuvre 3. Trop occupé avec les autres cultures 4. Pas nécessaire 5. Autre (préciser)
12.4	Votre plantation a-t-elle été brulée au moins une fois par un feu de brousse au cours des 12 derniers mois?	|___|	1. OUI 2. NON
12.4a	Quelle proportion (%) de la plantation a été affectée par un feu de brousse?		*(%)*

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

12.5	Avez-vous observé la présence d'insectes ravageurs, ou maladies nuisibles au cours des 12 derniers mois?	|___|	1. OUI 2. NON **Si Non → Q12.5b**
12.5a	Quelle proportion (%) de la plantation a été affectée par les insectes ravageurs, ou maladies nuisibles?	|___|	*(%)*
12.5b	Avez-vous traité votre plantation contre les insectes, les envahisseurs et les maladies au cours des 12 derniers mois?	|___|	1. OUI 2. NON **Si Non → Q12.5e**
12.5c	Quels sont les moyens de lutte que vous utilisez?	|___|	1. Mécanique (taille) 2. Chimique 3. Mécanique et Chimique 4. Autre (préciser)
12.5d	Combien de fois avez-vous traité votre plantation contre les insectes, les envahisseurs et les maladies au cours des 12 derniers mois?	|___|	1. Jamais 2. Une fois 3. Deux fois 4. Trois fois ou plus
12.5e	Pourquoi n'avez-vous pas traité votre plantation contre les insectes, les envahisseurs et les maladies? *Donner seulement la raison principale*	|___|	1. Pas nécessaire 2. Trop de travail 3. N'a pas trouvé la main d'œuvre 4. Trop occupé avec les autres cultures 5. Coûts élevés de l'activité 6. Produits non disponibles **→ Q12.5f** 7. Ne connaît pas les produits de traitement 8. Autre (Préciser)
12.5f	Pourquoi les produits ne sont pas disponibles? *Donner seulement la raison principale*		1. Les produits spécifiques au cajou ne sont pas disponibles 2. Trop chers 3. Pénurie à l'échelle du pays 4. Pénurie à l'échelle du département ou de la commune 5. Corruption dans le réseau de distribution d'approvisionnement 6. Favoritisme dans la distribution 7. Autre (Préciser)
12.6	Votre plantation a-t-elle été endommagée au moins une fois par des bœufs au cours des 12 derniers mois?	|__|	1. OUI 2. NON
12.6a	Que faites-vous pour vous protéger contre les dommages causés par les bœufs? *Donner seulement la méthode principale*	|__|	1. Mise en place de haies vives 2. Mise en garde des éleveurs 3. Rien 4. Autre (Préciser)
12.7	Comment avez-vous récolté la majorité (la plus grande part) de vos noix de cajou pendant la saison de récolte de cette année? *Donner seulement la méthode principale*	|___|	1. Ramassé les fruits/ noix tombés sur le sol 2. Cueillir les fruits/noix sur les arbres quand ils sont mûrs 3. Secouer l'arbre pour faire tomber les fruits murs 4. Autres (préciser)

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

12.8	Quand la récolte commence, quel est l'intervalle en jours que vous passez dans votre champ pour récupérer les noix (pour faire toute la récolte; moyenne)?	|____|	1. Moins de 2 jours 2. 2-3 jours 3. 4-5 jours 4. 6-7 jours 5. 7 jours et plus
12.9	Comment les ouvriers (travailleurs qui récoltent les noix) ou vous-même avez séparé la noix de la pomme pendant la saison de récolte de cette année? *Réponse multiple.*	|___|	1. Torsion de la noix de la pomme 2. Utilisation d'un fil de nylon → **Q12.10** 3. Utilisation d'un couteau pour couper le lien 4. Autre (préciser)
12.9a	Pourquoi vous-même ou vos ouvriers n'utilisez pas (ou utilisez toujours) un fil de nylon? *Donner seulement la raison principale*	|___|	1. Ça prend trop de temps 2. Ne connais pas la pratique 3. Trop sale 4. Aucun bénéfice de l'application de cette pratique 5. Autres (préciser)
12.10	Avez-vous séché la noix avant de l'emballer pendant la saison de récolte de cette année?	|___|	1. OUI 2. NON **Si Non → 12.11**
12.10a	Comment les avez-vous séchées pendant la saison de récolte de cette année? *Choisir les trois options les plus importantes*	|___| |___| |___|	1. Séchées sur une étagère/claie 2. Séchées sur le sol dans une maison 3. Séchées sur une bâche au dehors 4. Séchées sur un sol en ciment dans une maison 5. Séchées par terre dehors 6. Séchées dans un panier 7. Pas nécessaire de sécher car elles le sont déjà au champ 8. Autre (préciser)
12.10b	Comment savez-vous que les noix sont bien séchées?	|___|	1. Bruit de cliquetis sec 2. Résistance à la pression de l'ongle 3. Met la main dans le sac pour "sentir" 4. Sèche juste pour un nombre donné de jours (oscille entre 1 et 3 jours) 5. Autre (préciser)
12.11	Où avez-vous stocké la majorité de vos noix jusqu'à ce que vous les vendiez pendant la saison de récolte de cette année?	|___|	1. Dans une chambre fermée 2. Sous un hangar/terrasse 3. A l'air libre 4. Je les entrepose avec un groupe coopératif 5. Autre (précisez)
12.12	Quelles techniques d'emballage avez-vous utilisées pour stocker vos noix pendant la saison de récolte de cette année? *Réponse multiple.*	|___|	1. Sacs en jute → **Q12.13** 2. Sacs en plastique 3. Paniers/bols 4. Aucune 5. Autre (préciser)

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

12.12a	Pourquoi n'avez-vous pas utilisé des SACS EN JUTE pour l'emballage de la majorité de vos noix de cajou pendant la saison de récolte de cette année?	|___|	1. C'est cher 2. Non disponible 3. Ne vois pas la nécessité 4. Je vends mes noix au même prix que ceux qui utilisent autres emballages 5. Utilisé pour la majorité 6. Autre (préciser)
12.13	Savez-vous comment les acheteurs évaluent la qualité des noix?	|___|	1. OUI 2. NON → **Q13.1**
12.13a	Quels sont, selon vous, les critères utilisés par les acheteurs pour évaluer la qualité de vos noix? *(Je peux en nommer jusqu'à trois* critères*)*	|____| |____| |____|	1. La taille des noix 2. Le poids des noix 3. La taille de l'amande 4. Comptages des noix (nombre de noix/kg) 5. KOR (ouverture et mesure) 6. Qualité de l'amande 7. Couleur de la coque 8. Couleur de l'amande 9. Humidité/contenu en eau des noix 10. Présence de corps étrangers avec les noix 11. Autre (préciser)

13. EVALUATION DE RENDEMENT			
13.1	En général, comment se porte la quantité de votre récolte de noix de cajou cette année (2018) comparé à la production de 2017? Elle était:	|___|	1. Plus qu'avant → **Q13.1a** 2. Autant qu'avant (pas d'effet) → **Q13.2** 3. Moins qu'avant → **Q13.1b**
13.1a	Si plus qu'avant: Quelle est la principale raison pour laquelle vous pensez que la quantité récoltée de vos noix de cajou a augmenté cette année?	|___|	1. Bon climat/conditions météorologiques 2. Adoption des pratiques dans les formations 3. Age de la plantation 4. Peu d'insectes, des parasites et des maladies 5. La disponibilité et la fiabilité des produits chimiques et des intrants connexes (p. ex., pulvérisateurs) 6. Autre (précisez) → **Q13.2**
13.1b	Si moins qu'avant: Quelle est la principale raison pour laquelle vous pensez que la quantité récoltée de vos noix de cajou a diminué cette année?	|___|	1. Mauvais climat/conditions météorologiques 2. Non adoption des pratiques dans les formations 3. Age de la plantation 4. Beaucoup d'insectes, des parasites et des maladies 5. Non-disponibilité ou manque de fiabilité des produits chimiques et des intrants connexes (p. ex., pulvérisateurs) 6. Feux de brousse 7. Autre (précisez)

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

13.2	La qualité de vos noix a-t-elle changé cette année (2018) par rapport à 2017? Elle était:	|___|	1. Mieux qu'avant → **Q13.2a** 2. Autant qu'avant (pas d'effet) → **Q13.3** 3. Pire qu'avant → **Q13.2b**
13.2a	Si mieux qu'avant: Quelle est la principale raison pour laquelle vous pensez que la qualité de vos noix de cajou a augmenté cette année?	|___|	1. Bon climat/conditions météorologiques 2. Adoption des pratiques dans les formations 3. Moins d'insectes, des parasites et des maladies 4. La disponibilité et la fiabilité des produits chimiques et des intrants connexes (p. ex. pulvérisateurs) 5. Autre (précisez)
13.2b	Si pire qu'avant: Quelle est la principale raison pour laquelle vous pensez que la qualité de vos noix de cajou a diminué cette année?	|___|	1. Mauvais climat/conditions météorologiques 2. Non adoption des pratiques dans les formations 3. Beaucoup d'insectes, des parasites et des maladies 4. Non-disponibilité ou manque de fiabilité des produits chimiques et des intrants connexes (p. ex., pulvérisateurs) 5. Autre (précisez) → **Q13.3**
13.3	En général, comment s'est portée la production de 2017 de noix de cajou comparé à la production de 2016?	|___|	1. Plus qu'avant → **Q13.3a** 2. Autant qu'avant (pas d'effet) → **Q13.4** 3. Moins qu'avant → **Q13.3b**
13.3a	Si plus qu'avant: Quelle est la principale raison pour laquelle vous pensez que la quantité récoltée de vos noix de cajou a augmenté en 2017?	|___|	1. Bon climat/conditions météorologiques 2. Adoption des pratiques dans les formations 3. Age de la plantation 4. Peu d'insectes, des parasites et des maladies 5. La disponibilité et la fiabilité des produits chimiques et des intrants connexes (p. ex. pulvérisateurs) 6. Autre (précisez) → **Q13.4**
13.3b	Si moins qu'avant: Quelle est la principale raison pour laquelle vous pensez que la quantité récoltée de vos noix de cajou a diminué en 2017?	|___|	1. Mauvais climat/conditions météorologiques 2. Non adoption des pratiques dans les formations 3. Age de la plantation 4. Beaucoup d'insectes, des parasites et des maladies 5. Non-disponibilité ou manque de fiabilité des produits chimiques et des intrants connexes (p. ex., pulvérisateurs) 6. Feux de brousse 7. Autre (précisez)
13.4	La qualité de vos noix a-t-elle changé de 2017 par rapport à 2016? Elle était:	|___|	1. Mieux qu'avant → **Q13.4a** 2. Autant qu'avant (pas d'effet) → **Q13.5** 3. Pire qu'avant → **Q13.4b**

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

13.4a	Si mieux qu'avant: Quelle est la principale raison pour laquelle vous pensez que la qualité de vos noix de cajou a augmenté en 2017?	|___|	1. Bon climat/conditions météorologiques 2. Adoption des pratiques dans les formations 3. Moins d'insectes, des parasites et des maladies 4. La disponibilité et la fiabilité des produits chimiques et des intrants connexes (p. ex. pulvérisateurs) 5. Autre (précisez)
13.4b	Si pire qu'avant: Quelle est la principale raison pour laquelle vous pensez que la qualité de vos noix de cajou a diminué en 2017?	|___|	1. Mauvais climat/conditions météorologiques 2. Non adoption des pratiques dans les formations 3. Beaucoup d'insectes, des parasites et des maladies 4. Non-disponibilité ou manque de fiabilité des produits chimiques et des intrants connexes (p. ex., pulvérisateurs) 5. Autre (précisez)
13.5	Selon vous, quel est le plus gros problème en lien avec le climat et la météo selon les périodes productives ou improductives?	|___|	1. Trop peu de pluie pendant la période improductive. 2. Trop de pluie pendant la période improductive. 3. Trop peu de pluie pendant la période de production. 4. Trop de pluie pendant la période de production. 5. Autre (précisez)
13.6	Croyez-vous qu'il existe des moyens d'atténuer les effets des perturbations climatiques?	|___|	1. OUI **Si Oui → 13.6a** 2. NON **Si Non → 14.1**
13.6a	Que suggérez-vous? *Réponse multiple.*	|___|	1. Irrigation 2. Paillage 3. Labour 4. Butage autour des arbres 5. Variétés résistantes 6. Culture intercalaire 7. Autre (précisez)

14. APPARTENANCE AUX ORGANISATIONS PAYSANNES			
14.1	Êtes-vous membre d'une coopérative ou association/groupement de producteurs?	|___|	1. OUI **Si Oui → 14.3** 2. NON **Si Non → 14.2**
14.2	Pour quelles raisons n'êtes-vous pas membre d'une coopérative ou d'une association formelle/enregistrée de producteurs? *Maximum de trois raisons.*	|___|	1. Aucune association de producteurs n'existe dans le village ou dans la zone 2. Coûts élevés pour adhérer (frais/cotisation de membre) 3. Prend trop de temps 4. Ne donne pas d'avantages suffisants en terme d'information sur les prix ou prix des cultures 5. Ne donne pas d'avantages suffisants pour vendre à un bon prix

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

			6. Ne donne pas d'avantages suffisants en termes de formation/échanges sur les techniques culturales, accès aux intrants 7. Ne donne pas d'avantages suffisants en termes d'échange d'équipements 8. Conflit/désaccord avec les membres de la coopérative/association 9. Autre (précisez) 10. Ne sait pas 11. Refuse de répondre → 15.1
14.3	Type d'organisation paysanne à laquelle vous appartenez est formelle/enregistrée ou informelle/non enregistrée?	|____|	1. Formelle/enregistrée 2. Informelle/non enregistrée 3. Ne sait pas/pas de réponse
14.4	Quel est le type d'organisation paysanne auquel vous appartenez?	|____|	1. CVPA (Coopératives villageoises de producteurs de noix de cajou) 2. Groupes de producteurs évoluant vers CVPA 3. Groupement féminin 4. Autre (précisez) 5. Ne sait pas/pas de réponse
14.5	Avez-vous rejoint cette organisation en conséquence directe de votre implication dans le Programme BeninCajù/ FENAPAB/CRADIB/DEDRAS? *Seulement BeninCajù*	|____|	1. OUI 2. NON
14.5	Pour quelles raisons avez-vous adhéré à une coopérative ou association formelle/ enregistrée de producteurs? *Maximum de trois raisons.*	|___|	1. Gagner plus d'argent du cajou 2. Commercialisation/Vente de produits 3. Meilleur accès aux intrants à travers l'organisation 4. Meilleure information sur les prix de cajou 5. Meilleur accès aux formations sur le cajou 6. Fourniture de services de vulgarisation 7. Fourniture de services (ex. pulvérisation, contrôle de qualité) 8. Échanger des techniques culturales 9. Meilleur accès aux équipements 10. Échange de main d'œuvre 11. Accès au crédit 12. Evénements sociaux/activités 13. Recommandation d'un ami ou d'un membre de la famille 14. Recommandation de l'animateur/Conseiller Agricole du projet BeninCajù (CIAP)/Technoserve ou CRS (Catholic Relief Services) 15. Autre (précisez) 16. Ne sait pas/Pas de réponse

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

14.6	Avez-vous actuellement accès aux informations du marché (informations sur les prix des noix de cajou) par l'entremise de vos coopératives ou associations de producteurs?	|___|	1. OUI 2. NON

15. SOURCES D'INFORMATION DU MARCHÉ			
15.1	Avez-vous eu des informations sur les prix des noix de cajou au cours de cette campagne?	|___|	1. OUI **Si Oui → Q15.3** 2. NON
15.2	Pourquoi n'avez-vous pas eu accès à l'information sur les prix des noix de cajou au cours de cette campagne? *Donner seulement la raison principale*	|___|	1. Je ne sais pas où obtenir l'information. 2. Je n'ai pas eu le temps 3. Je ne voulais pas le faire. 4. Autre (précisez) 5. Ne sait pas/Pas de réponse
15.3	Quels sont ces sources d'information sur les prix de vente? *Choisir les trois options les plus importantes*	|___|	1. Association de producteurs/coopératives (CVPA, GP) 2. Radio 3. Autres médias 4. Messagerie texte 5. Médias sociaux 6. Internet 7. Via autre producteurs 8. Agents de vulgarisation 9. Rassemblement de producteurs lors de formations ou d'événements forains (communale, demonstration grand public au niveau village) 10. Acheteurs 11. Au marché de la localité 12. Autre (précisez) 13. Ne sait pas/Pas de réponse
15.4	À quelle fréquence accédez-vous aux informations sur les prix de vente?	|___|	1. Tous les jours quand la récolte commence (Info par voisinage) 2. Environ chaque semaine 3. Environ toutes les deux semaines 4. Environ une fois par mois 5. Tous les six mois environ ou moins souvent 6. Autre (précisez) 7. Ne sait pas/Pas de réponse

16. ACCES AU CREDIT ET ÉPARGNE			
16.1	Avez-vous épargné une partie de vos revenus, au cours des 12 derniers mois?	|___|	1. OUI 2. NON **SI non → Q16.3a**
16.1a	Avez-vous épargné une partie de vos revenus issus du cajou?	|___|	1. OUI 2. NON

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

16.2	Où faites-vous vos épargnes? *Sélectionnez tout ce qui s'applique*		1. Groupe CECI 2. Institution de Microfinance 3. Tontine 4. Caisse personnelle à la maison 5. Autre (précisez)
16.3	Pourquoi avez-vous épargné? *Ne lisez pas les réponses. Donnez à l'agriculteur le temps de réfléchir et de répondre. Réponse multiple.*	|___|	1. Entretenir mes plantations 2. Installer une nouvelle plantation 3. Investir dans des cultures de rente 4. Investir dans les cultures vivrières 5. Assurer les dépenses de santé de ma famille 6. Assurer les dépenses pour l'éducation des enfants 7. Assurer les dépenses futures de nourriture de la famille 8. Préparer la retraite ou imprevus 9. Autres (précisez)
16.3a	Quelle est la principale raison pour laquelle vous n'avez pas épargné?		1. Pas d'argent à épargner 2. Nulle part où épargner 3. Je ne veux pas 4. Autres (précisez) → 16.7
16.4	Êtes-vous membre d'un groupe SILC?	|___|	1. OUI → **16.4a** 2. NON
16.4a	Avez-vous rejoint un Groupe CECI à cause du programme BeninCajù? *Seulement BeninCajù*	|___|	1. OUI → **16.4b** 2. NON
16.4b	Êtes-vous toujours membre du groupe SILC? *Seulement BeninCajù*	|___|	1. OUI 2. NON
16.5	L'adhésion au Groupe CECI a-t-il amélioré votre qualité de vie et celle de votre famille?	|___|	1. OUI **SI oui → 16.5a** 2. NON
16.5a	De quelle façon? *Choisir les trois options les plus importantes.*	|___|	1. Je peux emprunter de l'argent pendant la période de soudure pour acheter des produits de première nécessité (p. ex., de la nourriture). 2. Je n'ai pas à vendre ma récolte de noix de cajou à bas prix. 3. Je peux investir dans ma plantation de noix de cajou. 4. Je peux investir dans d'autres cultures. 5. Je peux réparer ma maison. 6. Je n'ai pas besoin d'emprunter auprès des tontines (avec taux d'intérêt élevé). 7. Autres (précisez)

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

16.6	Avec la gestion actuelle et la participation au CECI, pensez-vous que votre groupe restera viable après la fin du programme BeninCajù? Utilisez l'échelle de 1, très peu durable, à 5, très durable. *Seulement BeninCajù.*	|___|	1. 5- Très durable 2. 4- Durable 3. 3- Assez durable 4. 2- Peu durable 5. 1- Pas durable du tout 6. NSP/PR
16.6a	Justifiez votre réponse. *Seulement si vous répondez Group* CECI *pour la question 16.2* *Seulement BeninCajù*	|___|	1. Une bonne gestion 2. Une bonne participation 3. Une bonne cohésion sociale 4. N'y a pas une bonne gestion 5. N'y a pas une bonne participation 6. N'y a pas une bonne cohésion sociale 7. Nous voulons continuer 8. Autres (précisez)
16.7	Avez-vous accédé à un crédit (prêt) depuis 2016?	|___|	1. OUI 2. NON **SI non → 17.1**
16.8	Combien de fois avez-vous obtenu des crédits depuis 2016?	|___|	*Nombre*
16.9	Quel a été le montant cumulé des crédits obtenus depuis 2016.	|___|	*FCFA*
16.10	Quelles étaient les sources de ce(s) crédit(s)?	|___| |___| |___|	1. CECI (Communauté d'épargne et de crédit interne) 2. Tontine 3. Banques 4. Institution de Microfinance 5. CVPA 6. Autre coopérative 7. Usine 8. Autres organisations paysannes 9. Usuriers dans le Village 10. Commerçants/acheteurs 11. Autre (précisez)
16.11	À quelles fins avez-vous utilisé ce crédit? Choisir les trois options les plus importantes	|___| |___| |___|	1. Dépenses sur la plantation de cajou **→ 16.12** 2. Dépenses sur d'autres cultures 3. Achat d'animaux ou de volaille pour élevage 4. Achat d'aliments 5. Dépenses de scolarité 6. Dépenses médicales et de santé 7. Construction/réparation de maisons 8. Investissement dans d'autres affaires/activités génératrices de revenu 9. Autres dépenses de ménage 10. Cérémonies sociales/religieuses 11. Aider les autres 12. Urgence 13. Divertissement 14. Autre (précisez) **→ 16.13**

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

16.12	Quel montant de crédit obtenu avez-vous utilisé pour la production de cajou (FCFA)?	|___|	*FCFA*
16.12a	À quelles fins avez-vous investi ces crédits dans votre production de noix de cajou? *Réponses multiples.*	|___|	1. Acquisition de terres 2. Construire/reparer l'habitation 3. Acquisition de semis 4. Payer des intrants (produits chimiques) 5. Payer pour la maind'oeuvre (p. ex., pour la plantation, la taille) 6. Payer pour les équipements agricoles 7. Autres fins (préciser)
16.13	Avez-vous eu des difficultés à rembourser votre/vos crédit(s)?	|___|	1. OUI 2. NON

17. EMPLOYE(E)S			
17.1	Qui travaille sur votre ferme de noix de cajou?	|___|	1. Seulement moi → **18.1** 2. Seulement moi et les membres de ma famille (non-payés) → **18.1** 3. Moi-même, ma famille et des employés payés → **17.2** 4. Seulement des employés payés → **17.2** 5. NSP/PR → **18.1**
17.2	Au cours des 12 derniers mois, avez-vous engagé des employés? Les emplois doivent avoir duré plus d'un mois.		1. OUI 2. NON **SI NON → 18.1**
17.2a	Au cours des 12 derniers mois, combien d'employés ont été engagés?		1. Nombre total: 2. Nombre de femmes:
17.2b	Au cours des 12 derniers mois, avez-vous été en mesure d'engager des employés grâce à l'aide de BeninCajù/FENAPAB/ CRADIB/DEDRAS (p. ex. en raison de l'augmentation de la production grâce à la formation ou à un prêt)? Les emplois doivent avoir duré plus d'un mois.	|___|	1. OUI 2. NON **SI NON → 18.1** *Seulement BeninCajù*
17.3	Au cours des 12 derniers mois, combien d'employés ont été engagés grâce à l'assistance BeninCajù/FENAPAB/CRADIB/ DEDRAS? Les emplois doivent avoir duré plus d'un mois.	|___|	1. Nombre total: 2. Nombre de femmes:
17.4	Combien de jours la personne 1 (personne 2, personne 3, etc.) a-t-elle été employée?		1. Personne 1: sexe; nombre de jours 2. Personne 2: sexe; nombre de jours 3. Personne 3: sexe; nombre de jours 4. Personne 4: sexe; nombre de jours 5. Personne 5: sexe; nombre de jours 6. Personne 6: sexe; nombre de jours 7. Personne 7: sexe; nombre de jours 8. Personne 8: sexe; nombre de jours

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

			9. Personne 9: sexe; nombre de jours 10. Personne 10: sexe; nombre de jours

18. AUTRES ACTIVITÉS ET SERVICES			
18.1	Avez-vous participé aux Journées de Foire des agriculteurs (Farmer Field Days)?	|___|	1. OUI 2. NON **SI NON → 18.3**
18.2	Comment évalueriez-vous la pertinence et la qualité des Journées de Foire des agriculteurs?	|___|	1. Très faible 2. Faible 3. Passable 4. Bonne 5. Excellente
18.2a	Justifier votre réponse.		1. J'ai beaucoup appris. 2. Je n'ai rien appris de nouveau. 3. J'ai appris les meilleures pratiques dans les activités de production de noix de cajou. 4. J'ai appris les meilleures pratiques et les activités post-récolte. 5. J'ai appris à propos de la chaîne de valeur. 6. J'ai visité un champ de démonstration. 7. J'ai pu discuter avec les autres producteurs et acteurs puis nouer des relations 8. Autres (préciser)
18.3	Avez-vous reçu des services d'assistance technique des Conseillers Agricoles (CA) de FENAPAB, CRADIB, DEDRAS par l'intermédiaire de BeninCajù? *Seulement BeninCajù*		1. OUI **SI oui → 18.3a** 2. NON 3. NSP/PR
18.3a	Êtes-vous satisfait des services d'assistance technique des Conseillers Agricoles (CA) de FENAPAB, CRADIB, DEDRAS par l'intermédiaire de BeninCajù? *Seulement BeninCajù*	|___|	1. Oui, très satisfait 2. Oui, plutôt satisfait 3. Non, plutôt insatisfait 4. Non, très insatisfait 5. NSP/PR
18.3b	Sur quels sujets les des Conseillers Agricoles (CA) de FENAPAB, CRADIB, DEDRAS vous ont-ils apporté leur soutien par l'intermédiaire de BeninCajù? *Seulement BeninCajù* *Ne lisez pas les réponses. Donnez à l'agriculteur le temps de réfléchir et de répondre. Réponse multiple*		1. Bonnes pratiques agronomiques (BPA) 2. Techniques agroforestières durables 3. Agriculture de conservation 4. Cultivars de noix de cajou 5. Gestion de la commercialisation, gestion financière, gestion de groupe 6. Autre (précisez) 7. NSP/PR
18.4	Avez-vous accès à des installations d'entreposage et/ou de transformation post-récolte de qualité?	|___|	1. OUI **SI oui → 18.5** 2. NON **SI non → 18.8** 3. NSP/PR **SI NSP → 18.8**
18.5	Utilisez-vous ces installations?	|___|	1. OUI **SI oui → 18.6** 2. NON **SI non → 18.7** 3. NSP/PR **SI NSP → 18.8**

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

18.6	Où sont ces installations?	|___|	1. Sur ma ferme 2. Associé à ma Coop/Groupe de producteurs 3. Associé à une autre coopérative/groupe de producteurs 4. Autre (préciser)
18.7	Pourquoi ne les utilisez-vous pas? *Donner seulement la raison principale*	|___|	1. Je n'ai pas les moyens de transporter mon produit. 2. Je ne reçois pas de paiement à l'avance lorsque je livre mon produit. 3. Je ne fais pas confiance en laissant mon produit dans ces installations. 4. Je n'ai pas besoin de stocker mon produit 5. Je ne fais pas de transformation post-récolte. 6. Autre (préciser)
18.8	Quelles sont, selon vous, les principales caractéristiques d'une ferme bien gérée? *Ne lisez pas les réponses.* Écoutez ce que le producteur a à dire et choisissez les réponses appropriées.	|___|	1. Bien aérée et bien drainée (taille, nettoyage, travail du sol). 2. Bonne densité: 100 arbres par hectare (espacement de 10 m entre les arbres). 3. Gestion de l'eau ou de la fertilité du sol (association de cultures, travail du sol) 4. Choix de bonnes cultures lors de la combinaison de cultures (soja, arachide, maïs, maïs, igname) 5. Protégée contre les incendies (création de pare-feu ou entouré de cultures ou d'espaces qui ne permettent pas la propagation du feu). 6. Bonne lutte contre les ravageurs et les maladies (pas d'invasion de ravageurs et de maladies) 7. Autre (préciser) 8. Autre (préciser) 9. Autre (préciser)

19. QUESTIONS SPÉCIFIQUES QUANT AU PROJET BENINCAJÙ (uniquement pour les groupes de traitement)			
19.1	Quelle est l'activité de BeninCajù qui a le plus amélioré votre production?	|___|	1. Programmes de formation (Or, Argent) 2. Autre renforcement des capacités techniques agricoles 3. Autres activités de renforcement des capacités de récolte et d'après-récolte 4. Journées de foire des agriculteurs 5. Programme de sensibilisation des agriculteurs 6. Production des plantules greffées 7. Vente groupée des produits 8. Organisation en coopératives 9. CECIs 10. Liens avec les institutions financières (prêts) 11. Certifications (graduation) 12. Autre (précisez)

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

19.2	Quelle est l'activité de BeninCajù qui a le moins contribué à l'amélioration de votre production?	|___|	1. Programmes de formation (Or, Argent) 2. Autre renforcement des capacités techniques agricoles 3. Autres activités de renforcement des capacités de récolte et d'après-récolte 4. Journées de foire des agriculteurs 5. Programme de sensibilisation des agriculteurs 6. Production des plantules greffées 7. Vente groupée des produits 8. Organisation en coopératives 9. CECIs 10. Liens avec les institutions financières (prêts) 11. Certifications (graduation) 12. Autre (précisez)
19.3	Quelle formation/service spécifique le programme BéninCajù pourrait-il fournir et qui vous serait le plus bénéfique? *Réponse ouverte.*		|_____|
19.4	Comment pensez-vous que le programme BéninCajù pourrait améliorer la participation des femmes aux activités et aux bénéfices du projet? *Réponse multiple.*	|___|	1. Offrir des formations uniquement aux femmes 2. Offrir des activités réservées aux femmes 3. Faire plus d'efforts pour trouver des participantes 4. Je ne sais pas 5. Je n'ai pas de réponse 6. Autre (précisez)
19.5	Quel est selon vous le plus grand impact du programme BéninCajù sur votre ferme?	|___|	1. Amélioration de la gestion environnementale de la ferme 2. Peut mieux réagir au changement climatique 3. L'augmentation de revenu 4. L'augmentation de la production à l'aide de techniques de formation et d'une augmentation des recettes. 5. Accès accru aux acheteurs et aux marchés et augmentation des revenus. 6. Accès aux prêts et autres services financiers 7. Autre (précisez) 8. NSP/PR
19.6	Dans l'ensemble, comment pensez-vous que le programme BeninCajù a amélioré la qualité de votre ferme? En utilisant une échelle de 5 (Énormément) à 1 (Très peu).	|___|	1. 5- Énormément 2. 4- Significativement 3. 3- Assez 4. 2- Un peu 5. 1- Très peu 6. Ne sait pas/Pas de réponse
19.7	Selon vous, dans quelle mesure les améliorations qui ont résulté de BeninCajù sont-ils durables, 1 étant très peu durables et 5 étant très durables?	|___|	1. 5- Très durable 2. 4- Durable 3. 3- Assez durable 4. 2- Peu durable 5. 1- Pas durable du tout 6. NSP/PR

APPENDIX 4 – PRODUCER SURVEY (CONTINUED)

19.7a	Quels sont, selon vous, les plus grands risques pour la durabilité des bénéfices générés par le programme BéninCajù pour votre ferme? *Réponses multiples.*	|___|	1. Marché – le prix de la noix de cajou pourrait baisser 2. Changement climatique/météo 3. Je ne peux pas mettre en œuvre tout ce que j'ai appris dans les formations (contraintes de temps). 4. Je ne peux pas mettre en œuvre tout ce que j'ai appris dans les formations (je ne comprends pas tout). 5. Autre (précisez) 6. Ne sait pas/Pas de réponse
19.7b	Recevez-vous du soutien (p. ex., formation, financement) d'autres groupes (p. ex., ONG, gouvernement, fournisseurs de services)?	|___|	1. Pas d'autre soutien reçue d'une autre source 2. MAEP/CARDER (service de vulgarisation) 3. Gouvernement 4. Cooperative 5. ONG/autres projets (préciser)|_____| 6. Autre (préciser) |_____|
19.8	Quel est selon vous le plus grand impact du programme BéninCajù sur vous et sur la qualité de vie de votre famille?	|___|	1. Augmentation des revenus 2. Une meilleure santé 3. Prestige social 4. Autre (précisez) 5. Je ne sais pas/Pas de réponse
19.9	Dans l'ensemble, comment pensez-vous que le programme BeninCajù a amélioré la qualité de vie de votre famille? En utilisant une échelle de 5 (Énormément) à 1 (Très peu).	|___|	1. 5- Énormément 2. 4- Significativement 3. 3- Assez 4. 2- Un peu 5. 1- Très peu 6. Ne sait pas/Pas de réponse

20. FIN		
20.1	En tant que répondant, vous pouvez nous fournir des commentaires supplémentaires quant à l'étude (par exemple, clarifications, commentaires).	
	Merci beaucoup d'avoir pris le temps de remplir ce sondage.	**Fin du questionnaire**
20.2	Commentaires de l'enumérateur (par exemple, problèmes, clarifications, commentaires).	

APPENDIX 5 – PROCESSOR SURVEY

Sondage pour les transformateurs pour l'évaluation à mi-parcours

Profil de la personne interrogée: la personne devrait être quelqu'un qui est très impliqué dans les opérations quotidiennes du transformateur et qui peut avoir accès aux RH et à d'autres informations opérationnelles. Il se peut que plus d'une personne soit nécessaire pour répondre à ce sondage.

Note to Enumerator: Il est également important d'essayer de demander autant de tables de transformation que possible aux usines, notamment les données de production et commerciales dans le temps. **It is also important to try to request as many processing tables as you can from the factories, notably output and commercial data through time.

A. INTRODUCTION

1.1	Nom de l'unité de transformation:	
1.2	Coordonnées du transformateur (adresse physique):	
1.2a	Obtenir Geopoint	
1.3	Nom de la commune	
1.4	Nom du département	
1.5	Nom de l'intervieweur:	
1.6	Date:	|__|__|/|__|__|/|__|__|__|__|
1.7	Numéro de questionnaire:	|__|__||__|__|
1.8	Nom de la personne contact:	
1.9	Courriel de la personne contact:	
1.10	Numéro de téléphone de la personne contact:	
1.11	Poste de la personne-ressource – Titre du poste	
1.12	Sexe du Répondant:	Observez, ne demandez pas

B. CONSENTEMENT

Bonjour et merci pour cet entretien. Nous travaillons avec BeninCajù (CIAP: Cashew Integration and Acceleration Program) (mis en œuvre par TechnoServe et CRS) sur un programme qui vise à accroître le revenu des ménages producteurs d'anacarde. Les informations recueillies au cours de cette enquête sont importantes. Elles permettent d'améliorer la politique de soutien apporté aux producteurs de Cajou des communautés locales au Bénin.

Votre participation à cette étude suppose que vous acceptez de fournir les informations à propos de votre entreprise de transformation.

Les informations collectées seront gardées au moins jusqu'en 2020 dans le but de préparer des rapports sur les changements observés chez les producteurs de cajou. Votre participation est totalement volontaire. Vous avez le choix de ne pas répondre aux questions auxquelles vous ne serez pas confortables et vous pouvez ne pas participer à notre enquête à tout moment. Si vous avez des questions concernant l'enquête vous pouvez contacter les services de CIAP: [redacted], Tél +[redacted] ou [redacted], Tél +[redacted].

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

1. RENSEIGNEMENTS GÉNÉRAUX ET EMPLOYÉS

1.1 En quelle année avez-vous commencé à exploiter votre entreprise de transformation des noix ou pomme de cajou (année de démarrage)?

_____

1.2 Avec quels produits du cajou travaillez-vous?

Pomme de cajou ____
Noix de cajou crue (NCC) ____
Les deux ____
Ne sait pas/pas de réponse ____

1.3 Dans quelle mesure êtes-vous impliqué dans les opérations quotidiennes de votre entreprise de produits du cajou?

Vous gérez directement toutes les opérations _____
Vous gérez directement les opérations financières et administratives (incluant les RH) _____
Vous confiez une partie à un gestionnaire, sur place _____
Vous confiez une partie à un gestionnaire, hors site _____
Vous gérez le processus de transformation directement, au niveau de l'usine _____
Vous gérez directement (autres fonctions, précisez) _____
Pas impliqué du tout (si cette option est choisie, une autre personne peut aider à remplir l'enquête, à moins que le répondant n'ait accès à tous les dossiers de l'entreprise). _____
Ne sait pas/pas de réponse _____

1.4 Quel pourcentage de votre temps de travail passez-vous à l'usine?

75 à 100% _____
50 à 74% _____
25 à 49% _____
Visites occasionnelles _____
Pas plus d'une ou deux visites annuellement (si cette option est choisie, une autre personne peut aider à remplir l'enquête, à moins que le répondant n'ait accès à tous les dossiers de l'entreprise). _____
Ne sait pas/pas de réponse _____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

1.5 Comment évaluez-vous votre équipe de gestion (salariés cadres)?

Hautement qualifiée et expérimentée	Allez à 1.6
Acceptable, mais a encore besoin d'un certain soutien ou de formation	Allez à 1.6
Inefficace	Allez à 1.5a
Ne sait pas/pas de réponse	Allez à 1.6

1.5a Pourquoi considérez-vous que votre équipe de gestion (salariés cadres) soit inefficace? *Réponses multiples*

Les individus manquent de motivation	
Les individus n'ont pas les compétences nécessaires en matière de gestion	
Les individus n'ont pas les compétences techniques nécessaires	
Autre (précisez)	
Ne sait pas/pas de réponse	

1.6 Comment évalueriez-vous vos salariés non-cadres?

Hautement qualifiés et expérimentés	Allez à 1.7
Acceptables, a encore besoin d'un certain soutien ou de formation	Allez à 1.7
Inefficaces	Allez à 1.6a
Ne sait pas/pas de réponse	Allez à 1.7

1.6a Pourquoi considérez-vous que vos salariés non-cadres sont inefficaces? *Réponses multiples*

Les individus manquent de motivation	
Les individus n'ont pas les compétences nécessaires en matière de supervision et contrôle	
Les individus n'ont pas les compétences techniques nécessaires	
Autre (spécifiez)	
Ne sait pas/pas de réponse	

1.7 Comment évalueriez-vous vos ouvrier(e)s?

Hautement qualifiés et expérimentés	Allez à 1.8
Acceptables, ont encore besoin d'un certain soutien ou de formation	Allez à 1.8
Inefficaces	Allez à 1.7a
Ne sait pas/pas de réponse	Allez à 1.8

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

1.7a Pourquoi considérez-vous que vos ouvrier(e)s sont inefficaces? *Réponses multiples*

Les individus manquent de motivation	_____
Les individus n'ont pas les compétences nécessaires en matière de transformation	_____
Les individus n'ont pas les compétences techniques nécessaires	_____
Autre (spécifiez)	_____
Ne sait pas/pas de réponse	_____

1.8 Quel est le nombre total de vos employés actuels (2018)?

Total	_____
Femmes	_____
Hommes	_____

1.9 Votre nombre d'employés fluctue-t-il au cours de l'année?

Oui	_____	Allez à 1.9a
Non	_____	Allez à 1.13
Ne sait pas/pas de réponse	_____	Allez à 1.13

1.9a Pourquoi cette fluctuation se produit-elle?

Incapacité d'acheter suffisamment produit pour une année complète (par manque de fonds ou d'autres ressources)	_____
Pas assez ou capacité réduite des entrepôts pour stocker pendant une année complète	_____
Impossibilité de recruter des travailleurs en raison d'autres emplois saisonniers dans la région de l'usine	_____
Impossibilité de payer le personnel en raison de l'absence de recettes pendant toute l'année	_____
Caractère saisonnier de la disponibilité de la matière première	_____
Autre (spécifiez)	_____
Ne sait pas/pas de réponse	_____

1.10 Quel est le nombre total maximum d'employés au cours de l'année 2018?

Total	_____
Femmes	_____
Hommes	_____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

1.10a Quel est le nombre total minimum d'employés au cours de l'année 2018?

Total	_____
Femmes	_____
Hommes	_____

1.11 Quel est le nombre total maximum d'employés au cours de l'année 2017?

Total	_____
Femmes	_____
Hommes	_____

1.11a Quel est le nombre total minimum d'employés au cours de l'année 2017?

Total	_____
Femmes	_____
Hommes	_____

1.12 Quel est le nombre total maximum d'employés au cours de l'année 2016?

Total	_____
Femmes	_____
Hommes	_____

1.12a Quel est le nombre total minimum d'employés au cours de l'année 2016?

Total	_____
Femmes	_____
Hommes	_____

1.13 Quel est le taux de rotation de votre personnel (% des travailleurs qui quittent en moins d'un an)?

_____

1.14 Au cours de la dernière année (12 derniers mois), pouvez-vous attribuer la création de nouveaux emplois (sans compter les variations saisonnières régulières) à l'aide fournie par le projet BeninCajù (TNS et CRS) (p. ex. prêts, production plus élevée)?

Oui	_____	Allez à 1.14a
Non	_____	Allez à 1.17
Ne sait pas/pas de réponse	_____	Allez à 1.14a

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

1.14a De quelle façon la prestation de l'aide aux projets a-t-elle influencé la prise de décision concernant la création d'emplois (p. ex., accélération de la création d'emplois (les transformateurs l'auraient fait à rythme plus lent, peu importe l'aide fournie par le projet); la création d'emplois n'aurait pas été possible sans l'aide du projet; etc.)?

_____

1.15 Au cours de la dernière année (12 derniers mois) combien d'employés, y compris vous-même s'il y a lieu, ont été employés grâce à l'assistance BeninCajù? Les emplois doivent avoir duré plus d'un mois.

Nombre total	_____
Nombre de femmes	_____
Nombre d'hommes	_____
Ne sait pas/pas de réponse	_____

1.16 Combien de ces emplois ont duré environ 12 mois, environ 9 mois, environ 6 mois et environ 3 mois?

	12 mois	9 mois	6 mois	3 mois
Nombre total				
Nombre de femmes				
Nombre d'hommes				
Ne sait pas/pas de réponse				

1.17 Quels programmes sociaux avez-vous pour les travailleurs?

Garderie/Crèche pour enfants	_____
Repas gratuit	_____
Transport	_____
Soutien en matière de santé	_____
Horaires de travail flexibles	_____
Autre (spécifiez)	_____
Ne sait pas/pas de réponse	_____

1.18 Votre entreprise a-t-elle des objectifs d'embauche pour les femmes occupant des postes d'opération des machines, de supervision ou de gestion?

Oui	_____
Non	_____
Ne sait pas/pas de réponse	_____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

1.19 Pensez-vous qu'il y a des obstacles qui empêchent les femmes de travailler dans votre entreprise dans des poste d'opération de machines, de supervision ou de gestion?

Oui	_____	Allez à 1.19a
Non	_____	Allez à 1.19b
Ne sait pas/pas de réponse	_____	Allez à 2.0

1.19a Si oui, pourquoi pensez-vous cela? Sélectionner jusqu'à trois choix

Nous n'avons pas de politiques pour favoriser le recrutement des femmes.	_____
Les femmes sur le marché du travail ne sont pas formées pour ces fonctions	_____
Nous n'avons pas une politique de formation ou stage adéquate	_____
Nous n'avons pas un environnement de travail favorable aux femmes.	_____
Les femmes auront trop de difficulté à s'imposer dans cet environnement de travail à prédominance masculine.	_____
Travail manuel lourd.	_____
Autre (spécifiez)	_____
Ne sait pas/pas de réponse	_____

1.19b Si non, pourquoi pensez-vous cela? Sélectionner jusqu'à trois choix

Nous avons des politiques favorables aux femmes.	_____
Nous avons un environnement de travail favorable aux femmes.	_____
Nous avons déjà beaucoup de femmes qui travaillent dans ces fonctions.	_____
Autre (spécifiez)	_____
Ne sait pas/pas de réponse	_____

2. ÉVALUATION DES OPÉRATIONS

Seulement les transformateurs de noix de cajou brutes (RCN)

2.1 Quelle est la capacité installée en tonne métrique de RCN/année?

2016	_____
2017	_____
2018 (planifiée)	_____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

2.2 Quelle est la quantité achetée en tonne métrique de RCN/année?

2016	_____
2017	_____
2018 (estimation)	_____

2.2a Quelle est la capacité utilisée (quantité transformée) en tonne métrique de RCN/année?

2016	_____
2017	_____
2018 (estimation)	_____

2.3 Quelle est la valeur moyenne du prix de vente du RCN (FCFA/kg) pour les ventes en négoce (svp indiquer le KOR moyen, si connu)

Année	FCFA/KG Moyen	KOR Moyen
2016		
2017		
2018 (estimation)		



2.3a Quelle est la valeur moyenne de votre prix de vente des amandes (FCFA/kg) pour le grade W320, par an?

Année	FCFA/KG (Moyenne pour grade W320)
2016	
2017	
2018 (estimation)	



2.3b Quels étaient vos revenus bruts provenant de la vente d'amandes et noix brutes de cajou (ventes négoces)?

Année	Amandes	Noix brutes (RCN – Ventes négoces)
2016		
2017		
2018 (plan)		

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

2.3c Quels étaient vos revenus nets provenant de la vente d'amandes et noix brutes de cajou (ventes négoces)?

Année	Amandes	Noix brutes (RCN – Ventes négoces)
2016		
2017		
2018 (plan)		

2.4 Dans quel(s) processus de transformation votre société est-elle impliquée (Oui/Non)?

Calibrage (grading)	
Fragilisation (cooking)	
Décorticage (shelling)	
Étuvage (steaming)	
Dépelliculage (Peeling)	
Classification (grading)	
Emballage (packing)	
Stockage (warehouse)	

2.5 Quel est la productivité moyenne (machines, personnes, quarts, jours, semaines) pour 2018?

Section	% de mécanisation	Nombre de machine(s)	# personnes/ quart	# de quarts par jour	# jours de travail par semaine	# de mois de travail estimés pour l'année
Calibrage (grading)						
Fragilisation (cooking)						
Décorticage (shelling)						
Étuvage (Steaming)						
Dépelliculage (Peeling)						
Classification (grading)						
Emballage (packing)						
Stockage (warehouse)						

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

2.6 Quelle est la productivité moyenne (tous grades confondus) par jour en 2018 (actuelle)?

Calibrage (grading)	_____
Fragilisation (cooking)	_____
Décorticage (shelling)	_____
Étuvage (Steaming)	_____
Dépelliculage (Peeling)	_____
Classification (grading)	_____
Emballage (packing)	_____
Stockage (warehouse)	_____

2.6a Le niveau de mécanisation et de productivité a-t-il changé depuis votre implication avec BeninCajù?

Oui	_____	Aller à la 2.6b
Non	_____	Allez à la 2.7
Ne sait pas/pas de réponse	_____	Allez à la 2.7

2.6b Si oui, veuillez commenter.

_____

2.7 Utilisez-vous les coques de noix de cajou?

Oui	_____	Aller à la 2.7a
Non	_____	Aller à la 2.11
Ne sait pas/pas de réponse	_____	Aller à la 2.11

2.7a Si oui, depuis quand utilisez-vous les coques de noix de cajou? *Soyez aussi spécifique que possible*

_____

2.8 Si oui, quelle en est l'utilisation? *Sélectionnez tout ce qui s'applique*

Combustible pour les opérations de transformation	_____
Production d'huile de coques de noix de cajou (CNSL oil) et de galettes (biomasse) à vendre	_____
Production d'huile de coques de noix de cajou (CNSL oil) et de galettes de coques (biomasse) pour une combustion plus propre pour la production d'énergie et la fabrication de charbon de bois	_____
Vendre et transporter à une unité satellite	_____
Autre (spécifiez)	_____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

2.9 Est-ce que vous générez des revenus à partir des coques de noix de cajou?

Oui	_____	Aller à 2.10
Non	_____	Aller à 2.11
Ne sait pas/pas de réponse	_____	Aller à 2.11

2.10a Si oui, combien de FCFA par an?

_____

2.10b Si oui, combien de KG (coques brutes) par an?

_____

2.11 Comment vous débarrassez-vous de vos déchets de coques de noix de cajou? *Sélectionnez tout ce qui s'applique*

Je n'ai pas de déchets, ils sont utilisés pour l'usine	_____
Je les brûle	_____
Ils sont évacués sur un site de décharge	_____
Je les offre à d'autres transformateurs	_____
Autre (spécifiez)	_____

2.12 Faites-vous le suivi des coûts de transformation?

Oui	_____	Aller à 2.12a
Non	_____	Aller à 2.13
Ne sait pas/pas de réponse	_____	Aller à 2.13

2.12a Quel est votre coût de transformation de RCN ou amande (FCFA)?

Année	RCN (tonne)	Amande (KG)
2016		
2017		
2018		

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

2.13 (Même si vous ne retracez pas les coûts de transformation), avez-vous l'impression que les changements institués à la suite du projet BeninCajù vous ont aidé à réduire les coûts de transformation?

Oui, beaucoup	_____
Oui, un peu	_____
Non	_____
Ne sait pas/pas de réponse	_____

2.13a Pouvez-vous nous donner quelques précisions sur les raisons pour lesquelles vous percevez les choses de cette façon? *Réponses multiples*

Utilisation des nouvelles technologies.	_____
Utilisation de sous-produits de la noix de cajou pour générer des revenus	_____
Employés plus efficaces (formation)	_____
Autre (préciser)	_____
Ne sait pas/pas de réponse	_____

2.14 Connaissez-vous les coûts de transformation de vos concurrents? *Réponses multiples*

Oui, au Bénin	_____
Oui, au niveau régional	_____
Oui, au niveau international	_____
Non	_____
Ne sait pas/pas de réponse	_____

2.15 Faites-vous le suivi du pourcentage des pertes ou de transformation inadéquate (proportion des produits qui ne peut pas être vendue; proportion des produits vendus après déclassement, écart entre le rendement des produits transformés obtenu et le rendement optimal ou de référence)?

Oui	_____	Aller à 2.16
Non	_____	Aller à 2.18
Ne sait pas/pas de réponse	_____	Aller à 2.18

2.16 Quel est le pourcentage des pertes ou de transformation inadéquate de la RCN?

2016	_____
2017	_____
2018	_____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

2.17 Quel est le coût des pertes ou de la transformation inadéquate de la RCN chaque année (FCFA)?

2016	
2017	
2018 (estimation)	

2.17a Quel est la cause principale des pertes ou de la transformation inadéquate de la RCN chaque année?

2016	
2017	
2018	

2.18 Avez-vous des agriculteurs individuels directement liés à votre entreprise? Il s'agit des producteurs qui livrent les matières premières à votre entreprise avec un ou sans contrat formel.

Oui	Aller à 2.19
Non	Aller à 3.1
NSP/PR	Aller à 3.1

2.19 S'agit-il de contrats officiels ou de relations indirectes entre acheteurs/négociants (pas de contrats formels définissant au préalable les modalités des transactions)? *Il s'agit des producteurs qui livrent les matières premières à votre entreprise avec un ou sans contrat formel. Réponses multiples*

Contrats formels	Aller à 2.20
Relations indirectes (pas de contrats officiels)	Aller à 2.21
Ne connaît pas la division/Ne fait pas la nuance entre les deux	Aller à 2.22
Pas de réponse	Aller à 3.1

2.20 Quel est le nombre d'agriculteurs individuels (hommes) directement (contrats formels) en affaires avec votre entreprise? *Il s'agit des producteurs qui livrent les matières premières à votre entreprise avec un contrat formel.*

2016	
2017	
2018	

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

2.20a Quel est le nombre d'agricultrices individuelles (femmes) directement (contrats formels) en affaires avec votre entreprise? *Il s'agit des producteurs qui livrent les matières premières à votre entreprise avec un contrat formel.*

2016 _____
2017 _____
2018 _____

2.20ba Quelle est la quantité de noix de cajou brutes achetée directement (contrats formels) (tonne(s) de RCN)?

2016 _____
2017 _____
2018 _____

2.20c Quel est le prix payé par KG de RCN sur les achats directs (contrats formels)?

Année	Prix moyen (FCFA/KG)	Qualité moyenne (KOR)
2016		
2017		
2018		

2.21 Quel est le nombre d'agriculteurs (hommes) indirectement (relations indirectes, pas de contrats formels) en affaires avec votre entreprise? *Il s'agit des producteurs qui livrent les matières premières à votre entreprise sans contrat formel.*

2016 _____
2017 _____
2018 _____

2.21a Quel est le nombre d'agricultrices (femmes) indirectement (relations indirectes, pas de contrats formels) en affaires avec votre entreprise? *Il s'agit des producteurs qui livrent les matières premières à votre entreprise sans contrat formel.*

2016 _____
2017 _____
2018 _____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

2.21ba Quelle est la quantité de noix de cajou brute achetée indirectement (relations indirectes, pas de contrats formels) (tonne métrique de RCN)?

2016 _____
2017 _____
2018 _____

2.21c Quel est le prix payé par KG de RCN sur les achats indirects (relations indirectes, pas de contrats formels)?

Année	Prix moyen (FCFA/KG)	Qualité moyenne (KOR)
2016		
2017		
2018 (estimation)		

2.22 Quel est le nombre d'agriculteurs (hommes) (contrats officiels ou relations indirectes/pas de contrats formels) en affaires avec votre entreprise? *Il s'agit des producteurs qui livrent les matières premières à votre entreprise avec un ou sans contrat formel.*

2016 _____
2017 _____
2018 _____

2.22a Quel est le nombre d'agricultrices (femmes) (contrats officiels ou relations indirectes/pas de contrats formels) en affaires avec votre entreprise? *Il s'agit des producteurs qui livrent les matières premières à votre entreprise avec un ou sans contrat formel.*

2016 _____
2017 _____
2018 _____

2.22b Quelle est la quantité de noix de cajou brute achetée directement (contrats formels ou relations indirectes) (tonne métrique de RCN)?

2016 _____
2017 _____
2018 _____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

2.22c Quel est le prix payé par KG de RCN sur les achats directs (contrats formels ou relations indirectes/pas de contrats formels)?

Année	Prix moyen (FCFA/KG)	Qualité moyenne (KOR)
2016		
2017		
2018 (estimation)		

Seulement les transformateurs de pomme de cajou

2.23 Quelle est la capacité installée en tonne métrique de pommes de cajou/année?

2017 _____
2018 (planifié) _____

2.23a Quelle est la quantité achetée en tonne métrique de pommes de cajou/année?

2017 _____
2018 (plan) _____

2.23b Quelle est la capacité utilisée (quantité transformée) en tonne métrique de pommes de cajou/année?

2017 _____
2018 (plan) _____

2.24 Combien de litres de jus pouvez-vous produire chaque année?

2017 _____
2018 (plan) _____

2.24a Combien de litres de jus avez-vous produit chaque année?

2017 _____
2018 (plan) _____

2.25 Quel est le prix payé par litre de jus de pomme de cajou? *Le transformateur s'occupe de la vente.*

2017 _____
2018 (planiifé) _____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

2.25a Quels étaient vos revenus nets provenant de la vente de jus de pomme de cajou?

2017 _____
2018 (plan) _____

2.25b Quels étaient vos revenus bruts provenant de la vente de jus de pomme de cajou?

2017 _____
2018 (plan) _____

2.26 Dans quel(s) processus de transformation votre société est-elle impliquée (Oui/Non)?

Triage – pesage _____
Lavage _____
Extraction _____
Clarification _____
Filtration _____
Pasteurisation _____
Mise en bouteille _____
Appertisation _____
Caramélisation _____
Choc thermique _____
Mirage _____
Étiquetage _____
Mise en pack _____
Stockage _____

2.26a Quel est le niveau de mécanisation (% de transformation de la pomme de cajou)?

Triage – pesage _____
Lavage _____
Extraction _____
Clarification _____
Filtration _____
Pasteurisation _____
Mise en bouteille _____
Appertisation _____
Caramélisation _____
Choc thermique _____
Mirage _____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

Étiquetage _____
Mise en pack _____
Stockage _____

2.27 Productivité: personne/jour, Kg, manuelle, 2018 (actuelle)

Triage – pesage _____
Lavage _____
Extraction _____
Clarification _____
Filtration _____
Pasteurisation _____
Mise en bouteille _____
Appertisation _____
Caramélisation _____
Choc thermique _____
Mirage _____
Étiquetage _____
Mise en pack _____
Stockage _____

2.28 Productivité: personne/jour, Kg, mécanisée, 2018 (actuelle)

Triage – pesage _____
Lavage _____
Extraction _____
Clarification _____
Filtration _____
Pasteurisation _____
Mise en bouteille _____
Appertisation _____
Caramélisation _____
Choc thermique _____
Mirage _____
Étiquetage _____
Mise en pack _____
Stockage _____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

2.28a Comment vous débarrassez-vous de vos déchets de pommes de cajou ou que faites-vous de vos déchets de pommes de cajou (sous-produits)?

Je n'ai pas de déchets, ils sont utilisés pour l'usine	____
Je les brûle	____
Ils sont évacués sur un site de décharge	____
Je les offre à d'autres transformateurs	____
Vendre des sous-produits	____
Autres (préciser)	____
Ne sait pas/pas de réponse	____

2.29 Faites-vous le suivi des coûts de transformation?

Oui	____	Aller à 2.29a
Non	____	Aller à 2.30
Ne sait pas/pas de réponse	____	Aller à 2.30

2.29a Quel est votre coût de transformation/tonne métrique de pomme de cajou (FCFA)?

2017	____
2018	____

2.30 (Même si vous ne retracez pas les coûts de transformation), avez-vous l'impression que les changements institués à la suite du programme BeninCajù vous ont aidé à réduire les coûts de transformation?

Oui, beaucoup	____
Oui, un peu	____
Non	____
Ne sait pas/pas de réponse	____

2.30a Pouvez-vous nous donner quelques précisions sur les raisons pour lesquelles vous percevez les choses de cette façon? *Réponses multiples*

Utilisation des nouvelles technologies.	____
Utilisation de sous-produits de la pomme de cajou pour générer des revenus.	____
Employés plus efficaces (formation)	____
Autre (préciser)	____
Ne sait pas/pas de réponse	____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

2.31 Connaissez-vous les coûts de transformation dans les pays concurrents?

Oui	_____
Non	_____
Ne sait pas/pas de réponse	_____

2.32 Faites-vous le suivi du pourcentage des pertes ou de transformation inadéquate (proportion des produits non vendue, proportion des produits vendue après déclassement, écart entre le rendement obtenu et le rendement optimal ou de référence)?

Oui	_____	Aller à 2.33
Non	_____	Aller à 2.35
Ne sait pas/pas de réponse	_____	Aller à 2.35

2.33 Quel est le pourcentage des pertes ou de transformation inadéquate de la pomme de cajou?

2017	_____
2018	_____

2.34 Quel est le coût des pertes ou de la transformation inadéquate de la pomme de cajou chaque année (FCFA)?

2017	_____
2018	_____

2.34a Quel est la cause principale des pertes ou de la transformation inadéquate de la pomme de cajou chaque année?

2017	_____
2018	_____

2.35 Avez-vous des agriculteurs individuels directement liés à votre entreprise? Il s'agit des producteurs qui livrent les matières premières à votre entreprise avec un ou sans contrat formel.

Oui	Aller à 2.36
Non	Aller à 3.1
NSP/PR	Aller à 3.1

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

2.36 S'agit-il de contrats formels ou de relations indirectes entre acheteurs/négociants (pas de contrats formels définissant au préalable les modalités des transactions)? *Il s'agit des producteurs qui livrent les matières premières à votre entreprise avec un ou sans contrat formels. Réponses multiples*

Contrats formels	Aller à 2.37
Relations indirectes (pas de contrats formels)	Aller à 2.38
Ne connaît pas la division/Ne fait pas la nuance entre les deux	Aller à 2.39
PR	Aller à 3.1

2.37 Quel est le nombre d'agriculteurs (hommes) directement (contrats formels) en affaires à votre entreprise? *Il s'agit des producteurs qui livrent les matières premières à votre entreprise avec un contrat formels.*

2017 _____

2018 _____

2.37a Quel est le nombre d'agricultrices (femmes) directement (contrats formels) en affaires à votre entreprise? *Il s'agit des producteurs qui livrent les matières premières à votre entreprise avec un contrat formels.*

2017 _____

2018 _____

2.37b Quelle est la quantité de pommes de cajou brutes achetée directement (contrats formels) (tonne de pomme)?

2017 _____

2018 _____

2.37c Quel est le prix payé par KG de pommes sur les achats directs (contrats formels)?

2017 _____

2018 _____

2.38 Quel est le nombre d'agriculteurs (hommes) indirectement (relations indirectes) en affaires à votre entreprise? *Il s'agit des producteurs qui livrent les matières premières à votre entreprise sans contrat formel.*

2017 _____

2018 _____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

2.38a Quel est le nombre d'agricultrices (femmes) indirectement (relations indirectes) en affaires à votre entreprise? *Il s'agit des producteurs qui livrent les matières premières à votre entreprise sans contrat formel.*

2017 _____
2018 _____

2.38b Quelle est la quantité de pommes de cajou brutes achetée indirectement (relations indirectes) (tonne de pomme)?

2017 _____
2018 _____

2.38c Quel est le prix payé par KG de pomme sur les achats indirects (relations indirectes)?

2017 _____
2018 _____

2.39 Quel est le nombre d'agriculteurs (hommes) (contrats formels ou relations indirectes) en affaires à votre entreprise? *Il s'agit des producteurs qui livrent les matières premières à votre entreprise avec ou sans contrat formel.*

2017 _____
2018 _____

2.39a Quel est le nombre d'agricultrices (femmes) (contrats formels ou relations indirectes) en affaires à votre entreprise? *Il s'agit des producteurs qui livrent les matières premières à votre entreprise avec ou sans contrat formels.*

2017 _____
2018 _____

2.39b Quelle est la quantité de pommes brutes achetée (contrats formels ou relations indirectes) (tonne de pomme)?

2017 _____
2018 _____

2.39c Quel est le prix payé par KG de pommes sur les achats (contrats formels ou relations indirectes)?

2017 _____
2018 _____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

3. FINANCE

3.1 Quel montant avez-vous investi en capital, y compris par des prêts (FCFA)?

Année	Actifs immobilisés	Fonds de roulement
Capital initial		
2016		
2017		
2018		

3.2 Avez-vous accès au financement pour votre usine de transformation?

Oui		Aller à 3.3
Non		Aller à 4.1
Ne sait pas/pas de réponse		Aller à 4.1

3.3 Si oui, quel montant (FCFA) a été mobilisé pour l'investissement?

Capital initial	
2016	
2017	
2018	

3.4 Qui sont vos fournisseurs de crédit? *Réponses multiples*

Banque commerciale accréditée	
Une coopérative d'épargne/crédit	
Institution de microfinance	
BeninCajù – Technoserve (subvention de contrepartie)	
Autres (précisez)	

3.5 Le projet BeninCajù (Technoserve et CRS) vous a-t-il aidé spécifiquement à accéder au crédit (p. ex. élaboration de plans d'affaires, facilitation de l'octroi de crédit, etc)?

Oui	Allez à 3.5a
Non	Allez à 3.6
Ne sait pas/pas de réponse	Allez à 3.6

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

3.5a Avec ce(s) crédit(s) dont BeninCajù vous a aidé à accéder, à quelle(s) fin(s) avez-vous utilisé ce(s) crédit(s)? *Réponses multiples*

- Pour démarrer une nouvelle entreprise de transformation de noix/pomme de cajou _____
- Pour démarrer une nouvelle entreprise (autre que dans le cajou) _____
- Remise à niveau de mon entreprise: nouvelles machines (remplacement) _____
- Agrandir mon entreprise: Nouvelles machines pour augmenter la capacité _____
- Réduction des coûts de mon entreprise: de nouvelles machines pour augmenter le niveau de mécanisation (augmenter la productivité et ainsi réduire les coûts). _____
- Remise à niveau de mon entreprise: Remplacer des équipements pour les travailleurs manuels (tables, chaises, autres matériaux) _____
- Agrandir mon entreprise: Nouveaux équipements pour les travailleurs manuels (tables, chaises, autres matériaux) _____
- Remise à niveau de mon entreprise: Travaux d'entretien _____
- Agrandir mon entreprise: Nouveaux investissements en infrastructure (travaux) _____
- Pour embaucher des employés supplémentaires _____
- Fonds de roulement (gestion quotidienne de l'entreprise) _____
- Pour la formation/l'éducation _____
- Consolidation de dettes _____
- Raisons personnelles _____
- Autre (précisez) _____
- Ne sait pas/pas de réponse _____

3.5b Si vous avez accédé à d'autres crédits, à quelle fin avez-vous utilisé ces crédits? *Réponses multiples*

- Aucun autre crédit _____
- Pour démarrer une nouvelle entreprise de transformation de noix/pomme de cajou _____
- Pour démarrer une nouvelle entreprise (autre que dans le cajou) _____
- Remise à niveau de mon entreprise: nouvelles machines (remplacement) _____
- Agrandir mon entreprise: Nouvelles machines pour augmenter la capacité _____
- Réduction des coûts de mon entreprise: de nouvelles machines pour augmenter le niveau de mécanisation (augmenter la productivité et ainsi réduire les coûts). _____
- Remise à niveau de mon entreprise: Remplacer des équipements pour les travailleurs manuels (tables, chaises, autres matériaux) _____
- Agrandir mon entreprise: Nouveaux équipements pour les travailleurs manuels (tables, chaises, autres matériaux) _____
- Remise à niveau de mon entreprise: Travaux d'entretien _____
- Agrandir mon entreprise: Nouveaux investissements en infrastructure (travaux) _____
- Pour embaucher des employés supplémentaires _____
- Fonds de roulement (gestion quotidienne de l'entreprise) _____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

Pour la formation/l'éducation _____
Consolidation de dettes _____
Raisons personnelles _____
Autre (précisez) _____
Ne sait pas/pas de réponse _____

3.6 A quelle fin avez-vous utilisé ces crédits? *Réponses multiples*

Pour démarrer une nouvelle entreprise de transformation de noix/pomme de cajou _____
Pour démarrer une nouvelle entreprise (autre que dans le cajou) _____
Remise à niveau de mon entreprise: nouvelles machines (remplacement) _____
Agrandir mon entreprise: Nouvelles machines pour augmenter la capacité _____
Réduction des coûts de mon entreprise: de nouvelles machines pour augmenter le niveau de mécanisation (augmenter la productivité et ainsi réduire les coûts). _____
Remise à niveau de mon entreprise: Remplacer des équipements pour les travailleurs manuels (tables, chaises, autres matériaux) _____
Agrandir mon entreprise: Nouveaux équipements pour les travailleurs manuels (tables, chaises, autres matériaux) _____
Remise à niveau de mon entreprise: Travaux d'entretien _____
Agrandir mon entreprise: Nouveaux investissements en infrastructure (travaux) _____
Pour embaucher des employés supplémentaires _____
Fonds de roulement (gestion quotidienne de l'entreprise) _____
Pour la formation/l'éducation _____
Consolidation de dettes _____
Raisons personnelles _____
Autre (précisez) _____
Ne sait pas/pas de réponse _____

3.7 Avez-vous réussi à atteindre votre/vos objectif(s) avec ce(s) prêt(s)?

Oui _____ Aller à 3.9
Non _____ Aller à 3.8
Ne sait pas/pas de réponse _____ Aller à 3.9

3.8 Selon vous, quelle est la principale raison pour laquelle vous n'avez pas atteint votre/vos objectif(s)?

Le prêt n'était pas assez important. _____
Il faut encore plus de temps pour atteindre mon/mes objectif(s) _____
Je n'ai pas été en mesure d'utiliser le prêt pour mon entreprise en raison de problèmes imprévus qui ont surgi. _____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

L'actif que j'ai acheté n'a pas eu d'effet positif sur mon entreprise. _____
Les conditions du marché étaient mauvaises _____
Je n'ai pas reçu de clients supplémentaires _____
Les facteurs environnementaux (p. ex., sécheresse, inondations) ont affecté mon entreprise. _____
Nous étions mal informé sur la justification de l'investissement (équipement(s), machine(s), travaux ou autre) _____
Autre (précisez): _____ _____

3.9 Dans quelle mesure les améliorations qui ont résulté de ce(s) prêt(s) sont-ils durables, 1 étant très peu durables et 7 étant très durables?

1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
Ne sait pas/pas de réponse _____

3.10 Voyez-vous votre entreprise rester (ou devenir, si elle ne l'est pas actuellement) financièrement viable après la fin du projet BeninCajù (Technoserve et CRS)?

Oui _____ Allez à 3.11
Peut-être _____ Allez à 3.12
Non _____ Allez à 3.12
Ne sait pas/pas de réponse _____ Allez à 4.1

3.11 Si oui, quelle est la principale raison pour laquelle vous croyez cela?

Nous avions déjà une entreprise rentable avant le projet BeninCajù. _____
Nous avons augmenté notre clientèle _____
Nos investissements ont permis d'accroître la productivité _____
Nos investissements ont permis d'accroître la qualité _____
Nos investissements ont permis de réduire les coûts de transformation _____
Nos investissements ont permis d'améliorer notre profitabilité (ou réduire notre perte financière) _____
Autre (précisez): _____ _____
Ne sait pas/pas de réponse _____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

3.12 Si non, quelle est la principale raison pour laquelle vous croyez cela?

Nous comptons sur le financement pour mener nos opérations quotidiennes.	_____
Nous avons une clientèle trop restreinte.	_____
Nous ne réalisons pas encore un profit annuel.	_____
Nous ne faisons pas assez de profits pour couvrir la période de soudure	_____
Les coûts de transformation sont trop élevés	_____
Autre (précisez): _____	_____
Ne sait pas/pas de réponse	_____

4. FORMATIONS ET ASSISTANCE TECHNIQUE

Assistance pour les formations

4.1 Est-ce que vous ou d'autres individus de votre entreprise ont reçu une formation dans le cadre du projet BeninCajù depuis 2016?

Oui	_____	Aller à 4.2
Non	_____	Allez à 4.12
Ne sait pas/pas de réponse	_____	Allez à 4.12

4.2 A combien de formations avez-vous participé, vous ou d'autres personnes de votre entreprise dans le cadre du projet BeninCajù depuis 2016?

_____

4.3 Parmi les formations que BeninCajù a dispensées à votre entreprise, quelles sont les trois que vous avez trouvées les plus efficaces et pourquoi? *Réponse ouverte.*

1 _____
2 _____
3 _____

4.4 Parmi les formations que BeninCajù a dispensées à votre entreprise, quelles sont les trois que vous avez trouvées les moins efficaces et pourquoi? *Réponse ouverte.*

1 _____
2 _____
3 _____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

4.5 Comment évalueriez-vous la pertinence générale des formations dispensées, 1 étant très peu pertinente et 7 étant très pertinente?

1	_____
2	_____
3	_____
4	_____
5	_____
6	_____
7	_____
Ne sait pas/pas de réponse	_____

4.6 Comment évalueriez-vous l'efficacité générale des formations dispensées, 1 étant très peu efficace et 7 étant très efficace?

1	_____
2	_____
3	_____
4	_____
5	_____
6	_____
7	_____
Ne sait pas/pas de réponse	_____

4.7 Au cours de la dernière année, votre entreprise a-t-elle été en mesure d'appliquer des techniques et des technologies améliorées grâce à la mise en œuvre de concepts provenant des formations?

Oui	_____	Aller à 4.8
Non	_____	Allez à 4.10
Ne sait pas/pas de réponse	_____	Allez à 4.11

4.8 Pouvez-vous donner jusqu'à trois exemples de techniques et de technologies améliorées appliquées suite aux formations reçues?

1 _____
2 _____
3 _____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

4.9 Dans quelle mesure les améliorations qui ont résulté de ces techniques et technologies améliorées suite aux formations sont durables ou pas, 1 étant très peu durables et 7 étant très durables?

1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
Ne sait pas/pas de réponse _____

4.10 Pourquoi votre entreprise n'a-t-elle pas été en mesure d'appliquer des techniques et des technologies améliorées suite aux formations reçues? *Réponses multiples*

Je n'ai rien appris de nouveau _____
Je n'ai rien appris de pertinent pour mon entreprise. _____
Je ne voulais pas changer la façon dont je dirigeais mon entreprise. _____
Je n'ai pas eu l'occasion d'appliquer les concepts appris. _____
Autre (précisez): _____ _____

4.11 Au cours de la dernière année, votre entreprise a-t-elle été en mesure d'appliquer des pratiques de gestion d'entreprise améliorées grâce à la mise en œuvre de concepts provenant des formations?

Oui _____ Aller à 4.12
Non _____ Allez à 4.14
Ne sait pas/pas de réponse _____ Allez à 4.15

4.12 Pouvez-vous donner jusqu'à trois exemples de pratiques de gestion d'entreprise améliorées appliquées suite aux formations reçues?

1 _____
2 _____
3 _____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

4.13 Dans quelle mesure les améliorations qui ont résulté de ces pratiques de gestion d'entreprise améliorées suite aux formations sont durables ou pas, 1 étant très peu durables et 7 étant très durables?

1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
Ne sait pas/pas de réponse _____

4.14 Pourquoi votre entreprise n'a-t-elle pas été en mesure d'appliquer des pratiques de gestion d'entreprise améliorées suite aux formations reçues? *Réponses multiples*

Je n'ai rien appris de nouveau _____
Je n'ai rien appris de pertinent pour mon entreprise. _____
Je ne voulais pas changer la façon dont je dirigeais mon entreprise. _____
Je n'ai pas eu l'occasion d'appliquer les concepts appris. _____
Autre (précisez): _____ _____

Assistance technique

4.15 Est-ce que vous ou d'autres individus de votre entreprise ont reçu une assistance technique du projet BeninCajù depuis 2016?

Oui _____ Aller à 4.16
Non _____ Allez à 4.20
Ne sait pas/pas de réponse _____ Allez à 4.20

4.16 Combien de sessions d'assistance technique avez-vous ou d'autres personnes dans votre entreprise ont reçu du projet BeninCajù depuis 2016?

_____

4.17 Parmi les sessions d'assistance technique que BeninCajù a dispensées à votre entreprise, quelles sont les trois que vous avez trouvées les plus efficaces y pourquoi? *Réponse ouverte.*

1 _____
2 _____
3 _____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

4.17 Parmi les sessions d'assistance technique que BeninCajù a dispensées à votre entreprise, quelles sont les trois que vous avez trouvées les moins efficaces y pourquoi? *Réponse ouverte*.

1 _____
2 _____
3 _____

4.18 Comment évalueriez-vous la pertinence générale de l'assistance technique dispensée, 1 étant très peu pertinente et 7 étant très pertinente?

1	_____
2	_____
3	_____
4	_____
5	_____
6	_____
7	_____
Ne sait pas/pas de réponse	_____

4.19 Comment évalueriez-vous l'efficacité générale de l'assistance technique dispensée, 1 étant très peu efficace et 7 étant très efficace?

1	_____
2	_____
3	_____
4	_____
5	_____
6	_____
7	_____
Ne sait pas/pas de réponse	_____

4.20 Votre entreprise utilise-t-elle activement des plans d'affaires ou de marketing?

Oui	_____	Aller à 4.21
Non	_____	Allez à 4.24
Ne sait pas/pas de réponse	_____	Allez à 4.26

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

4.21 Avez-vous tenté d'accomplir au moins une des actions stratégiques décrites dans ces plans au cours des six mois précédents?

Oui	_____	Aller à 4.21
Non	_____	Allez à 4.22
Ne sait pas/pas de réponse	_____	Allez à 4.22

4.22 Veuillez décrire l'une de ces actions stratégiques.

_____

4.23 Pouvez-vous nous dire comment vous pensez que les plans d'affaires ou de marketing peuvent être améliorés?

_____

4.24 Quelle est la principale raison pour laquelle vous n'utilisez pas activement les plans d'affaires ou de marketing?

Ceux-ci n'ont pas encore été développés.	_____
Les plans d'affaires ou de marketing n'étaient pas adéquats pour mon entreprise	_____
Je ne me sens pas à l'aise de les utiliser.	_____
Autre (précisez): _____	_____
Ne sait pas/pas de réponse	_____

4.25 Pouvez-vous nous dire comment vous pensez que les plans d'affaires ou de marketing peuvent être améliorés?

_____

4.26 Participez-vous actuellement à des programmes de formation des agriculteurs?

Oui	_____	Aller à 4.27
Non	_____	Aller à 5.1
Ne sait pas/pas de réponse	_____	Aller à 5.1

4.27 Si oui, lesquels?

_____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

4.28 Avez-vous obtenu la certification AFI (l'Association des industries alimentaires)?

Oui	_____
Non	_____
Ne sait pas/pas de réponse	_____

4.29 Avez-vous obtenu la certification HACCP (analyse des risques et maîtrise des points critiques)?

Oui	_____
Non	_____
Ne sait pas/pas de réponse	_____

4.30 Avez-vous obtenu, ou êtes-vous en cours d'obtenir d'autre(s) certifications?

Oui	Aller à 4.30a
Non	Aller à 5.1
Ne sait pas/pas de réponse	Aller à 5.1

4.30a Quelles sont ces autres certifications?

_____

5. DÉVELOPPEMENT DES MARCHÉS

5.1 Transformez-vous pour un marché local et/ou international?

Local	_____
International	_____
Les deux	_____
Ne sait pas/pas de réponse	_____

5.2 Quel est le pourcentage de votre production qui est transformée pour le marché local?

_____

5.3 Qui sont vos principaux acheteurs pour le marché local (nommez ceux pour la dernière année)?

_____

5.4 Quel est le pourcentage de votre production qui est transformée pour le marché international?

_____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

5.5 Qui sont vos principaux acheteurs pour le marché international?

Exportateurs	_____
Acheteurs directs ; distributeurs ou détaillants *(par exemple, Walmart)*	_____
Les deux (égal)	_____
Ne sait pas/pas de réponse	_____

5.6 Quels sont vos principaux marchés d'exportation? (p. ex., Pays/Région) (nommez ceux de la dernière année)

_____

5.7 Est-ce que le programme BeninCajù (TechnoServe) a facilité d'importantes relations directes d'acheteur à transformateur pour vous?

Oui	_____	Allez à 5.8
Non	_____	Allez à 5.9
Ne sait pas/pas de réponse	_____	Allez à 5.9

5.8 Pouvez-vous les nommer? (Pays/Société)

_____

5.9 Êtes-vous satisfait de ces pourcentages et montants pour le marché local et le marché international? Utilisez l'échelle de 1 (très insatisfait) à 5 (très satisfait).

1	_____	Allez à 5.11
2	_____	Allez à 5.11
3	_____	Allez à 5.11
4	_____	Allez à 5.11
5	_____	Allez à 5.10
Ne sait pas/pas de réponse	_____	Allez à 5.13

5.10 Quelle est la principale raison pour laquelle vous aimeriez que votre entreprise reste au statu quo (p. ex. pas de changement nécessaire)?

Je suis satisfait avec les profits de mon entreprise.	_____
Il n'y a de possibilités pour une croissance future.	_____
J'aimerais me concentrer sur d'autres affaires.	_____
Autre (spécifiez): _____	_____
Ne sait pas/pas de réponse	_____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

5.11 Qu'aimeriez-vous changer?

Augmenter le marché local _____
Augmenter le marché international _____
Augmenter les deux marchés _____
Autre (spécifiez): _____ _____
Ne sait pas/pas de réponse _____

5.12 Qu'est-ce qui vous empêche d'atteindre ces objectifs? *Réponses multiples*

_____
Absence de certification de l'Association des industries alimentaires (AFI) _____
Absence de certification HACCP (analyse des risques et maîtrise des points critiques). _____
Absence de certification (autre) _____
Manque de financement _____
Approvisionnement insuffisant en matières premières _____
Capacité de production insuffisante _____
Main-d'œuvre inadéquate _____
Manque de soutien de la politique gouvernementale _____
Coût de production élevé _____
Insuffisance de l'approvisionnement en énergie (électricité) _____
Vendre à bas prix aux exportateurs _____
Autre (spécifiez): _____ _____
Ne sait pas/pas de réponse _____

5.13 Quelles sont vos sources crédibles d'information sur le marché? *Réponses multiples*

Internet _____
Cashew info _____
Cashew week _____
Nkalo _____
Agence béninoise de promotion des échanges commerciaux (ABePEC/APIEx) _____
Autre (spécifiez): _____ _____
Ne sait pas/pas de réponse _____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

5.14 Pensez-vous que l'information sur le marché est devenue plus facilement accessible et est davantage mise à jour (en temps réel) depuis le début du projet BeninCajù?

Oui	_____	Allez à 5.15
Plutôt	_____	Allez à 5.15
Non	_____	Aller à 5.16
Ne sait pas/pas de réponse	_____	Aller à 5.16

5.15 Cela vous a-t-il aidé à mieux négocier les prix d'achat et de vente?

Oui pour les deux	_____
Oui les achats	_____
Oui pour les ventes	_____
Non	_____
Ne sait pas/pas de réponse	_____

5.16 Avez-vous participé à des foires, conférences ou missions commerciales internationales au cours de la dernière année?

Oui	_____	Allez à 5.17
Non	_____	Allez à 5.21
Ne sait pas/pas de réponse	_____	Allez à 6.1

5.17 À quels salons, conférences et missions commerciales internationales avez-vous participé au cours de la dernière année? *Réponses multiples*

Conseil National des Transformateurs de Cajou du Bénin	_____
Alliance africaine du cajou (ACA)	_____
Conférence mondiale du cajou	_____
Sietta (Initiative Cajou Afrique, iCA)	_____
Salons professionnels	_____
Autre (spécifiez): _____	_____
Ne sait pas/pas de réponse	_____

5.18 Combien de contrats d'achat ont résulté de ces événements?

_____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

5.19 Êtes-vous satisfait de ce niveau de participation?

Oui	_____
Plutôt	_____
Non	_____
Ne sait pas/pas de réponse	_____

5.20 La formation et l'assistance technique résultant du projet BeninCajù vous ont-elles aidé à améliorer vos chances de remporter des contrats d'achat lors de ces événements?

Oui, beaucoup	_____
Oui, plutôt	_____
Non	_____
Ne sait pas/pas de réponse	_____

5.21 Quelle est la principale raison pour laquelle vous n'assistez pas aux conférences ou missions commerciales internationales au cours de la dernière année?

Pas de conférences	_____
Pas le temps	_____
Pas d'argent	_____
N'a pas voulu	_____
Autre (spécifiez)	_____
Ne sait pas/pas de réponse	_____

6. VUE D'ENSEMBLE

6.1 A votre connaissance, est-ce que des partenariats public-privés nécessaires (par exemple, avec l'ABePEC/APIEX, Agence béninoise de promotion des échanges commerciaux, ou le projet d'établissement de l'Association nationale de la noix de cajou du Ministère de l'Industrie, du Commerce et des Petites et Moyennes Entreprises avec les principales parties prenantes du secteur privé) ont été établis à la suite du projet BeninCajù?

_____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

6.2 Dans quelle mesure les réformes institutionnelles dans le secteur agricole (Agence territoriale de développement agricole, Direction départementale de l'agriculture, taxes sur les exportations de noix de cajou) affectent-elles votre entreprise?

Pas affecté du tout _____
Quelque peu, il est plus difficile pour mon entreprise de faire des profits. _____
En effet, il est très difficile pour mon entreprise de faire des profits. _____
Autre (spécifiez): _____ _____
Ne sait pas/pas de réponse _____

6.3 Votre entreprise reçoit-elle un soutien (p. ex. formation, financement) d'autres groupes (p. ex. ONG, gouvernement)?

Aucun autre soutien financier obtenu _____
Gouvernement _____
ONG/autres projets (préciser) _____
Autre (spécifiez): _____ _____
Ne sait pas/pas de réponse _____

6.4 Quelle est l'activité de BeninCajù qui a le plus amélioré votre entreprise et comment?

_____

6.5 Quelle est l'activité de BeninCajù qui a le moins amélioré votre entreprise et pourquoi?

_____

6.6 Quelle formation/service le programme BeninCajù pourrait-il fournir dans le futur qui profiterait le plus à votre entreprise?

_____

6.7 Quel impact le BeninCajù a-t-il eu sur votre entreprise, 1 étant un impact très faible et 7 un impact très important?

1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
Ne sait pas/pas de réponse _____

APPENDIX 5 – PROCESSOR SURVEY (CONTINUED)

7. FIN

7.1 En tant que répondant, vous pouvez nous fournir des commentaires supplémentaires (par exemple, problèmes, clarifications, commentaires).

Merci beaucoup d'avoir pris le temps de remplir ce sondage.

8. FIN DU QUESTIONNAIRE

8.1 Commentaires de l'énumérateur:

APPENDIX 6 – KEY INFORMANT INTERVIEWS WITH PROCESSORS

Nom de l'organisation: _____

Type d'organisation: _____

Rôle/poste dans l'organisation: _____

Durée du temps passé à ce poste: _____

Homme/femme: _____

Village/Ville/Ville: _____

Facilitateur: Avant de commencer l'entrevue, reconfirmer le consentement du répondant. Lisez le contenu du formulaire de consentement et demandez-lui s'il accepte ou non d'être interviewé. Vous, le consultant, mènerez cette ICI après l'enquête sur les processeurs, également facilitée par vous. Veuillez utiliser ces questions comme questions d'approfondissement pour obtenir plus d'information sur des aspects particuliers de l'enquête auprès des transformateurs. Il y a un grand chevauchement entre le sondage et ce texte, alors ne pensez pas que vous avez besoin de poser toutes les questions ci-dessous.

Introduction

Bonjour. Merci d'avoir accepté de participer à cet entretien. Je m'appelle _____ et je suis ici au nom d'Advisem, une firme de consultants engagée par Technoserve pour effectuer l'évaluation à mi-parcours du projet Bénin-Cajù. L'évaluation à mi-parcours se veut un outil de gestion interne permettant d'évaluer l'avancement du projet à ce jour et d'identifier les corrections de parcours nécessaires, de guider la gestion du projet pour atteindre ses objectifs et assurer la meilleure utilisation des ressources du projet. Cet entretien avec vous a été demandé parce que votre point de vue est important. Je sais que vous êtes très occupé et nous apprécions votre temps. Nous comprenons que nous vous demanderons parfois des informations particulières concernant vos opérations commerciales et nous protégeons ces informations. Ces informations sont très importantes pour nous permettre de comprendre l'avancement du projet, et nous apprécions votre participation.

Cet entretien durera environ 1 heure.

Pertinence (faisons-nous ce qu'il faut faire avec les bonnes personnes au bon endroit?

1) Quels sont les principaux défis que doivent relever les transformateurs dans la transformation des noix de cajou et des produits dérivés?

2) Comment le programme BeninCajù a-t-il travaillé avec vous pour relever ces défis?

3) Dans quelle mesure le programme répond-il aux besoins des transformateurs? Dans l'affirmative, comment réagit-il? Si ce n'est pas beaucoup, comment pourrait-il être plus réactif?

4) Pouvez-vous nous en dire plus sur les interventions du projet, et lesquelles étaient les plus importantes pour vous, et lesquelles sont les moins importantes?

APPENDIX 6 – KEY INFORMANT INTERVIEWS WITH PROCESSORS (CONTINUED)

Efficacité (atteignons-nous les résultats escomptés?)

5) Comment le programme a-t-il affecté la qualité et la valeur des produits transformés à base de noix de cajou et des produits dérivés?

6) Comment estimez-vous que votre processus de production a changé depuis votre participation au projet? Quel a été l'impact du projet sur votre processus de production? Veuillez décrire

7) Avez-vous changé vos pratiques de gestion financière depuis le début du projet?

8) Avez-vous reçu des prêts d'institutions financières liées à ce projet? Quel a été l'impact de ces prêts sur les investissements réalisés dans votre usine de transformation?

9) Depuis le début du projet, pensez-vous qu'il est devenu plus facile ou plus compliqué d'obtenir un prêt d'une institution financière?

10) Avez-vous investi ou reçu des investissements dans l'infrastructure ou l'innovation technologique dans vos opérations de transformation dans le cadre du projet? Comment cela s'est-il produit? Veuillez décrire.

11) Comment pensez-vous que le projet a eu un impact sur votre accès aux marchés (pour acheter et vendre) des produits agricoles? Le projet a-t-il eu un impact sur la façon dont les transactions sont effectuées? Si oui, comment?

12) Le projet a-t-il permis d'explorer de nouveaux marchés ou de nouveaux produits (marchés existants) et dans quelle mesure cela a-t-il été utile pour accroître les revenus?

13) Les nouveaux marchés ont-ils apporté de nouvelles ventes? Comment ces transactions ont-elles eu lieu? Pouvez-vous nous en dire plus sur les étapes de la rencontre avec les nouveaux marchés et partenaires à la réalisation d'une vente/transaction?

14) Avez-vous vu une croissance des ventes, en termes de quantité et de prix, depuis votre participation au projet?

15) Le projet a-t-il eu un impact positif ou négatif sur vos profits? Si oui, comment?

16) Quels autres facteurs externes au projet ont contribué positivement ou négativement à la mise en œuvre des activités du projet dans votre domaine?

Efficacité (atteignons-nous les résultats escomptés?)

17) Quels sont les obstacles à la participation des femmes dans votre main-d'œuvre? Que peut-on faire pour éliminer ces obstacles?

18) Y a-t-il plus d'hommes que de femmes productrices? Achetez-vous des produits de producteurs féminins? Comment le projet peut-il augmenter le nombre de productrices?

Durabilité (est-ce que ça va durer après l'achèvement du programme?)

APPENDIX 6 – KEY INFORMANT INTERVIEWS WITH PROCESSORS (CONTINUED)

19) Quels avantages du projet se poursuivront-t-ils une fois le projet terminé?

20) En tant que transformateur, pensez-vous que ce que vous avez appris avec le projet continuera d'avoir un impact sur votre travail, en termes de capacité financière et technique et de vision stratégique? Continuerez-vous à utiliser ce que vous avez appris dans le cadre du projet? Si oui, pourquoi, sinon pourquoi?

21) Parmi les activités du projet, quelles sont celles qui, selon vous, pourraient être reproduites? Quelles activités auraient pu être réalisées autrement pour accroître les résultats?

22) Quels sont les plus grands risques pour la poursuite des bénéfices générés par BeninCajù?

Impact (quels sont les changements les plus importants pour nos bénéficiaires et nos partenaires clés?

23) Quels sont les impacts les plus importants du projet pour vous, vos employés et les producteurs en termes de qualité de vie, d'amélioration des moyens de subsistance, de capacité à relever les défis, etc.?

24) Y a-t-il des résultats positifs ou négatifs inattendus du projet? Veuillez décrire

Leçons apprises (que devrions-nous retenir pour un programme futur?)

25) Quelles sont les principales leçons que vous avez tirées de la mise en œuvre du projet?

26) Quelles recommandations donneriez-vous pour améliorer le projet?

APPENDIX 7 – KEY INFORMANT INTERVIEWS WITH INPUT SUPPLIER/NURSERY MANAGERS

Nom de l'organisation: _____

Type d'organisation: _____

Rôle/poste dans l'organisation: _____

Durée du temps passé à ce poste: _____

Homme/femme: _____

Village/Ville/Ville: _____

Heure au début de l'entretien: _____

Heure à la fin de l'entretien: _____

Facilitateur: Avant de commencer l'entrevue, reconfirmer le consentement du répondant. Lisez le contenu du formulaire de consentement et demandez-lui s'il accepte ou non d'être interviewé.

Introduction

Bonjour. Merci d'avoir accepté de participer à cet entretien. Je m'appelle _____ et je suis ici au nom d'Advisem, une firme de consultants engagée par Technoserve pour effectuer l'évaluation à mi-parcours du projet Bénin-Cajú. L'évaluation à mi-parcours se veut un outil de gestion interne permettant d'évaluer l'avancement du projet à ce jour et d'identifier les corrections de parcours nécessaires, de guider la gestion du projet pour atteindre ses objectifs et assurer la meilleure utilisation des ressources du projet. Cet entretien avec vous a été demandé parce que votre point de vue est important. Je sais que vous êtes très occupé et nous apprécions votre temps. Nous comprenons que nous vous demanderons parfois des informations particulières concernant vos opérations commerciales et nous protégeons ces informations. Ces informations sont très importantes pour nous permettre de comprendre l'avancement du projet, et nous apprécions votre participation.

Cet entretien durera environ 1 heure.

Questions d'ouverture

1) Depuis combien de temps fournissez-vous des intrants/gestion de cette pépinière? Avez-vous commencé cette activité à cause du projet?

2) Quel a été votre rôle dans le projet BeninCajú?

3) Quels produits ou intrants fournissez-vous aux producteurs?

Pertinence (faisons-nous ce qu'il faut faire avec les bonnes personnes au bon endroit?

4) Quels sont les principaux défis auxquels sont confrontés les fournisseurs d'intrants?

APPENDIX 7 – KEY INFORMANT INTERVIEWS WITH INPUT SUPPLIER/NURSERY MANAGERS (CONTINUED)

5) Le programme répond-il aux besoins des pépiniéristes et des autres fournisseurs d'intrants? Dans l'affirmative, comment? Dans la négative, comment pourrait-il être plus réactif?

6) Quels sont les principaux défis auxquels sont confrontés les producteurs pour accéder à des intrants de qualité?

7) Comment le projet a-t-il aidé à faciliter l'accès des producteurs aux intrants (comme les semis)?

8) Qu'est-ce qui a changé pour les fournisseurs d'intrants et la fourniture de semis aux producteurs depuis le début du projet?

Efficacité (atteignons-nous les résultats escomptés?)

9) Avez-vous constaté une croissance de la demande de semis et d'intrants depuis votre participation au projet?

10) Le projet a-t-il eu une incidence positive ou négative sur la qualité et la valeur des produits et dérivés de la noix de cajou?

11) Comment pensez-vous que le projet a eu un impact sur l'accès aux marchés pour acheter et vendre des semis et des intrants? Voyez-vous un changement dans la demande de semis et d'intrants?

12) Les producteurs utilisent-ils plus ou moins d'intrants (comme les semis) vendus par les fournisseurs d'intrants et les pépiniéristes?

13) Qu'est-ce qui, à l'extérieur du projet, a contribué positivement ou négativement au projet?

14) Y a-t-il des effets involontaires du projet (positifs ou négatifs)?

Efficacité (atteignons-nous les résultats escomptés?)

15) Que fait le projet ou que peut-on faire pour améliorer la participation des femmes aux activités et aux bénéfices du projet?

Durabilité (est-ce que ça va durer après l'achèvement du programme?)

16) Des interventions du projet, lesquelles étaient les plus importantes pour vous, et lesquelles sont les moins importantes?

17) Quels avantages du projet se poursuivront après la fin du projet? En tant que responsable de pépinière/fournisseur d'intrants, pensez-vous que vous continuerez d'avoir la possibilité de fournir des intrants de la même qualité que les producteurs d'intrants?

18) Parmi les activités du projet, quelles sont celles qui, selon vous, pourraient être reproduites après la fin du projet?

APPENDIX 7 – KEY INFORMANT INTERVIEWS WITH INPUT SUPPLIER/NURSERY MANAGERS (CONTINUED)

19) Quelles activités auraient pu être réalisées autrement pour accroître les résultats?

Impact (quels sont les changements les plus importants pour nos bénéficiaires et nos partenaires clés?

20) Le projet a-t-il eu un impact positif et/ou négatif sur votre profit? Si oui, comment?

21) Quels sont les impacts les plus importants du projet pour vous et les autres bénéficiaires du projet en termes de train de vie, de moyens de subsistance, de capacité à résoudre les difficultés?

Leçons apprises et pratiques exemplaires (que devrions-nous retenir pour un programme futur?)

22) Quelles sont les principales leçons que vous avez tirées de la mise en œuvre du projet à ce jour?

23) Quelles recommandations donneriez-vous pour améliorer le projet?

APPENDIX 8 – KEY INFORMANT INTERVIEWS WITH TRAINING ORGANIZATIONS (FENAPAB, DEDRAS)

Nom de l'organisation: _____

Type d'organisation: _____

Rôle/poste dans l'organisation: _____

Durée du temps passé à ce poste: _____

Homme/femme: _____

Village/Ville/Ville: _____

Facilitateur: Avant de commencer l'entrevue, reconfirmer le consentement du répondant. Lisez le contenu du formulaire de consentement et demandez-lui s'il accepte ou non d'être interviewé.

Introduction

Bonjour. Merci d'avoir accepté de participer à ce groupe de discussion. Je m'appelle _____ et je suis ici au nom d'Advisem, une firme de consultants engagée par Technoserve pour effectuer l'évaluation à mi-parcours du projet Bénin-Cajù. L'évaluation à mi-parcours se veut un outil de gestion interne permettant d'évaluer l'avancement du projet à ce jour et d'identifier les corrections de parcours nécessaires, de guider la gestion du projet pour atteindre ses objectifs et assurer la meilleure utilisation des ressources du projet. Cet entretien avec vous a été demandé parce que votre point de vue et est important. Je sais que vous êtes très occupé et nous apprécions votre temps. Nous comprenons que nous vous demanderons parfois des informations particulières concernant vos opérations commerciales et nous protégeons ces informations. Ces informations sont très importantes pour nous permettre de comprendre l'avancement du projet, et nous apprécions votre participation.

Cet entretien durera environ 1 heure.

Pertinence (faisons-nous ce qu'il faut faire avec les bonnes personnes au bon endroit?

1) Quelle est la mission de votre organisation?

2) Quel a été le rôle de votre organisation dans le projet?

3) Quel soutien le projet a-t-il apporté à votre organisation?

4) Quels sont les principaux défis auxquels les producteurs sont confrontés?

5) Quels sont vos appuis aux producteurs? Comment sont-ils fourni?

6) Quelle est votre relation avec les groupes de producteurs? Est-ce que vous les soutenez?

APPENDIX 8 – KEY INFORMANT INTERVIEWS WITH TRAINING ORGANIZATIONS (FENAPAB, DEDRAS) (CONTINUED)

Efficacité (atteignons-nous les résultats escomptés?)

7) Quels sont les résultats de la formation que vous aviez donnée aux producteurs?

8) Quelles techniques et technologies améliorées sont les plus facilement adoptées par les producteurs? Lesquels sont les moins facilement adoptables? Pourquoi?

9) Ces techniques de production améliorées ont-elles un impact positif ou négatif sur les rendements et les revenus des producteurs?

10) Quelles sont les principales réussites de ce projet qui pourraient être reproduites? Quelles améliorations pourraient être apportées au projet pour en accroître les résultats?

11) Qu'est-ce qui a bien fonctionné et qu'est-ce qui n'a pas bien fonctionné dans la prestation de la formation aux producteurs?

12) Le projet a-t-il eu une incidence sur les compétences en affaires des producteurs (pratiques de gestion, utilisation d'un plan d'affaires ou de marketing, etc. Si oui, comment et pourquoi?

13) Les producteurs soutenus sont-ils susceptibles de rester financièrement viables au-delà de la période de soutien du projet?

14) Le projet a-t-il eu un impact sur la façon dont vous fournissez des services de formation et de vulgarisation aux producteurs de noix de cajou?

15) Quelles différences en termes de quantité, de qualité et de génération de revenus voyez-vous entre un niveau or et un niveau argent pour les formations des producteurs?

Efficacité (c.-à-d. mise en œuvre du programme et prestation des services)

16) Comment les stratégies mises en œuvre peuvent-elles améliorer la participation des femmes dans la chaîne de valeur de la noix de cajou?

17) Est-ce que vos membres subissent des changements climatiques et d'autres impacts liés aux conditions météorologiques sur la quantité et la qualité du rendement? Fournissez-vous une formation spécifique aux agriculteurs sur la façon d'atténuer l'impact des changements climatiques? Recueillez-vous de l'information sur ces impacts et, si oui, comment?

Durabilité (est-ce que ça va durer après l'achèvement du programme?)

18) Pensez-vous que les avantages du projet se poursuivront après l'achèvement des projets? Dans l'affirmative, comment ces activités seront-elles poursuivies? Si ce n'est pas le cas, comment peut-on les poursuivre?

19) Pensez-vous que les répercussions du projet sur votre organisation se poursuivront une fois que le projet aura pris fin?

APPENDIX 8 – KEY INFORMANT INTERVIEWS WITH TRAINING ORGANIZATIONS (FENAPAB, DEDRAS) (CONTINUED)

20) Quelle est la probabilité que les producteurs continuent d'utiliser des techniques et des technologies améliorées après le projet? Quels facteurs contribueront ou entraveront la durabilité de ces pratiques?

21) Quels sont les principaux risques pour la poursuite des bénéfices du projet?

22) Y a-t-il des facteurs externes qui ont influencé la capacité de votre organisation? Quel en a été l'impact et pourquoi? L'impact a-t-il été positif ou négatif?

Leçons apprises et pratiques exemplaires (que devrions-nous retenir pour un programme futur?)

23) Quels ont été les principaux enseignements tirés de votre travail avec le projet à ce jour?

24) Quelles sont les principales recommandations pour améliorer l'efficacité des formations du programme?

APPENDIX 9 – KEY INFORMANT INTERVIEWS WITH DEMONSTRATION PLOT PRODUCERS

Nom de l'organisation: _____

Type d'organisation: _____

Rôle/poste dans l'organisation: _____

Durée du temps passé à ce poste: _____

Homme/femme: _____

Village/Ville/Ville: _____

Heure au début de l'entretien: _____

Heure à la fin de l'entretien: _____

Facilitateur: Avant de commencer l'entrevue, reconfirmer le consentement du répondant. Lisez le contenu du formulaire de consentement et demandez-lui s'il accepte ou non d'être interviewé.

Introduction

Bonjour. Merci d'avoir accepté de participer à cet entretien. Je m'appelle _____ et je suis ici au nom d'Advisem, une firme de consultants engagée par Technoserve pour effectuer l'évaluation à mi-parcours du projet BéninCajú. L'évaluation à mi-parcours se veut un outil de gestion interne permettant d'évaluer l'avancement du projet à ce jour et d'identifier les corrections de parcours nécessaires, de guider la gestion du projet pour atteindre ses objectifs et assurer la meilleure utilisation des ressources du projet. Cet entretien avec vous a été demandé parce que votre point de vue est important. Je sais que vous êtes très occupé et nous apprécions votre temps. Nous comprenons que nous vous demanderons parfois des informations particulières concernant vos opérations commerciales et nous protégeons ces informations. Ces informations sont très importantes pour nous permettre de comprendre l'avancement du projet, et nous apprécions votre participation.

Cet entretien durera environ 1 heure.

Questions d'ouverture

1) Quand avez-vous commencé à travailler comme agriculteur de démonstration dans le cadre du projet?

2) Comment les agriculteurs de démonstration ont-ils été sélectionnés?

Pertinence (faisons-nous ce qu'il faut faire avec les bonnes personnes au bon endroit?

3) Quel est votre rôle dans le projet BeninCajú?

4) Quels sont les principaux défis auxquels sont confrontés les producteurs dans la production de noix de cajou?

APPENDIX 9 – KEY INFORMANT INTERVIEWS WITH DEMONSTRATION PLOT PRODUCERS (CONTINUED)

5) Comment avez-vous aidé les producteurs à relever ces défis?

Efficacité (atteignons-nous les résultats escomptés?)

6) Seriez-vous en mesure de suggérer d'autres moyens à d'enseigner aux producteurs s'agissant de meilleures techniques, en plus des parcelles de démonstration et des formations dispensées?

   - Quelle formation avez-vous reçue dans le cadre du projet? Comment évalueriez-vous sa pertinence et sa qualité?
   - Avez-vous été en mesure d'intégrer cette formation dans votre travail?

7) D'après les techniques que vous avez apprises au cours du projet et les technologies qui ont pu être mises en œuvre, lesquelles étaient les plus importantes pour vous (et pourquoi?), et lesquelles sont les moins importantes (et pourquoi?)?

8) Les producteurs utilisent-ils toutes les techniques enseignées par le projet? Quelles sont celles que les producteurs préfèrent? Quelles sont celles qu'ils ont du mal à mettre en œuvre?

9) Dans quelle mesure, le projet a-t-il affecté la qualité des terres et des ressources en eau et l'utilisation des techniques et technologies agricoles? Veuillez nous en donner des exemples.

10) Dans quelle mesure le projet a-t-il eu un impact sur la façon dont vous gérez les opérations et les finances de votre ferme? Veuillez nous en donner des exemples.

11) Avez-vous constaté un changement dans la qualité de vos produits depuis votre participation au projet? Si oui, pensez-vous que ce changement est attribuable au projet BéninCajú?

12) Depuis le début du projet, avez-vous plus ou moins d'informations sur les prix du marché?

13) Avez-vous vu un changement dans les ventes, en termes de quantité et/ou de prix, depuis votre participation au projet? Si oui, pensez-vous que ce changement est dû au projet BéninCajú?

14) Pensez-vous que le fait de travailler dans la parcelle de démonstration vous a été bénéfique par rapport à d'autres agriculteurs?

15) Avez-vous reçu des prêts d'institutions financières facilitées par ce projet? Avez-vous obtenu des prêts d'un groupe SILC? Quel a été l'impact de ces prêts sur les investissements réalisés dans vos exploitations agricoles?

16) Depuis le début du projet, pensez-vous qu'il est devenu plus facile ou plus compliqué, pour vous, d'obtenir un prêt d'une institution financière?

17) Pensez-vous que les institutions financières comprennent les besoins des producteurs de noix de cajou?

APPENDIX 9 – KEY INFORMANT INTERVIEWS WITH DEMONSTRATION PLOT PRODUCERS (CONTINUED)

18) Parmi les activités du projet, quelles sont celles qui, selon vous, pourraient être reproduites? Quelles activités auraient pu être réalisées autrement différemment pour accroître les résultats?

Efficacité (c.-à-d. mise en œuvre du programme et prestation des services)

19) Depuis le début du projet, Y a-t-il plus de producteurs ou de productrices de noix de cajou? Pourquoi cela? Comment pouvons-nous accroître la participation des femmes à la production?

20) Avez-vous vu au cours des dernières années un changement dans les conditions météorologiques? Ont-ils eu un impact positif ou négatif sur votre production?

21) Pensez-vous que le fait de travailler sur une parcelle de démonstration vous a fourni des techniques qui vous aident à atténuer les problèmes météorologiques?

Durabilité (est-ce que ça va durer après l'achèvement du programme?)

22) Quels avantages du projet se poursuivront après la fin du projet? En tant que producteur, pensez-vous que ce que vous avez appris dans le cadre du projet continuera d'avoir un impact sur votre travail, en termes de techniques agronomiques, de récolte et de manutention post-récolte, et de gestion des fermes et des plantations?

23) Continuerez-vous à utiliser ce que vous avez appris dans le cadre du projet après le projet? Si oui, pourquoi, si ce n'est pas le cas, pourquoi pas?

24) Quels sont les autres acteurs involontaires qui ont contribué positivement ou négativement aux effets du projet et

Impacts (quels sont les changements les plus importants pour les bénéficiaires et les partenaires clés?

25) Comment estimez-vous que votre production a changé depuis votre participation au projet? Et en comparaison avec d'autres agriculteurs, êtes-vous plus, moins ou aussi productif qu'eux?

26) Faites-vous plus ou moins de profit maintenant qu'avant? Et en comparaison avec d'autres agriculteurs, faites-vous plus, moins ou aussi de profit qu'eux?

27) Quels sont les impacts les plus importants du projet pour vous et les autres bénéficiaires duprojet en termes de train de vie, de moyens de subsistance, de capacité à résoudre les difficultés?

Leçons apprises et pratiques exemplaires (que devrions-nous retenir pour un programme futur?)

28) Quelles sont les principales leçons que vous pouvez tirer du projet à ce jour?

29) Quelles recommandations donneriez-vous pour améliorer le projet?

APPENDIX 10 – KEY INFORMANT INTERVIEWS WITH FINANCIAL INSTITUTIONS

Nom de l'organisation: _____

Type d'organisation: _____

Rôle/poste dans l'organisation: _____

Durée du temps passé à ce poste: _____

Homme/femme: _____

Village/Ville/Ville: _____

Heure au début de l'entretien: _____

Heure à la fin de l'entretien: _____

Facilitateur: Avant de commencer l'entrevue, reconfirmer le consentement du répondant. Lisez le contenu du formulaire de consentement et demandez-lui s'il accepte ou non d'être interviewé.

Introduction

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Cet entretien durera environ 1 heure.

Questions d'ouverture

1) Veuillez nous présenter brièvement votre institution financière.

2) Depuis combien de temps travaillez-vous avec BeninCajú?

3) Financez-vous souvent des producteurs de noix de cajou ou des transformateurs de noix de cajou?

Pertinence (faisons-nous ce qu'il faut faire avec les bonnes personnes au bon endroit?

4) Quel a été le rôle de votre institution dans le projet?

5) Quels sont les principaux facteurs qui influencent l'accès des producteurs de noix de cajou au financement? et l'accès des transformateurs de noix de cajou au financement?

APPENDIX 10 – KEY INFORMANT INTERVIEWS WITH FINANCIAL INSTITUTIONS (CONTINUED)

6) Qu'est-ce que le projet a fait en ce qui concerne la promotion de l'accès au financement pour les producteurs et les transformateurs? Dans quelle mesure le projet a-t-il eu une incidence sur l'accès des producteurs et des transformateurs au financement?

Efficacité (atteignons-nous les résultats escomptés?)

7) Le projet a-t-il permis de promouvoir efficacement l'accès des producteurs au financement?

8) Le projet a-t-il permis de promouvoir efficacement l'accès des transformateurs au financement?

9) Avez-vous une relation avec des groupes SILC ou d'autres groupes communautaires informels ou formels?

10) Quelle est la relation entre votre institution financière et les communautés internes d'épargne et de crédit (SILC) ou les groupes d'épargne?

11) Le projet a-t-il eu une incidence sur la capacité de gestion financière, l'accès à l'information sur les marchés, les ventes de groupe et les connaissances techniques des producteurs?

12) Le projet a-t-il eu une incidence sur la planification des activités, la gestion financière et la capacité de commercialisation des transformateurs?

13) Avez-vous une expertise interne sur l'industrie de la noix de cajou? Si ce n'est pas le cas, avez-vous accès à une expertise externe?

14) Êtes-vous actif dans la commercialisation de vos services auprès des acteurs de l'industrie de la noix de cajou (producteurs, transformateurs, autres)?

15) Quelles sont les principales réussites de ce projet qui pourraient être reproduites? Quelles sont les principales améliorations à apporter pour améliorer l'accès des producteurs au financement?

16) Quelles améliorations clés devraient être apportées pour améliorer l'accès au financement pour les transformateurs?

17) Dans quelle mesure le changement dans l'accès au financement a-t-il eu un impact sur les investissements dans les fermes et les usines de transformation?

18) Comment les compétences en affaires des transformateurs (pratiques de gestion, utilisation du plan d'affaires ou de marketing, etc.) ont-elles changé par rapport à ce qu'elles étaient avant le projet? Avez-vous vu des différences? Si oui, quelles étaient-elles?

19) Est-ce que cela affecte la façon dont vous accordez les prêts?

Efficacité (c.-à-d. mise en œuvre du programme et prestation des services)

20) Quelle est votre répartition actuelle des prêts aux emprunteurs et emprunteuses?

APPENDIX 10 – KEY INFORMANT INTERVIEWS WITH FINANCIAL INSTITUTIONS (CONTINUED)

21) Comment les stratégies mises en œuvre peuvent-elles améliorer la participation des femmes aux activités et aux bénéfices du projet?

22) Avez-vous vu au cours des dernières années un changement dans les conditions météorologiques? Votre institution dispose-t-elle d'un processus officiel pour en tenir compte dans vos prêts aux producteurs?

Durabilité (est-ce que ça va durer après l'achèvement du programme?)

23) Pensez-vous que les impacts du projet en matière d'accès au financement et de gestion financière se poursuivront après la fin du projet?

24) Existe-t-il un mécanisme par lequel le mécanisme de liaison financière se poursuivra après la fin du projet?

25) Connaissez-vous le Fonds d'innovation et de développement des entreprises (IEDF)? Existe-t-il un mécanisme qui pourrait soutenir le Fonds d'innovation et de développement des entreprises du Bénin-Cajú?

26) Quels sont les plus grands risques pour les bénéfices générés par BeninCajú?

27) Y a-t-il des facteurs externes qui ont influencé l'accès des producteurs au financement?

28) Y a-t-il des facteurs externes qui ont influencé l'accès des transformateurs au financement?

29) Les transformateurs soutenus par le projet sont-ils susceptibles de demeurer financièrement viables au-delà de la période de soutien du projet? Qu'est-ce qui vous fait penser ça?

Impact (quels sont les changements les plus importants pour nos bénéficiaires et nos partenaires clés?

30) Les attitudes des institutions financières ont-elles changé en raison des activités de financement des activités de soutien au BéninCajú? Cela a-t-il eu une incidence sur les taux d'intérêt (coût du capital) offerts aux producteurs et aux transformateurs? Dans l'affirmative, quel en a été l'effet?

31) Pouvez-vous donner des exemples d'expériences positives ou négatives que vous avez vécues dans le cadre de votre participation au projet?

32) Quels sont les impacts les plus importants du projet pour les producteurs en termes de qualité de vie, d'amélioration des moyens de subsistance, de résilience aux chocs, etc.

33) Et les transformateurs?

APPENDIX 10 – KEY INFORMANT INTERVIEWS WITH FINANCIAL INSTITUTIONS (CONTINUED)

Leçons apprises et pratiques exemplaires (que devrions-nous retenir pour un programme futur?)

34) Quelles sont les principales leçons du projet pour vous à ce jour?

35) Quelles sont les recommandations clés pour améliorer l'efficacité du projet?

APPENDIX 11 – KEY INFORMANT INTERVIEWS WITH PROJECT STAFF

Nom de l'organisation: _____

Type d'organisation: _____

Rôle/poste dans l'organisation: _____

Durée du temps passé à ce poste: _____

Homme/femme: _____

Village/Ville/Ville: _____

Heure au début de l'entretien: _____

Heure à la fin de l'entretien: _____

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Cet entretien durera environ 1 heure.

Pertinence (faisons-nous ce qu'il faut faire avec les bonnes personnes au bon endroit?)

1) Dans quelle mesure le programme répond-il aux besoins des participants et aux conditions locales?

2) Dans quelle mesure la stratégie et les activités du programme sont-elles alignées sur les stratégies gouvernementales et sur les buts, objectifs et stratégies de développement du gouvernement américain?

Efficacité (atteignons-nous les résultats escomptés?)

3) Dans quelle mesure les activités de programme contribuent-elles aux résultats escomptés?

4) Compte tenu des niveaux actuels de résultats (agriculteurs formés, hectares cultivés selon des techniques et des technologies améliorées, volume de noix de cajou produites, etc.? (Objectif 1)

5) Dans quelle mesure le projet est-il sur la bonne voie pour atteindre ses objectifs compte tenu des résultats actuels (vente de noyaux en volume, expansion des marchés des transformateurs, formation de politiques et de règlements, application de nouvelles technologies ou pratiques de gestion, etc.? (Objectif 2)

APPENDIX 11 – KEY INFORMANT INTERVIEWS WITH PROJECT STAFF (CONTINUED)

6) Comment le projet peut-il mieux mesurer les revenus générés par la production de noix de cajou? (Objectif 1)

7) Quels facteurs internes et externes ont influé sur la capacité du projet d'atteindre les résultats et les cibles prévus?

8) Quels succès clés pourraient être reproduits? Quelles améliorations clés devraient être apportées à la mise en œuvre du projet pour maximiser les résultats?

9) Quelles techniques et technologies améliorées sont les plus facilement adaptables par les producteurs? Lesquels sont les moins facilement adaptables? (Objectif 1)

10) Dans quelle mesure les groupes SILC et le mécanisme de liaison financière (entre les producteurs et les fournisseurs de services de crédit officiels) augmentent-ils les investissements dans les exploitations agricoles? (Objectif 1)

11) Les attitudes des institutions financières actuelles et potentielles du secteur privé ont-elles changé en raison des activités d'appui financier Bénin-Cajú? (Objectif 2)

12) Dans quelle mesure les réformes institutionnelles dans le secteur agricole (Agence territoriale de développement agricole, Direction départementale de l'agriculture, taxes sur les exportations de noix de cajou) affectent-elles la mise en œuvre et les résultats du projet? La stratégie du projet devra-t-elle s'adapter à ces réformes? (Objectif 1)

13) Combien de politiques, de règlements et/ou de procédures administratives et à quel stade d'élaboration le projet a-t-il donné lieu? À quel stade de développement et d'approbation en sont ils?

14) Comment les compétences en affaires des transformateurs (pratiques de gestion, utilisation du plan d'affaires ou de marketing, etc.) ont-elles changé par rapport aux repères établis pendant la période de référence? (Objectif 2)

15) Dans quelle mesure le projet a-t-il pu faciliter les partenariats public-privé pour le développement du secteur de la noix de cajou? (Objectif 2)

16) Compte tenu du caractère saisonnier des activités du secteur, comment le projet peut-il mieux évaluer les emplois générés par les transformateurs bénéficiaires? (Objectif 2)

Efficacité (c.-à-d. mise en œuvre du programme et prestation des services)

17) Selon vous, quelles sont les activités qui ont le plus d'impact? Et quelles sont les activités qui ont le moins d'impact?

18) Comment les stratégies mises en œuvre peuvent-elles améliorer la participation des femmes aux activités et aux bénéfices du projet?

APPENDIX 11 – KEY INFORMANT INTERVIEWS WITH PROJECT STAFF (CONTINUED)

19) Dans quelle mesure le système actuel de S&E prend-il en compte les impacts climatiques et météorologiques sur le rendement, afin de mieux mesurer l'impact du projet?

20) Dans sa conception actuelle, le système de S&E est-il capable de fournir de manière efficace et précise les informations pertinentes nécessaires pour mesurer l'avancement du projet? Quels outils et procédures pourraient être améliorés?

Durabilité (est-ce que ça va durer après l'achèvement du programme?)

21) Quelles sont les chances que les avantages du projet se maintiennent après l'achèvement du projet? Quels sont les systèmes mis en place pour assurer les bénéfices à long terme du projet en termes de:

- Les techniques agronomiques, la récolte et la manutention post-récolte, les SILC, la gestion des exploitations agricoles et des plantations?
- Groupes de producteurs et BDS – Information sur le marché, ventes groupées, disponibilité d'intrants de haute qualité?
- Accès au financement – Prêts institutionnels et gestion financière?
- Processeurs – Capacité financière et technique, vision stratégique et rentabilité?

22) Quels sont les plus grands risques pour la durabilité des bénéfices générés par BeninCajù? Comment pourrait-on les atténuer?

Impact (quels sont les changements les plus importants pour nos bénéficiaires et nos partenaires clés?

23) Les changements observés sont-ils attribuables au projet? Tous les bénéficiaires visés ont-ils bénéficié des changements apportés par le projet de la même manière? Si ce n'est pas le cas, qui en a le plus bénéficié, qui en a le moins bénéficié, pourquoi?

24) Quels sont les impacts les plus importants du projet pour les bénéficiaires en termes de qualité de vie, d'amélioration des moyens de subsistance, de résilience aux chocs, etc.

Leçons apprises et pratiques exemplaires (que devrions-nous retenir pour un programme futur?)

25) Quelles sont les principales leçons que l'on peut tirer du projet à ce jour? Quelles implications pour les activités de FFP ultérieures peuvent être extraites de ces leçons apprises?

26) Quelles sont les principales recommandations pour améliorer l'efficacité du programme?

APPENDIX 12 – KEY INFORMANT INTERVIEWS WITH PUBLIC STATE MARKET ACTORS

Nom de l'organisation: _____

Type d'organisation: _____

Rôle/poste dans l'organisation: _____

Durée du temps passé à ce poste: _____

Homme/femme: _____

Village/Ville/Ville: _____

Heure au début de l'entretien: _____

Heure à la fin de l'entretien: _____

Facilitateur: Avant de commencer l'entrevue, reconfirmer le consentement du répondant. Lisez le contenu du formulaire de consentement et demandez-lui s'il accepte ou non d'être interviewé.

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Bonjour. Merci d'avoir accepté de participer à ce groupe de discussion. Je m'appelle _____ et je suis ici au nom d'Advisem, une firme de consultants engagée par Technoserve pour effectuer l'évaluation à mi-parcours du projet Bénin-Cajù. L'évaluation à mi-parcours se veut un outil de gestion interne permettant d'évaluer l'avancement du projet à ce jour et d'identifier les corrections de parcours nécessaires, de guider la gestion du projet pour atteindre ses objectifs et assurer la meilleure utilisation des ressources du projet. Cet entretien avec vous a été demandé parce que votre point de vue est important. Je sais que vous êtes très occupé et nous apprécions votre temps. Ces informations sont très importantes pour nous permettre de comprendre l'avancement du projet, et nous apprécions votre participation.

Cet entretien durera environ 1 heure.

Pertinence (faisons-nous ce qu'il faut faire avec les bonnes personnes au bon endroit?)

1) Quelle est la mission de votre organisation?

2) Quel soutien le projet a-t-il apporté à votre organisation?

Efficacité (atteignons-nous les résultats escomptés?)

3) Quel a été l'impact de ce soutien sur votre organisation? L'impact a-t-il été positif ou négatif? Pourquoi?

4) Quelles techniques, technologies ou relations commerciales améliorées (en particulier pour les transformateurs) sont les plus facilement adoptées par les producteurs et les transformateurs? Lesquels sont les moins facilement adoptables? Pourquoi?

APPENDIX 12 – KEY INFORMANT INTERVIEWS WITH PUBLIC STATE MARKET ACTORS (CONTINUED)

5) Y a-t-il des facteurs externes qui ont influencé la capacité de votre organisation?? Quel en a été l'impact et pourquoi? L'impact a-t-il été positif ou négatif

6) Quelles sont les principales réussites de ce projet qui pourraient être reproduites? Quelles améliorations pourraient être apportées au projet pour en accroître les résultats?

7) Le projet a-t-il eu une incidence sur les compétences en affaires du producteur/transformateur/exportateur (pratiques de gestion, utilisation d'un plan d'affaires/de marketing, etc.)? Si oui, comment et pourquoi?

8) Y a-t-il des réformes institutionnelles en cours dans le secteur agricole?

9) Dans quelle mesure les réformes institutionnelles dans le secteur agricole (Agence territoriale de développement agricole, Direction départementale de l'agriculture, taxes sur les exportations de noix de cajou) influencent les producteurs/transformateurs/exportateurs de l'industrie de la noix de cajou?

10) Combien de politiques, de règlements et/ou de procédures administratives et à quel stade d'élaboration le projet a-t-il donné lieu? À quel stade de développement et d'approbation en sont ils?

11) Votre organisation a-t-elle été en mesure d'établir des liens avec les marchés internationaux (promotion du commerce) grâce à l'appui aux projets? Lesquels?

12) Des ventes de noix de cajou ont-elles été réalisées sur ces nouveaux marchés? Comment ces transactions ont-elles eu lieu? Pouvez-vous nous en dire plus sur l'évolution de la rencontre avec les partenaires jusqu'à la réalisation d'une transaction?

13) Dans quelle mesure le projet a-t-il pu faciliter les partenariats public-privé pour le développement du secteur de la noix de cajou?

Efficacité (c.-à-d. mise en œuvre du programme et prestation des services)

14) Y a-t-il eu des changements dans la réglementation agricole ou les politiques relatives au traitement après récolte et aux procédures commerciales?

15) Avez-vous observé des changements dans les conditions météorologiques au cours des dernières années? Comment suivez-vous ces changements et leur impact sur la production de noix de cajou? Et comment ces changements climatiques influencent-ils les réformes politiques en cours?

16) Comment les stratégies mises en œuvre peuvent-elles améliorer la participation des femmes dans la chaîne de valeur de la noix de cajou? L'augmentation de la participation des femmes dans la chaîne de valeur de la noix de cajou est-elle un objectif documenté du travail de votre organisation?

APPENDIX 12 – KEY INFORMANT INTERVIEWS WITH PUBLIC STATE MARKET ACTORS (CONTINUED)

Durabilité (est-ce que ça va durer après l'achèvement du programme?)

17) Pensez-vous que les répercussions du projet sur votre organisation se poursuivront une fois que le projet aura pris fin? Quels sont les plus grands risques pour la durabilité des bénéfices générés par BeninCajù?

18) Dans quelle mesure les producteurs et les transformateurs sont-ils susceptibles de continuer à utiliser des techniques et des technologies améliorées après le projet? Quels facteurs contribueront-ils ou entraveront-ils la durabilité de ces pratiques?

19) Les transformateurs/producteurs/exportateurs bénéficiant d'un soutien sont-ils susceptibles de rester financièrement viables au-delà de la période de soutien du projet?

20) Pensez-vous que les avantages du projet se poursuivront après l'achèvement des projets? Dans l'affirmative, comment ces activités seront-elles poursuivies? Si ce n'est pas le cas, comment peut-on les poursuivre?

Impact (quels sont les changements les plus importants pour nos bénéficiaires et nos partenaires clés?

21) Y a-t-il des changements dans la chaîne de valeur de la noix de cajou attribuables au projet? Tous les bénéficiaires visés ont-ils profité des changements apportés par le projet de la même manière? Si ce n'est pas le cas, qui en ont le plus bénéficié, qui en ontle moins bénéficié, pourquoi?

22) Quels sont les impacts les plus importants du projet pour les bénéficiaires en termes de qualité de vie, d'amélioration des moyens de subsistance, de résilience aux chocs, etc.

Leçons apprises et pratiques exemplaires (que devrions-nous retenir pour un programme futur?)

23) Quels ont été les principaux enseignements tirés de votre travail avec le projet à ce jour?

24) Quelles sont les principales recommandations pour améliorer l'efficacité du programme?

APPENDIX 13 – FOCUS GROUP DISCUSSIONS WITH CASHEW PRODUCERS

Village/Ville:			
Date:			
Heure au début de la discussion:			
Heure à la fin de la discussion:			
Nombre de participants:	Hommes	Femmes	Total
(Il devrait y avoir un maximum de 14 participants pour que la discussion de groupe soit gérable)			

Facilitateur: En tant qu'animateur, vous devriez encourager toutes les personnes présentes à partager leurs points de vue et leurs idées. Veuillez également passer en revue toutes les notes avec le preneur de notes à la fin du GD afin de vous assurer que les principaux points soulevés par les participants du GD au cours de la discussion ont été saisis. Avant de commencer le GD, vous devez obtenir le consentement verbal de chacun des participants à participer à cette discussion. Lisez le contenu du formulaire de consentement et demandez à chaque participant s'il accepte ou non de participer au GD.

Preneur de notes: Le preneur de notes doit noter, sans porter de jugement, tout ce qui est mentionné par les participants à la discussion. Veuillez noter ces renseignements dans le modèle de prise de notes qui vous a été fourni.

Introduction

Bonjour. Merci d'avoir accepté de participer à ce groupe de discussion. Je m'appelle _____ et je suis ici au nom d'Advisem, une firme de consultants engagée par Technoserve pour effectuer l'évaluation à mi-parcours du projet Bénin-Cajù. L'évaluation à mi-parcours se veut un outil de gestion interne permettant d'évaluer l'avancement du projet à ce jour et d'identifier les éléments qui méritent d'être corrigés pour la deuxième moitié du projet. Le collègue qui m'accompagne est Hussein Faruque Aly, consultant chez Advisem.

Cet entretien avec vous a été demandé parce que votre point de vue est important. Je sais que vous êtes très occupés et nous apprécions le temps que vous nous consacriez. Nous sommes ici aujourd'hui pour parler de vos perceptions sur le projet et de vos recommandations. Nous vous garantissons que ces informations ne seront jamais divulguées à quiconque. Ces informations sont très importantes pour nous permettre de comprendre l'avancement du projet.

Règles de base

N'hésitez pas à parler franchement. Il n'y a pas de bonnes ou de mauvaises réponses. Veuillez respecter les opinions des autres — nous n'avons pas besoin d'être tous d'accord sur tous les points; nous sommes intéressés à entendre des points de vue différents. Vous n'avez pas besoin de parler dans un ordre particulier. Si vous avez quelque chose à dire, faites-le, mais parlez un à la fois. Vous êtes nombreux dans le groupe et il est important que j'obtienne le point de vue de chacun d'entre vous, alors donnez à tous une chance égale de participer à la discussion s'il-vous-plaît.

Ce groupe de discussion durera tout au plus une heure et demie.

APPENDIX 13 – FOCUS GROUP DISCUSSIONS WITH CASHEW PRODUCERS (CONTINUED)

Questions d'ouverture

1) Depuis combien de temps êtes-vous producteurs de noix de cajou?

2) Combien d'heures/jours de formation avez-vous reçu du projet?

Pertinence (faisons-nous ce qu'il faut faire avec les bonnes personnes au bon endroit?)

3) Quels sont les principaux défis auxquels sont confrontés les producteurs dans la production de noix de cajou?

4) De quelle manière le projet BeninCajù travaille-t-il avec les producteurs de noix de cajou?

5) Existe-t-il d'autres organisations (gouvernement, ONG, autres) qui vous apportent un soutien en dehors du projet BeninCajù?

6) Comment le projet BéninCajù vous a-t-il aidé à relever les défis mentionnés ci-dessus? Y a-t-il des défis pour lesquels le projet BéninCajù ne vous appuie pas à la hauteur de vos attentes? Si oui, qu'est-ce qui pourrait être fait autrement?

Efficacité (atteignons-nous les résultats escomptés?)

7) Quelles sont les formations dont vous avez bénéficié dans le cadre du projet? Que pensez-vous de la pertinence et de la qualité de ces formations?

8) Quelle est la différence entre les différents types de paquets de formation (or/argent)? Pensez-vous qu'il y a une différence pour les producteurs entre l'impact d'un forfait argent et or sur la qualité de la formation?

9) Avez-vous été en mesure de mettre en œuvre ce que vous avez appris pendant les formations dans votre travail de producteur de noix de cajou?

10) A partir des techniques que vous avez apprises au cours du projet et des technologies qui ont pu être mises en œuvre, lesquelles étaient les plus importantes pour vous (et pourquoi), et lesquelles sont les moins importantes (et pourquoi)?

11) Dans quelle mesure est-il plus facile de vendre votre production maintenant, en comparaison avec la situation avant le début du projet? Pourquoi est-ce ainsi selon vous?

12) Depuis que le projet a commencé, recevez-vous des informations sur les prix du marché? Si oui, est-ce que cela a changé à cause du projet ou non? Recevez-vous d'autres informations qui vous aident à vendre vos produits?

13) Avez-vous constaté un changement dans la qualité de vos produits depuis votre participation au projet? Si oui, pensez-vous que ce changement est attribuable au projet BeninCajù?

APPENDIX 13 – FOCUS GROUP DISCUSSIONS WITH CASHEW PRODUCERS (CONTINUED)

14) Avez-vous commencé à vendre des pommes de cajou à la suite du projet?

15) Avez-vous constaté un changement dans les ventes de produits du cajou, en termes de quantité et/ou de prix, depuis votre participation au projet? Si oui, pensez-vous que ce changement est attribuable au projet BeninCajù?

16) Depuis le début du projet, avez-vous reçu des prêts d'institutions financières? Pensez-vous qu'il est plus facile ou pas d'obtenir un prêt d'une institution financière grâce à l'appui du projet? Si plus facile, qu'est-ce qui fait la différence?

17) Avez-vous adhéré à un SILC? Avez-vous obtenu des prêts d'un groupe SILC? Si oui, quel a été l'impact de ces prêts sur les investissements réalisés dans vos exploitations agricoles?

18) Pensez-vous que les institutions financières comprennent les besoins des producteurs de noix de cajou?

Efficacité (c.-à-d. mise en œuvre du programme et prestation des services)

19) Y a-t-il plus de producteurs (hommes) ou de productrices (femmes) de noix de cajou? Pourquoi est-ce comme cela? Qu'est-ce qui pourrait être fait pour appuyer plus de femmes à se lancer dans la production de noix de cajou?

20) Avez-vous vu au cours des dernières années un changement dans les conditions météorologiques? Ont-ils eu un impact positif ou négatif sur votre production? Comment partagez-vous cette information sur l'impact des différents régimes météorologiques sur le projet? Le projet vous a-t-il aidé à faire face à l'impact de ces changements météorologiques? Si oui, comment?

Durabilité (est-ce que ça va durer après l'achèvement du programme?)

21) Parmi les activités du projet, quelles sont celles qui, selon vous, pourraient être reproduites dans le futur?

22) Quelles activités auraient pu être réalisées différemment pour accroître les résultats?

23) Une fois le projet terminé, pensez-vous que les bénéfices obtenus pourront durer? Quels bénéfices spécifiquement pourront durer, et quels acquis pourraient ne pas durer selon vous?

24) Quel type de soutien les producteurs continueront-ils de recevoir après la fin du projet? Qui, selon vous, fournira ce soutien?

25) En tant que producteur, pensez-vous que ce que vous avez appris dans le cadre du projet continuera d'avoir un impact sur votre travail, en termes de techniques agricoles, de récolte et de manutention post-récolte, et de gestion des fermes et des plantations? Pourquoi?

26) Quels sont les risques les plus importants qui pourraient affecter la durabilité des acquis après la fin du projet?

APPENDIX 13 – FOCUS GROUP DISCUSSIONS WITH CASHEW PRODUCERS (CONTINUED)

27) Quels autres facteurs externes au projet pourraient contribuer positivement ou négativement à la durabilité du projet?

Impacts (quels sont les changements les plus importants pour nos bénéficiaires et nos partenaires clés?

28) Quels sont les impacts les plus importants du projet pour vous et les autres bénéficiaires du projet en termes de qualité de vie, de vos moyens de subsistance, de votre capacité à résoudre les difficultés?

Leçons apprises et pratiques exemplaires

29) Quelles sont les principales leçons que vous avez tirées de la mise en œuvre du projet à ce jour?

30) Quelles recommandations donneriez-vous pour améliorer le projet?

31) Merci Beaucoup. Avez-vous de Questions pour nous?

APPENDIX 14 – FOCUS GROUP DISCUSSIONS WITH MEMBERS OF PRODUCER GROUPS

Village/Ville:			
Date:			
Heure au début de la discussion:			
Heure à la fin de la discussion:			
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Cet entretien avec vous a été demandé parce que votre point de vue est important. Je sais que vous êtes très occupé et nous apprécions votre temps. Nous sommes ici aujourd'hui pour parler de vos perceptions du projet et de vos recommandations. Nous comprenons que nous vous demanderons parfois des informations particulières concernant vos opérations commerciales et nous protégeons ces informations. Ces informations sont très importantes pour nous permettre de comprendre l'avancement du projet, et nous apprécions votre participation.

Règles de base

N'hésitez pas à parler ouvertement. Il n'y a pas de bonnes ou de mauvaises réponses. Veuillez respecter les opinions des autres — nous n'avons pas besoin d'être d'accord; nous sommes intéressés à entendre des points de vue différents. Vous n'avez pas besoin de parler dans un ordre particulier. Si vous avez quelque chose à dire, faites-le, mais parlez un à la fois. Vous êtes nombreux dans le groupe et il est

APPENDIX 14 – FOCUS GROUP DISCUSSIONS WITH MEMBERS OF PRODUCER GROUPS (CONTINUED)

important que j'obtienne le point de vue de chacun d'entre vous, alors donnez à tous une chance égale de participer à la discussion.

Ce groupe de discussion durera moins d'une heure et demie.

Questions d'ouverture

1) Quand ce groupement a-t-il été formé?

2) Êtes-vous un CVPA formel ou informel?

3) Combien de membres avez-vous? Connaissez-vous le nombre de membres masculins et féminins?

Pertinence (faisons-nous ce qu'il faut faire avec les bonnes personnes au bon endroit?)

4) Quels sont les principaux défis des producteurs de noix de cajou?

5) Quel est le rôle des groupements de producteurs dans le projet?

6) Comment les groupements de producteurs travaillent-ils avec leurs membres?

7) Quels sont les principaux défis que doivent relever les membres des groupements de producteurs?

8) Comment le projet BeninCajù a-t-il travaillé avec les groupements de producteurs pour relever ces défis?

Efficacité (atteignons-nous les résultats escomptés?)

9) Quel est le rôle des prestataires de formation dans ce projet (FENAPAB/DEDRAS/CRADIB)? Comment les prestataires de formation travaillent-ils avec les groupements de producteurs?

10) Le programme a-t-il eu une incidence sur la capacité des groupements de producteurs? Comment ça se fait? Veuillez décrire

11) Les producteurs appliquent-ils toutes les nouvelles techniques et technologies qui leur sont enseignées? Si non, lesquelles utilisent-ils le plus? Quelles sont celles que les producteurs n'utilisent pas?

12) La formation a-t-elle amélioré la qualité et le rendement (quantité) des producteurs de noix de cajou produites?

13) Êtes-vous satisfait du soutien que vous recevez des prestataires de formation et du projet? Qu'est-ce que vous appréciez le plus dans ce soutien? Selon vous, qu'est-ce qui pourrait être fait autrement?

14) Comment les groupements de producteurs pourraient-ils mieux fonctionner? Quels services pourraient-ils être offerts autrement ou quels autres services pourraient-ils être offerts?

APPENDIX 14 – FOCUS GROUP DISCUSSIONS WITH MEMBERS OF PRODUCER GROUPS (CONTINUED)

15) Quels facteurs involontaires peuvent avoir contribué positivement ou négativement à la capacité des groupements de producteurs?

16) Parmi les activités du projet, quelles sont celles qui, selon vous, pourraient être reproduites? Quelles activités auraient pu être réalisées différemment pour accroître les résultats?

17) L'appartenance à un groupement de producteurs a-t-elle été utile en ce qui concerne votre production, l'information sur le marché et la connaissance des prix du marché, les ventes du groupe, la disponibilité d'intrants de haute qualité depuis votre participation au projet?

18) Le nombre de membres du groupement a-t-il augmenté ou diminué depuis le début du projet? Comment le projet a-t-il affecté l'appartenance au groupement?

19) Votre groupement a-t-il développé des relations avec les SILC ou les institutions financières? Avez-vous reçu des prêts en tant que groupement ou en tant qu'agriculteurs individuels? Si oui, à quelles fins avez-vous utilisé ces prêts?

Efficacité (c-à-d. mise en œuvre du programme et prestation des services)

20) Y a-t-il plus de producteurs ou de productrices dans votre groupe? Pourquoi cela?

21) Comment pouvons-nous accroître la participation des femmes dans les groupements de producteurs?

22) Avez-vous vu au cours des dernières années un changement dans les conditions météorologiques? Ont-ils eu un impact positif ou négatif sur votre production? Comment partagez-vous cette information sur l'impact des différents régimes météorologiques sur le projet?

Durabilité (est-ce que ça va durer après l'achèvement du programme?)

23) Quels avantages du projet se poursuivront-ils après la fin du projet? En tant que membre d'un groupement de producteurs, pensez-vous que ce que vous avez appris avec le projet continuera d'avoir un impact sur la capacité des groupements de producteurs?

24) Le groupement offrira-t-il de l'information sur le marché ou facilitera-t-il les liens après la fin du projet? Quels sont les mécanismes en place pour s'assurer que cela continuera?

25) Selon vous, quels sont les risques les plus importants pour la poursuite des bénéfices générés par le projet?

Impact (quels sont les changements les plus importants pour nos bénéficiaires et nos partenaires clés?)

26) Quels sont les impacts les plus importants du projet pour vous et les autres bénéficiaires du projet en termes de qualité de vie, de moyens d'existence, de capacité à résoudre les difficultés?

APPENDIX 14 – FOCUS GROUP DISCUSSIONS WITH MEMBERS OF PRODUCER GROUPS (CONTINUED)

27) Y a-t-il des effets involontaires du projet (positifs ou négatifs)?

Leçons apprises et pratiques exemplaires (que devrions-nous retenir pour un programme futur?)

28) Quelles sont les principales leçons que l'on peut tirer du projet à ce jour?

29) Quelles recommandations donneriez-vous pour améliorer le projet?

APPENDIX 15 – FOCUS GROUP DISCUSSIONS WITH MEMBERS OF SILC GROUPS

Village/Ville:			
Date:			
Heure au début de la discussion:			
Heure à la fin de la discussion:			
Nombre de participants:	Hommes	Femmes	Total
(Il devrait y avoir un maximum de 14 participants pour que la discussion de groupe soit gérable)			

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Cet entretien avec vous a été demandé parce que votre point de vue est important. Je sais que vous êtes très occupés et nous apprécions le temps que vous nous consacriez. Nous sommes ici aujourd'hui pour parler de vos perceptions sur le projet et de vos recommandations. Nous sommes conscients que nous vous demanderons parfois des informations personnelles concernant vos opérations commerciales et nous vous garantissons que ces informations ne seront jamais divulguées à quiconque. Ces informations sont très importantes pour nous permettre de comprendre l'avancement du projet.

Règles de base

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APPENDIX 15 – FOCUS GROUP DISCUSSIONS WITH MEMBERS OF SILC GROUPS (CONTINUED)

le groupe et il est important que j'obtienne le point de vue de chacun d'entre vous, alors donnez à tous une chance égale de participer à la discussion s'il-vous-plaît.

Ce groupe de discussion durera tout au plus une heure et demie.

Questions d'ouverture

1) Quand les groupes SILC ont-ils commencé? Pouvez-vous expliquer comment les groupes commencent à travailler?

2) Comment fonctionne le groupe? Comment les décisions sont-elles prises?

Pertinence (faisons-nous ce qu'il faut faire avec les bonnes personnes au bon endroit?

3) Quel est le rôle des groupes SILC dans la production de noix de cajou?

4) Comment les groupes SILC travaillent-ils avec leurs membres?

5) Quels sont les principaux défis que doivent relever les membres producteurs de noix de cajou membres des groupes SILC?

6) Comment le projet BeninCajú a-t-il travaillé avec vous pour relever ces défis?

7) Est-ce que le programme répond-il aux besoins des groupes SILC? Si c'est le cas, comment, si ce n'est pas le cas, comment pourrait-il être plus réactif?

8) Les groupes SILC vous sont-ils utiles, en particulier dans vos activités de production de noix de cajou? Dans l'affirmative, comment, si ce n'est pas le cas, comment pourraient-ils être plus utiles?

Efficacité (atteignons-nous les résultats escomptés?)

9) Comment le programme a-t-il affecté la capacité des groupes SILC?

10) Est-ce que votre groupe SILC entretient des relations avec des institutions financières? Gardez-vous l'argent du groupe dans une institution financière? Comment cela fonctionne-t-il? Comment pourrait-il mieux fonctionner?

11) Votre groupe SILC ou vous membres on-t-il déjà emprunté de l'argent d'une institution financière?

12) Comment le groupe (ou les membres) a-t-il utilisé cet argent? Y a-t-il eu des problèmes avec l'utilisation de l'argent de l'institution financière?

13) Les membres du groupe SILC prennent-ils des prêts du groupe SILC? A quoi servent ces prêts?

14) De quelle manière les groupes SILCs ont-ils un impact sur les producteurs dans leur travail?

15) Y a-t-il beaucoup des producteurs de noix de cajou dans les groupes SILC?

APPENDIX 15 – FOCUS GROUP DISCUSSIONS WITH MEMBERS OF SILC GROUPS (CONTINUED)

16) Avez-vous déjà emprunté de l'argent pour l'utiliser spécifiquement sur votre production de noix de cajou? Si oui, pourquoi, et si non, pourquoi pas?

17) Le fait d'appartenir à un groupe SILC a-t-il été utile en ce qui concerne votre production et votre connaissance des prix du marché depuis votre participation au projet? Échangez-vous des idées ou des connaissances avec d'autres producteurs de noix de cajou qui sont membres des groupes SILC?

Durabilité (est-ce que ça va durer après l'achèvement du programme?)

18) Pensez-vous que les groupes SILC continueront après la fin du projet? Vont-ils continuer à affecter les producteurs de noix de cajou?

19) Quels autres facteurs pourraient contribué positivement ou négativement à la capacité des groupes SILC?

20) Parmi les activités du projet, quelles sont celles qui, selon vous, pourraient être reproduites? Quelles activités auraient pu être réalisées autrement pour accroître les résultats?

Impacts (quels sont les changements les plus importants pour nos bénéficiaires et nos partenaires clés?)

21) Le projet a-t-il eu un impact positif et/ou négatif sur la capacité des groupes SILC? Si oui, de quelle façon?

22) Quels sont les impacts les plus importants du projet pour vous et les autres bénéficiaires au projet en termes de qualité de vie, de moyens de subsistance, de capacité à résoudre les difficultés?

23) Le projet a-t-il généré des effets inattendus (positifs ou négatifs)?

Leçons apprises et pratiques exemplaires

24) Quelles sont les principales leçons que vous avez tirées de la mise en œuvre du projet à ce jour?

25) Quelles recommandations feriez-vous pour améliorer le projet?

APPENDIX 16 – INFORMED CONSENT

Formulaire de consentement pour participer à la discussion en groupe/Interview.

Introduction

- On vous demande de participer à cette interview/groupe de discussion dans le cadre de l'évaluation mi-parcours du Programme Food for Progress (FFPr)/BeninCajù de TechnoServe Bénin et de CRS.
- Le but de l'étude est d'obtenir votre opinion sur les changements qui ont eu lieu grâce au projet.
- En définitive, cette recherche sera présentée sous la forme d'un rapport présenté à TechnoServe et à d'autres intervenants qui souhaitent en connaître davantage sur les impacts de ce projet.

Description des procédures de l'étude

- Si vous acceptez de participer à cette étude, il vous sera demandé de partager de façon transparente les éléments suivants: votre avis sur les changements que vous avez perçus en raison du projet ou à cause d'autres facteurs; comment vous percevez les changements au sein de votre famille et de la collectivité; ou tout autre changement qui peut être attribué en tout ou en partie au projet.
- La durée du groupe de discussion est estimée entre 60 et 90 minutes;

La participation volontaire/droit de refuser ou de retirer

- La décision de participer à cette étude vous appartient. Vous pouvez refuser de prendre part à l'étude à tout moment et cela sans peur que cela affecte votre relation avec les chercheurs de cette étude ou avec CRS. Votre décision n'entraînera pas de conséquences sur les prestations de Technoserve auxquelles vous avez droit. Vous avez le droit de ne pas répondre à une question en particulier, ou à toutes les questions. Vous avez également le droit de vous retirer complètement du groupe de discussion ou entrevue à tout moment au cours du processus; en outre, vous avez le droit de demander que l'interviewer vous transmette les transcriptions des entretiens. Si vous choisissez de vous retirer de l'exercice, vos réponses ne seront pas utilisées pour l'évaluation.

Droit de poser des questions et de partager vos préoccupations quant à l'évaluation

- Vous avez le droit de poser des questions au sujet de cette évaluation à Advisem et à Technoserve avant, pendant ou après le groupe de discussion ou les entrevues. Si vous avez d'autres questions ou préoccupations au sujet de l'étude, à tout moment, n'hésitez pas à contacter _____ au (numéro de téléphone)_____, ou à l'adresse courriel: ¬¬¬¬¬¬¬¬¬¬¬¬¬¬¬¬¬-_____.

APPENDIX 17 – INSTITUTIONAL ASSESSMENT

Bonjour. Merci d'avoir accepté de participer à cette discussion de groupe de discussion/entrevue avec un informateur clé. Je m'appelle _____ et je suis ici au nom d'Advisem, une firme de consultants engagée par Technoserve pour effectuer l'évaluation à mi-parcours du projet Bénin-Cajù. L'évaluation à mi-parcours se veut un outil de gestion interne permettant d'évaluer l'avancement du projet à ce jour et d'identifier les corrections de parcours nécessaires, de guider la gestion du projet pour atteindre ses objectifs et assurer la meilleure utilisation des ressources du projet. Le collègue qui m'accompagne est un consultant d'Advisem.

Cet exercice vise à mieux comprendre le rôle de votre organisation/association dans le projet et sa capacité à remplir ce rôle. Il se compose d'une série de questions nécessitant des informations sur votre organisation, sa capacité, la perception de la qualité de son travail par les clients/bénéficiaires/intervenants, et un bref ensemble d'idées sur la façon d'améliorer votre organisation.

Il est conçu comme un bref outil permettant de mieux évaluer le travail du projet avec ses partenaires institutionnels jusqu'à présent et de formuler des recommandations sur la manière dont le projet peut soutenir ses partenaires institutionnels.

N'hésitez pas à parler ouvertement. Il n'y a pas de bonnes ou de mauvaises réponses. Nous apprécions vos opinions et nous attendons avec impatience votre participation à cet exercice.

Cet exercice durera moins de 45 minutes.

Comprendre votre organisation/association

1) Quelles sont les principales activités de votre organisation/association?

2) Quel est le rôle de votre organisation/association dans ce projet?

3) Pensez-vous que votre organisation a la capacité de remplir ces rôles de façon adéquate? (rang 1-7)

   1___2___3___3___4___5___6___7___ (1-Très faible – 7-très forte)

   Pourquoi?

4) Quelles sont les capacités que votre organisation doit avoir ou améliorer pour remplir ce rôle?

   a) ...

   b) ...

   c) ...

5) Quels sont les principaux obstacles qui empêchent votre organisation d'atteindre les capacités mentionnées?

APPENDIX 17 – INSTITUTIONAL ASSESSMENT (CONTINUED)

6) De quel soutien votre organisation a-t-elle besoin pour acquérir ces capacités?

   a) ...

   b) ...

   c) ...

7) Où pourriez-vous obtenir ce soutien? Quelle autre organisation peut le mieux vous aider à acquérir ces capacités?

8) Comment classeriez-vous la satisfaction des bénéficiaires et des intervenants à l'égard du soutien que vous offrez actuellement? (rang 1-7)

   1___2___3___3___4___5___6___7___ (1-Très faible – 7-très forte)

   Pourquoi?

9) Veuillez décrire ce sur quoi vous croyez que vos clients (ceux qui bénéficient de votre travail) sont les plus satisfaits?

   a) ...

   b) ...

   c) ...

10) Selon vous, de quoi vos clients sont-ils le moins satisfaits? Qu'est-ce que votre organisation doit améliorer le plus?

   a) ...

   b) ...

   c) ...

11) Que doit faire votre organisation pour améliorer sa capacité et accroître la satisfaction des clients à l'égard de son travail?

   a) ...

   b) ...

   c) ...

APPENDIX 18 – TREATMENT AND CONTROL VILLAGE SAMPLE SELECTION

Selection of Midterm Control Sample Villages for the Producer Household Survey

Treatment or control (T, C)	Departments	Communes	Arrondissements	Villages baseline	No.	New villages of correspondance [note]
C	BORGOU	N'DALI	N'DALI	WOBACAROU	1	WOBAKAROU
C	BORGOU	N'DALI	SIRAROU	BOKO	2	BOKO
C	BORGOU	TCHAOUROU	BETEROU	BETEROU	3	BETEROU
C	BORGOU	TCHAOUROU	TCHAOUROU	GUINIROU	4	GUINIROU
C	BORGOU	TCHAOUROU	TCHATCHOU	KOUBOU	5	KOUBOU
C	COLLINES	BANTE	ATOKOLIGBE	ALOBA	6	ALOBA
C	COLLINES	BANTE	BOBE	ASSABA	7	ASSABA
C	COLLINES	BANTE	LOUGBA	GOTCHA	8	GOTCHA
C	COLLINES	DASSA-ZOUME	DASSA I	ESSEBRE	9	ESSEBRE
C	COLLINES	DASSA-ZOUME	LEMA	LEMA	10	LEMA
C	COLLINES	DASSA-ZOUME	TRE	ADJOKAN	11	ADJOKAN
C	COLLINES	GLAZOUE	AKLANKPA	LAGBO	12	LAGBO
C	COLLINES	GLAZOUE	GOME	TCHACHEGOU	13	TCHATCHEGOU
C	COLLINES	GLAZOUE	ZAFFE	KABOLE	14	KABOLE
C	COLLINES	OUESSE	GBANLIN	GBANLIN	15	GBANLIN
C	COLLINES	OUESSE	LAMINOU	LAMINOU	16	LAMINOU
C	COLLINES	OUESSE	OUESSE	LAKOTO	17	LAKOKO
C	COLLINES	SAVALOU	DJALOUKOU	KONKONDJI	18	KONKONDJI
C	COLLINES	SAVALOU	GOBADA	ZODOWIN	19	ZADOWIN
C	COLLINES	SAVALOU	LAHOTAN	SEGBEYA	20	SEGBEYA
C	COLLINES	SAVALOU	OTTOLA	OTTOLA-ISSALE	21	ISSALE
C	COLLINES	SAVALOU	SAVALOU-ATTAKE	N'GBEHAN	22	N'GBEHAN
C	COLLINES	SAVE	KABOUA	GOGORO	23	GOGORO
C	COLLINES	SAVE	OKPARA	GBERET (AKON GBERE)	24	AKON
C					25	GBERE**
C	COLLINES	SAVE	SAKIN	DIHO	26	DIHO-AGBONGUI
C					27	DIHO-OGBO**
C	DONGA	BASSILLA	MANIGRI	MANIGRI IKANI	28	MANIGRI-IKANNI
C	DONGA	DJOUGOU	DJOUGOU I	FOUNGA	29	FOUNGA
C	DONGA	DJOUGOU	ONKLOU	DARINGA	30	DARINGA
C	ZOU	DJIDJA	DAN	AGBOHOUTOGNON	31	AGBOHOUTOGON
C	ZOU	DJIDJA	OUTO	AKLIMMIN	32	AKLINME

Note: When one of the previously selected baseline villages was divided into numerous villages, the village to be sampled was selected using a Random Number Selection and is indicated with **.

APPENDIX 18 – TREATMENT AND CONTROL VILLAGE SAMPLE SELECTION (CONTINUED)

Selection of Midterm Treatment Sample Villages for the Producer Household Survey

Treatment or control (T, C)	Departements	Communes	Arrondissements	Villages (anciens noms)	No.	New villages of correspondance [note 1]	Training status	Substitute village [note 2]
T	BORGOU	N'DALI	BORI	KORI	1	KORI	Ongoing	MAREGOUROU
T	BORGOU	N'DALI	OUENOU	BOUYEROU	2	BOUYEROU	Completed	
T	BORGOU	N'DALI	SIRAROU	KOMIGUEA	3	KOMIGUEA	Completed	
T	BORGOU	TCHAOUROU	GORO	GORO	4	GORO	Completed	
T	BORGOU	TCHAOUROU	TCHAOUROU	OKELAGBA	5	DAGBARA-GOUROU	Ongoing	SAKANA-KPEBA
T	COLLINES	BANTE	AGOUA	N'TCHON	6	N'TCHON	Ongoing	PIRA, ADJIGO
T	COLLINES	BANTE	BANTE	ADJANTE	7	ADJANTE	No training	BOBE, BOBE
T	COLLINES	BANTE	GOUKA	MAMATCHOKE	8	MAMATCHOKE	Ongoing	BOBE, DJAGBALLO
T	COLLINES	BANTE	PIRA	OTAOSE (OKOUTA-OSSE)	9	OKOUTA-OSSE	Ongoing	LOUGBA, KOTAKPA
T	COLLINES	DASSA-ZOUME	GBAFFO	GBAFO	10	GBAFFO	Completed	
T	COLLINES	DASSA-ZOUME	PAOUINGNAN	GBOWELE	11	GBOWELE	Completed	
T	COLLINES	GLAZOUE	AKLANKPA	AFFIZOUNGO2	12	AFFIZOUNGO-KPOTA	Completed	
T	COLLINES	GLAZOUE	ASSANTE	ASSANTE	13	ASSANTE	Completed	
T	COLLINES	GLAZOUE	OUEDEME	KPOTA	14	KPOTA	Completed	
T	COLLINES	GLAZOUE	ZAFFE	MADENGBE	15	MADENGBE	Ongoing	AKLAMPA, DJANMANDJI
T	COLLINES	OUESSE	GBANLIN	VOSSA	16	VOSSA	No training	TOUI, TOUI-ODJOULE
T	COLLINES	OUESSE	ODOUGBA	DOKOUNDOHO	17	DOKOUNDOHO	No training	TOUI, MALETE
T	COLLINES	OUESSE	OUESSE	OUESSE-CENTRE	18	OUESSE CENTRE	No training	KILIBO, KILIBO-ADJOUGOU
T	COLLINES	SAVALOU	DOUME	AMOU	19	AMOU	Ongoing	COFFE AGBALLA
T					20	AMOU SAKAOU	Ongoing	AFFE ZONGO
T	COLLINES	SAVALOU	KPATABA	EKPA	21	EKPA	Ongoing	DJALLOUKOU, DJALLOUKOU
T	COLLINES	SAVALOU	LOGOZOHOUE	HONNONKON	22	HONNOUKON	Ongoing	SAVALOU-AGA, KPAKPASSA
T	COLLINES	SAVALOU	OUESSE	OUESSE CENTRE	23	OUESSE	Ongoing	SAVALOU-AGA, ZOUNDJI
T	COLLINES	SAVALOU	TCHETTI	TCHETTI	24	TCHETTI	Ongoing	IGBERI
T	COLLINES	SAVE	OFE	ATCHAKPA	25	ATCHAKPA**	Completed	
T					26	ATCHAKPA-KPINGNI	Ongoing	
T	COLLINES	SAVE	OKPARA	OKE OWO2	27	OKE OWO-AGA	Completed	
T	DONGA	BASSILLA	BASSILA	BIGUINA	28	BIGUINA AKPASSA**	Completed	
T					29	BIGUINA HOLOUDE	Completed	

APPENDIX 18 – TREATMENT AND CONTROL VILLAGE SAMPLE SELECTION (CONTINUED)

Treatment or control (T, C)	Departements	Communes	Arrondissements	Villages (anciens noms)	No.	New villages of correspondance [note 1]	Training status	Substitute village [note 2]
T					30	BIGUINA TOSSO	Ongoing	
T	DONGA	BASSILLA	PENESSOULOU	NAGAYILE	31	NAGAYILE	Ongoing	PENESSOULOU
T	DONGA	DJOUGOU	KOLOKONDE	FOUMBEA	32	FOUMBEA	Ongoing	PARTAGO, NANOGOU
T	DONGA	DJOUGOU	ONKLOU	ONKLOU	33	ONKLOU PAHANOUN**	Completed	
T					34	ONKLOU SAOUPEHOUN	Completed	
T	ZOU	DJIDJA	AGOUNAN	AOTRELE	35	AWOTRELE	Ongoing	ASSAN

Notes

1. When one of the previously selected baseline villages was divided into numerous villages, the village to be sampled was selected using a Random Number Selection and is indicated with **.

2. All substitute villages have 'Completed trainings package'. When possible, each substitute is from the same department, commune and arrondissement to maintain similarity with the control dataset. If there was more than one village that had these characteristics the village was chosen using a Random Number Selection. If there was not a village in the same arrondissement one was chosen from another arrondissement in the same commune.

Appendix 19 – Midterm Sample Villages by Treatment/Control and Department, Commune, and Village Showing the Number and Percentage of Males and Females Sampled for the Producer Household Survey

No.	Treatment or control (T, C)	Training (NT=No Benincajù Training)	Department	Commune	Village	Number (male, female, total)			Percentage (male, female)	
						M	F	T	M	F
1	C	NT	Borgou	N'dali	Wobakarou	15	0	15	100.0	0.0
2	C	NT	Borgou	N'dali	Boko	15	0	15	100.0	0.0
3	C	NT	Borgou	Tchaourou	Beterou	14	1	15	93.3	6.7
4	C	NT	Borgou	Tchaourou	Guinirou	15	0	15	100.0	0.0
5	C	NT	Borgou	Tchaourou	Koubou	15	0	15	100.0	0.0
6	C	NT	Collines	Bante	Aloba	17	1	18	94.4	5.6
7	C	NT	Collines	Bante	Assaba	13	5	18	72.2	27.8
8	C	NT	Collines	Bante	Gotcha	16	2	18	88.9	11.1
9	C	NT	Collines	Dassa-Zoume	Essebre	12	3	15	80.0	20.0
10	C	NT	Collines	Dassa-Zoume	Lema	8	7	15	53.3	46.7
11	C	NT	Collines	Dassa-Zoume	Adjokan	11	4	15	73.3	26.7
12	C	NT	Collines	Glazoue	Lagbo	13	4	17	76.5	23.5
13	C	NT	Collines	Glazoue	Tchatchegou	8	7	15	53.3	46.7
14	C	NT	Collines	Glazoue	Kabole	6	9	15	40.0	60.0
15	C	NT	Collines	Ouesse	Gbanlin	18	1	19	94.7	5.3
16	C	NT	Collines	Ouesse	Laminou	16	2	18	88.9	11.1
17	C	NT	Collines	Ouesse	Lakoko	15	3	18	83.3	16.7
18	C	NT	Collines	Savalou	Konkondji	8	2	10	80.0	20.0
19	C	NT	Collines	Savalou	Zadowin	11	4	15	73.3	26.7
20	C	NT	Collines	Savalou	Segbeya	12	4	16	75.0	25.0
21	C	NT	Collines	Savalou	Issale	16	2	18	88.9	11.1
22	C	NT	Collines	Savalou	N'gbehan	16	1	17	94.1	5.9
23	C	NT	Collines	Save	Gogoro	13	3	16	81.3	18.8
24	C	NT	Collines	Save	Gbere	9	6	15	60.0	40.0
25	C	NT	Collines	Save	Diho-Ogbo	13	1	14	92.9	7.1
26	C	NT	Donga	Bassilla	Manigri-Ikanni	16	0	16	100.0	0.0
27	C	NT	Donga	Djougou	Founga	16	0	16	100.0	0.0
28	C	NT	Donga	Djougou	Daringa	14	4	18	77.8	22.2
29	C	NT	Zou	Djidja	Agbohoutogon	13	2	15	86.7	13.3
30	C	NT	Zou	Djidja	Aklinme	15	0	15	100.0	0.0
1	T	Silver	Borgou	N'dali	Maregourou	17	1	18	94.4	5.6
2	T	Silver	Borgou	N'dali	Bouyerou	16	2	18	88.9	11.1
3	T	Silver	Borgou	N'dali	Komiguea	17	1	18	94.4	5.6
4	T	Silver	Borgou	Tchaourou	Goro	14	4	18	77.8	22.2
5	T	Silver	Borgou	Tchaourou	Sakana-Kpeba	15	1	16	93.8	6.3
6	T	Gold	Collines	Bante	Adjigo	12	4	16	75.0	25.0
7	T	Gold	Collines	Bante	Bobe	12	5	17	70.6	29.4

APPENDIX 19 – MIDTERM SAMPLE VILLAGES BY TREATMENT/CONTROL AND DEPARTMENT, COMMUNE, AND VILLAGE SHOWING THE NUMBER AND PERCENTAGE OF MALES AND FEMALES SAMPLED FOR THE PRODUCER HOUSEHOLD SURVEY (CONTINUED)

No.	Treatment or control (T, C)	Training (NT=No Benincajù Training)	Department	Commune	Village	Number (male, female, total)			Percentage (male, female)	
						M	F	T	M	F
8	T	Gold	Collines	Bante	Djagballo	12	8	20	60.0	40.0
9	T	Gold	Collines	Bante	Kotakpa	15	3	18	83.3	16.7
10	T	Silver	Collines	Dassa-Zoume	Gbaffo	10	5	16	62.5	31.3
11	T	Silver	Collines	Dassa-Zoume	Gbowele	12	3	15	80.0	20.0
12	T	Silver	Collines	Glazoue	Affizoungo-Kpota	15	0	15	100.0	0.0
13	T	Silver	Collines	Glazoue	Assante	15	3	18	83.3	16.7
14	T	Silver	Collines	Glazoue	Kpota	15	2	17	88.2	11.8
15	T	Silver	Collines	Glazoue	Djanmandji	16	3	19	84.2	15.8
16	T	Silver	Collines	Ouesse	Toui-Odjoule	13	5	18	72.2	27.8
17	T	Silver	Collines	Ouesse	Malete	17	1	18	94.4	5.6
18	T	Silver	Collines	Ouesse	Kilibo-Adjougou	18	0	18	100.0	0.0
19	T	Gold	Collines	Savalou	Affe Zongo	11	4	15	73.3	26.7
20	T	Gold	Collines	Savalou	Djalloukou	13	4	17	76.5	23.5
21	T	Gold	Collines	Savalou	Kpakpassa	12	5	17	70.6	29.4
22	T	Gold	Collines	Savalou	Zoundji	14	3	17	82.4	17.6
23	T	Gold	Collines	Savalou	Igberi	10	8	18	55.6	44.4
24	T	Silver	Collines	Save	Atchakpa	12	5	17	70.6	29.4
25	T	Silver	Collines	Save	Oke Owo-Aga	16	1	17	94.1	5.9
26	T	Silver	Donga	Bassilla	Biguina Akpassa	17	1	18	94.4	5.6
27	T	Silver	Donga	Bassilla	Penessoulou	18	1	19	94.7	5.3
28	T	Gold	Donga	Djougou	Nanogou	18	0	18	100.0	0.0
29	T	Gold	Donga	Djougou	Onklou Pahanoun	17	1	18	94.4	5.6
30	T	Silver	Zou	Djidja	Assantoun	12	3	15	80.0	20.0
Total						830	165	996	83.3	16.6

APPENDIX 20 – LIST OF STAKEHOLDERS INTERVIEWED

Stakeholders	Location Village-City	Focal Point
Processors		
Fludor SA	Kpahè, Cana	[redacted]
TOLARO	Parakou	[redacted]
Kake 5 (non-operational nut processor).	Kpahè, Savalou, Collines	[redacted]
Yelokpon	Savalou, Collines	[redacted]
TSF Djougou		[redacted]
Sweet Benin	Parakou, Borgou	[redacted]
Demonstration plot producers		
[redacted]	Djija, Zou	N/A
[redacted]	N'Dali, Borgou	N/A
Input suppliers		
Djidja	Djija, Zou	[redacted]
Parakou	Borgou	[redacted]
Project staff		
[redacted]	Cotonou	N/A
[redacted]	Skype	N/A
[redacted]	Cotonou	N/A
[redacted]	Parakou	N/A
[redacted]	Cotonou	N/A
[redacted]	Cotonou	N/A
[redacted]	Cotonou	
[redacted]	Dassa	
[redacted]	Cotonou	N/A
[redacted]	Cotonou	
Financial institutions		
Oiko Credit	Cotonou	[redacted]
FAGACE	Cotonou	[redacted]
Société Générale des Banques (SGB)	Cotonou	[redacted]
CLCAM	Dassa	[redacted]
Public state market actors		
Agence territoriale de développement agricole pole 4 (ATDA4)	Parakou	[redacted]
Directeur Cabinet MAEP	Cotonou	[redacted]

APPENDIX 20 – LIST OF STAKEHOLDERS INTERVIEWED (CONTINUED)

Stakeholders	Location Village-City	Focal Point
Ministry of Industry, Commerce and Crafts	Cotonou	[redacted]
CNTC	Cotonou	[redacted]
Training organizations (FENAPAB, DEDRAS)		
FENAPAB	Parakou	[redacted]
DEDRAS ONG	Parakou	[redacted]
Field observations		
Komiguea	N'Dali	Borgou
Tchetti	Savalou	Collines
USDA	Phone call	[redacted]

APPENDIX 21 – WORK PLAN AND SCHEDULE

Roles and Responsibilities

To carry out the midterm evaluation of the BeninCajù project, the Advisem evaluation team is comprised of five consultants consisting of a specialist in evaluation, analysis and reporting ([redacted]); an expert with extensive international experience in smallholder farmer agriculture and rural development projects [redacted]); a technical expert in quantitative data collection and reporting ([redacted] an expert in community-based organizations involved in rural development programs, organizational capacity building, and qualitative methods ([redacted]); and a national consultant with extensive experience in data gathering management for projects in Benin ([redacted]). We also have two advisors with relevant subject-matter expertise, namely a value chain analysis specialist ([redacted]) and a cashew processing and distribution specialist [redacted]

The successful collection of data in the field will relied largely on project stakeholders meeting specific roles and responsibilities.

The responsibilities of the Advisem team were to:

- Review all documentation necessary to perform the evaluation.
- Prepare communication materials for TNS describing the objective of the evaluation and logistical details for the field mission.
- Prepare a detailed schedule for the field mission.
- Provide TNS an inception report (including all quantitative and qualitative tools).
- Pilot the surveys ([redacted], in person, and [redacted], [redacted] and [redacted], remotely; with the help of TNS) before fieldwork is to begin and make any adjustments to the tools before enumerator training.
- Hire enumerators/facilitators.
- Design and conduct the training of enumerators/facilitators.
- Carry out the field-based data collection, including conducting interviews with key informants, conducting FGDs, making field observations, and implementing the survey instruments, as well as data quality checks.
- Manage data cleaning and data analyses.
- Submit a cleaned dataset.
- Prepare and submit a draft and a final midterm evaluation report.
- Present evaluation results to USDA and TNS/CRS.
- Communicate with TNS any issues and needs to implement the field mission.

APPENDIX 20 – WORK PLAN AND SCHEDULE (CONTINUED)

The responsibilities of TNS were to:

- Oversee the contractual arrangements.
- Provide feedback on the evaluation process.
- Provide on a timely basis all project documentation that is relevant for the evaluation.
- Offer feedback and suggestions on the field mission logistics, especially to ensure the safety of the evaluation team.
- Provide feedback on the inception report and all data collection tools as soon as possible.
- Provide recommendations and support to help contact and secure participation of TNS beneficiaries for the interviews, FGDs, and surveys. This will be particularly important for the processor surveys.
- Identify and introduce key individual for interviews – local staff and other stakeholders.
- Help provide guidance for the location of a pilot test of the surveys ([redacted], in person, and [redacted], and [redacted], remotely) with beneficiaries to ensure the questions are clear.
- Make available a database of all beneficiaries (although there appear to be several lists in the google documents, having all trained beneficiaries clearly indicated is required to avoid confusion).
- Provide feedback on the preliminary findings, and the draft and final midterm evaluation reports.

Schedule

The following table presents a general calendar of work that occurred. Please see Appendix 22 for the detailed Fieldwork Schedule.

APPENDIX 20 – WORK PLAN AND SCHEDULE (CONTINUED)

Activity	July				August				September				October			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1. Launch of the mandate		●														
2. Preliminary Inception Report			●	●	●	●										
3. Final Inception Report (September 3th)					●											
4. Field Logistics (August 26-September 7) and Pre-test of tools (August 28-September 1)						●	●	●	●							
5. Field work (September 8-September 23)									●	●	●					
6. Data analysis, triangulation and report drafting										●	●	●	●	●		
7. Preliminary Report (October 19)															●	
8. Comments from TNS and USDA (October 24)															●	●
9. Final report (October 31)																●
10. Findings and Recommendations Presentation (TBD)																●

APPENDIX 22 – FIELD WORK SCHEDULE

Day	Weekday	Date	Location			Individuals [note]				Activities
			Dep	Comm	Village	[redacted]	[redacted]	[redacted]	[redacted]	
a	Wednesday	29-Aug	Cotonou	Dassa					x	Training pilot (producer survey; producer FGD; SILC FGD)
b	Thursday	30-Aug	Cotonou	Dassa					x	Training pilot (producer survey; producer FGD; SILC FGD)
c	Friday	31-Aug	Cotonou	Dassa	Erokoya				x	Pilot (producer survey – minimum of 20; producer 1 FGD; 1 SILC FGD)
d	Saturday	1-Sep	Cotonou	Dassa						Extra day if necessary for pilot, DeBrief with TNS
0	Friday	7-Sep	Cotonou							Arrival in Cotonou [redacted] Brussels Air 19.20
1	Saturday	8-Sep	Cotonou			x		x		Arrival in Cotonou: [redacted] and [redacted] AirFrance 0640 at 17h50
2	Sunday	9-Sep	Cotonou			x	x	x	x	Brief meeting with TNS (morning), Travel to Dassa. Must pick up Cell phones.
3	Monday	10-Sep	Collines	Dassa		x	x	x	x	Training (Contracts), KAKE 5 (KII Processor; NOT OPERATIONAL)
4	Tuesday	11-Sep	Collines	Dassa			x	x	x	Training (Per-diem payment),
4	Tuesday	11-Sep	Collines	Savalou		x		x		2Ib (Processor survey); CRS [redacted] SILCs): CLCAM (KII)
5	Wednesday	12-Sep	Collines	Savalou	Tchetti			x		Tchetti, Producers, Producers Groups, SILCs
5	Wednesday	12-Sep	Collines	Dassa	Tchetti	x				Field observations Tchetti; Irede (Processor survey) Yelokpon (Survey and KII),
5	Wednesday	12-Sep	Collines				x		x	Oversee surveys (e.g., field visits, check incoming data)
6	Thursday	13-Sep	Zou	Djija	Dan Djidja			x		Dan Djija (Silver training) Producers, Producer Groups, SILCs, Fludor
6	Thursday	13-Sep	Zou	Djija		x		x		Field observations(Djija), Input suppliers (Djidja), Demo plot (Djija); Fludor SA (Zogbo and KII)(Processor Surveys)
6	Thursday	13-Sep	Collines				x		x	Oversee surveys (e.g., field visits, check incoming data)
6	Thursday	13-Sep	Collines	Bante			x		x	[redacted] (KII) (Processor Survey)
6	Thursday	13-Sep	Dassa/Parakou			x	x	x	x	Travel to Parakou (or Friday)
7	Friday	14-Sep	Borgou	Parakou		x				ATDA4 (KIIs), FENAPAB, DEDRAS (KIIs), [redacted] (KII)
7	Friday	14-Sep	Borgou	Parakou				x		ATDA4 (KIIs), FENAPAB, DEDRAS (KIIs)
7	Friday	14-Sep	Borgou	Parakou			x		x	Woudou/Waduheheba (Processor Survey); Oversee surveys (e.g., field visits, check incoming data)
8	Saturday	15-Sep	Nanogou	Djogou				x		Producers (Silver training), Producer Groups, SILCs; TSF Djougou (Processor Survey)
8	Saturday	15-Sep	Donga				x		x	Oversee surveys (e.g., field visits, check incoming data)
9	Sunday	16-Sep	Borgou	Parakou		x	x	x	x	Transcription of exercises, verifying data collected. Day Off Fieldwork.
10	Monday	17-Sep	Borgou	N'Dali	Kominguea			x		Producers (Silver training), Producer Groups, SILCs; TOLARO (KII and Survey)
10	Monday	17-Sep	Borgou				x		x	Check on enumerators/Tropic fruits, Triangles (Processor Survey)
11	Tuesday	18-Sep	Parakou -Cotonou			x		x		Transcription of exercises, verifying data collected, travel to Cotonou
11	Tuesday	18-Sep	Borgou	Parakou			x		x	Check on enumerators, and Yinrado(Processor Survey)

APPENDIX 22 – FIELD WORK SCHEDULE (CONTINUED)

Day	Weekday	Date	Location			Individuals [note]				Activities
			Dep	Comm	Village	WB	JH	HF	SN	
12	Wednesday	19-Sep	Parakou-Dassa				x		x	Travel to Cotonou, Agbara (Processor Survey)
12	Wednesday	19-Sep				x		x		Oiko Credit, SGB, FAGACE, MAEP, CNTC, MIC
13	Thursday	20-Sep	Cotonou				x	x		[redacted] (KIIs)
13	Thursday	20-Sep	Cotonou			x				AN Industries (Processor Survey)
14	Friday	21-Sep	Cotonou			x	x	x		[redacted] (CRS)
14	Friday	21-Sep	Cotonou			x	x	x	x	Debriefing TNS/CRS
14	Friday	21-Sep	Cotonou			x		x		Directorie de Commerce (KIIs)
15	Saturday	22-Sep	Cotonou			x	x			[redacted] KIIs)
15	Saturday	22-Sep	Cotonou							[redacted]: AF 0647 at 23h40
16	Sunday	23-Sep	Cotonou							
17	Monday	24-Sep	Cotonou							[redacted] Flying out 13:45
	Wednesday	26-Sep								[redacted] (Skype) CRS
	Thursday	4-Oct								[redacted] (Skype) TNS

Note:
[redacted].

APPENDIX 23 – REVISED PMP AND SUGGESTIONS FOR THE M&E SYSTEM

Indicators and agency responsible	Sources	Methods/tools	Frequency	Methodological considerations by TNS	Suggestions by Advisem
(Expected result) IMPACT/GOAL: Sustainably reduce global poverty and hunger					
a) Progress out of Poverty Index	Producers	Producer survey	• Baseline • Midline • Endline		Advisem: Generally speaking, there is a larger issue than simply the 10 elements measured. Ultimately, program success should not be based primarily on this indicator. The new Simple Poverty Scorecard poverty-assessment tool for Benin is based on data from the 2015 Household Living Standards Survey (Enquête Modulaire Intégrée surles Conditions de Vie des Ménages, EMICoV). It replaces the old scorecard for Benin based on data from the 2010 EMICoV (Schreiner, 2012a). The new 2015 scorecard should be used from now on, both by first-time users and by legacy users of the old 2010 scorecard. Many assumptions of the 2010 scorecard have not held (e.g., the scorecard will often not provide the right sign; it estimates an improvement (reduction) in poverty for Benin from 2010 to 2015, rather than the actual worsening) and direct comparisons cannot effectively be made between the scorecards. If consumption-based poverty in Benin continues to increase (worsen), then the new 2015 scorecard will probably also under-estimate poverty rates. But if consumption-based poverty decreases (improves), then it is reasonable to expect that the new scorecard's accuracy will be similar to that of other scorecards. This uncertainty is the nature of poverty-assessment tools that use non-consumption indicators to estimate consumption-based poverty and that are constructed with data from an earlier time period and then applied with data from a later period." Please see *Simple Poverty Scorecard® Poverty-Assessment Tool Benin*, by Mark Schreiner and Jean Paul Sossou, 15 December 2017 for additional details on the PPI.
b) Number of individuals benefiting directly from USDA-funded interventions *(Standard #17)*, disaggregated by sex	TNS	Document review	• Rolling process • To be reported in each narrative report	• TNS: Vous pourrez également analyser notre méthode de comptage des bénéficiaires et nous fournir votre feedback • NOT cumulative. only covers individuals benefitting during the period (ie those who have graduated will no longer be counted)	• Advisem: This is not a good indicator at the impact level because this is the scope of the project, it's not about a change happening. You already know more or less at the design stage of the project how many people you wish will benefit from the project. This being said, USDA usually keeps it at this level, so we can track it through desk review and just see how you compare with the target. At some point this indicator is meant to be cumulative. • Issue: avoiding double counting between CRS and TNS. One individual receiving services from CRS, TNS or both = 1 beneficiary. • And 1 beneficiary receiving multiple trainings in one or multiple reporting periods = 1 beneficiary. Best way to do that is to give every individual a beneficiary number or calculate an adjustment factor on the total number of beneficiaries based on a calculation of how many beneficiaries attend multiple trainings during one reporting period (through a survey or comparing training attendance lists). • USDA: This indicator only tracks direct beneficiaries reached with direct USDA assistance (funded in part or in whole by USDA). Individuals should not be double counted. Individuals may receive multiple interventions in one fiscal year but should only be counted upon first receipt of project interventions. For example, if one individual participates in multiple USDA-sponsored training courses in a given fiscal year, they will only be counted one time in that fiscal year. Individuals participating in USDA-sponsored training courses in multiple fiscal years may be counted once in each fiscal year. • Question: do you cumulate beneficiaries from different fiscal years, if they received services throughout various years?

APPENDIX 23 – REVISED PMP AND SUGGESTIONS FOR THE M&E SYSTEM (CONTINUED)

Indicators and agency responsible	Sources	Methods/tools	Frequency	Methodological considerations by TNS	Suggestions by Advisem
c) Number of individuals benefiting indirectly from USDA-funded interventions *(Standard #18)*	TNS	Document review	• Rolling process • To be reported in each narrative report	TNS: Need to make sure we're not double counting here – if more than one member of the same family participates in the training, that would be 2 direct beneficiaries but not 10 indirect beneficiaries; initial target (in USDA contract) was not a factor of 5, (49000*5 is not 172116), but the CRS target was – how do we think this should be calculated??	• Advisem: Just as for the direct beneficiary, you can calculate an adjustment factors taking a sample of beneficiaries and measuring how many are relatives living under the same roof, then apply this factor to the total direct beneficiaries. Also, as found in the midterm survey some families do have more than one individual participating in training. • Also, the 172,116 target is a factor of 5 of the target that is provided in the PMP tab, which is different from the targets on the Outcome and Output tabs. Thus, if the real target for direct beneficiaries is actually 49,000 than the indirect beneficiary target should be adjusted to 245,000. There are numerous instances where targets are not consistent across various tabs (PMP, outcome, output). • USDA: Individuals should not be double counted. Individuals may benefit from multiple interventions in one fiscal year but should only be counted once per fiscal year. If an individual is already counted as a direct beneficiary, the individual should not also be counted as an indirect beneficiary if they are indirectly benefitting from other project interventions. For example, if a farmer is counted as a direct beneficiary after directly participating in a training course, the farmer should not also be counted as an indirect beneficiary if another family member participates in a different training course.
d) Number of jobs attributed to USDA assistance *(Standard #15)*, disaggregated by sex	• Producer • Processors	• Producer survey • Processor survey	Annually	• Nous souhaitons également que vous regardiez notre mode de calcul: • L'indicateur est renseigné actuellement seulement par la composante « transfromation » • Voir si la composante production peut contribuer en comptabilisant aussi les emplois créés • Report May 2018: We have recently revised our calculation method for this indicator. Because many of the jobs are temporary in • nature and hours fluctuate according to the season, we now determine this count by taking the average number of jobs throughout the year. In this way, this indicator can only be calculated annually, in the first quarter of everycalendar year. Therefore, the number reported here are the results achieved through 12/31/17.	• Advisem: The Producer questionnaire asks how many jobs were created; using minimum criteria to consider if a "real" job was created. Hence TNS can capture that information from both producers and processors. • To date, the project has not been calculating the indicator [note 1] related to the number of jobs attributed to USDA assistance correctly and stating the indicator was calculated by taking "the average number of jobs throughout the year at partner processing facilities" is unclear. The last monitoring report showed that as of March 31, 2018, the project had generated 423 jobs in processing facilities, of which about 100 (24%) were for women. Importantly, the monitoring report stated that the indicator will be recalculated using the definition provided in the USDA manual for the next report. However, to calculate this indicator appropriately for the life of the project, retroactive calculations will need to be made. Although, the USDA reporting mechanism states this information should be reported biannually, it would probably be most effective to collect this data annually because of the seasonal character of the sectors activities. Each year (and retroactively for September 2016-September 2017; midterm data can be used for September 2017- September 2018, although BeninCajù may want to reconfirm nut processor data) the processors should be asked what their minimum and maximum number of employees were over the year. Following this, they should be asked whether and how BeninCajù activities had an effect on job creation (e g., accelerating job creation (processors would have done so at a slower pace, regardless of the assistance provided by the project); job creation would not have been possible without the project assistance which allowed for increased production; etc.). For example, the processors that stated BeninCajù activities led to job creation reported reasons such as strengthened production

APPENDIX 23 – REVISED PMP AND SUGGESTIONS FOR THE M&E SYSTEM (CONTINUED)

Indicators and agency responsible	Sources	Methods/tools	Frequency	Methodological considerations by TNS	Suggestions by Advisem
					capacity, strengthened human resources (help in recruitment, management training), entrance into the formal sector, and an improved economic and financial situation. Finally, the number of new jobs created and the length of time of these jobs (the midterm divided this into 3, 6, 9 and 12 month options, which allows for an estimation of full-time equivalent (FTE) job creation) should be provided. This can be cross-referenced with the minimum and maximum numbers of employees over the years to ensure accurate values and that new jobs are only reported once. For example, information from apple processors [note 2] revealed six of the 10 reporting the BeninCajù project had a direct impact on employment, creating a total of 300 FTE jobs (female: 290, male 10) over the last 12 month period. • Also, it is unclear why BeninCajù is also not assessing whether producers have been able to provide additional employment as a result of BeninCajù activities. In the midterm survey it was assessed whether producers had hired employees and whether for treatment producers they believed this was a direct result of BeninCajù assistance. Overall, a total of 19.8% of BeninCajù producers and 10.1% of control producers reported hiring employees over the last 12 months (X^2=17.16, df=1, p<0 001). Specifically, of the 101 treatment producers, 21 (20.8%) reported hiring as a direct result of BeninCajù activities and a total of 25 FTE jobs (females: 3, males: 22) were created over the last 12 month period. [note 3] This number could then be extrapolated to the entire BeninCajù trained population. • USDA: Jobs are all types of employment opportunities created during the reporting year in agriculture- or rural-related enterprises (including paid on-farm/fishery employment.) Jobs lasting less than one month are not counted in order to emphasize those jobs that provide more stability through duration. Jobs should be converted to full-time equivalents (FTE). Thus, a job that lasts four months should be counted as 1/3 FTE and a job that lasts for 130 days should be counted as ½ FTE. To be considered a job created, the positions must last longer than one month in duration.
(Expected result) OUTCOME 1: Increased agricultural productivity					
1.a) Number of hectares under improved techniques or technologies as a result of USDA assistance *(Standard #1)*, disaggregated by male/female, new/continuing, technique/technology type	Producers	Document review	• Baseline • Endline	...	• Advisem: We did not measure this and it was stated it would be revised through desk review. This would be a rough estimate from the data we collected. • Ultimately, an extrapolation could be done using the farm size and whether farmer applied one new technique (please see comments on measuring new techniques). • USDA: At least one technique applied per farmer cultivating make a plot to be counted.

APPENDIX 23 – REVISED PMP AND SUGGESTIONS FOR THE M&E SYSTEM (CONTINUED)

Indicators and agency responsible	Sources	Methods/tools	Frequency	Methodological considerations by TNS	Suggestions by Advisem
1.b) Number of hectares under sustainable agroforestry practices (Custom), disaggregation by male/female	TNS	…	• Baseline • Endline?	• Ok pour la proposition de l'enlever dans le tableau des indicateurs • Report May 2018: This indicator is calculated using data collected during the survey of the use of good agricultural practices conducted this year. • The survey does not currently measure application of specific "sustainable agroforesty practices," but instead considers all GAP (except pest/disease management) to be as such. TechnoServe is currently working with CRS to revise their criteria for measuring application of specific agricultural practices as this approach is considered to be too general to understand the actual impact of trainings. As a result, this figure is likely to be revised in the future.	• Advisem: We did not measure this and it was stated it would be revised through desk review. • BeninCajù would have to use the question on intercropping in their survey to address this indicator. Eventually this indicator could be removed if intercropping is included in the indicator above. • "Agroforestry is a land use management system in which trees or shrubs are grown around or among crops or pastureland."
1.c) Volume of selected crops (cashew) produced per hectare (yield) (FFPr SO1 (#1) – Illustrative), disaggregated by size of farm	Producers OR reports	Producer survey OR desk review	..	Ok pour la proposition de l'estimation à comprarer avec les résultats obtenus lors des enquêtes de rendement	• Advisem: interestingly, USDA does not have an indicator that measures directly yields. But this is important and should be measured. • The current method that is being used to calculate crop yield seems the most appropriate way. Values by productive tree could also be provided. However, to obtain a larger sample size, which can help to provide an even a more accurate result, would be simply asking farmers their cashew yield (the midterm found that farmers gave a single income value, that was very close to the value involving numerous calculations; thus the same would be likely be true for cashew yield). See the report for more details on this option.
1.d) Number of policies, regulations and/or administrative procedures in each of the following stages of development as a result of USDA assistance *(Standard #12)*, disaggregated by stage	• TNS reports • Key informants	• Desk review • KIIs	…	Report submitted by May 2018: The two documents currently under development are: 1 decree relating to the creation, organization and functioning of the Council of Cashew and Shea: 1 decree on the modalities of marketing cashew and shea butter A third regulation/policy has already been implemented: in 2017 a tax of 60 FCFA per kg of exported raw cashew nut was implemented under the advice of BeninCajù.	…
(Expected result) OUTCOME 2: Expanded trade of agricultural products (domestic, regional, and international)					
2.a) Value of sales by project beneficiaries *(Standard 13)*, disaggregated by commodity (product) type	• Processors • Reports	• Processor survey • Desk review	…	Report May 2018: This covers cashew apple juice, processed kernel, and raw cashew nut sales.	• Advisem: See indicator definition by USDA. • There is variation in values across the various TNS reports.

APPENDIX 23 – REVISED PMP AND SUGGESTIONS FOR THE M&E SYSTEM (CONTINUED)

Indicators and agency responsible	Sources	Methods/tools	Frequency	Methodological considerations by TNS	Suggestions by Advisem
2.b) Volume of commodities (metric tons) sold by project beneficiaries *(Standard 14)*	• Producers • Processors • Reports	• Producer survey • Processor survey • Desk review	…	• Il reste des doutes sur la nature du produit vendu (pomme ou jus) et le type de bénéficiaire (Producteurs ou transformateurs) • Mettre les 2 valeurs pour le jus (Litre et MT en faisant l'approxiamtion suivante: 1 MT ~ 1000 L • Report May 2018: In addition to the processed kernel and RCN sold, this also includes 30.16 MT of cashew apples sold to produce 15,080 liters of cashew apple juice	Advisem: See indicator definition by USDA.
2.c) Number of agricultural regulations related to post-harvest handling procedures vetted or reviewed by the public/industry (FFPr 2.4 2 (#3) – Illustrative), disaggregated by subject area	TNS reports	Desk review	…	• Bien que assez proches, jusqu'à present, nous avons renseigné séparément ces deux indicatteurs avec des difficultés à les deistinguer clairement • Suggestion: lire nos commentaires sur les deux indicateurs dans le rapport PMP et leur definition dans le manuel USDA sur les indicateurs et nous faire votre feedback et recommendations pour la suite du projet – on suggère de le supprimer • Report May 2018: No update since previous period. These two cover: In addition to export fiscal decree, the national policy guidance document from B2A commission was reviewed by a public workshop with project support and a final report was issued informing upcoming decrees.	Advisem: There is only one USDA Standard indicator that covers policies and regulations. Our take would be to merge this indicator with the one above to avoid any confusion. There is no real need to separate them.
(Expected result) OUTPUT 1.1: Increased use of improved agricultural techniques and technologies					
1.1 a) Number of individuals who have applied improved techniques and technologies as a result of USDA assistance *(Standard #2)*, disaggregated by male/female, new/continuing, technique/technology type	• Producers • M&E team	• Producer survey • KIIs	…	• Pour le producer survey • Résultats à comparer à ceux dans nos rapports (desk review) • Suggestion d'une discussion sur le mode de calcul de l'indicateur avec les équipes M&E (KII) • Report May 2018: This indicator currently only covers beneficiaries of the production component (Gold, Silver, & Bronze farmers, and nursery managers, but excluding SILC members since we are currently working with CRS to refine this data). We are currently conducting a review of beneficiary data for the other components (processing, access to finance, and institutional) and will report on these final, cleaned figures next period.	• Advisem: This really should only cover Gold, Silver, Bronze farmers, unless SILC member are specifically being taught on agricultural practices (SILC members could be included in the indicator on improved farm management). • This indicator is not being assessed appropriately. It is based on asking if individuals applied the various techniques, BUT it does not take into account if the producer was applying them before the training (which for many techniques is extremely likely). Thus, how it is being measured does not assess "as a result of USDA assistance." Producers need to be asked if they applied NEW techniques after the training. This should be measured by external evaluators, as trainers/BeninCajù asking these questions could lead to biased results. • This indicator could be moved at the outcome level, as suggested by the USDA indicator definition. • Disaggregation: male/female, new/continuing, type of practice, type of package

APPENDIX 23 – REVISED PMP AND SUGGESTIONS FOR THE M&E SYSTEM (CONTINUED)

Indicators and agency responsible	Sources	Methods/tools	Frequency	Methodological considerations by TNS	Suggestions by Advisem
1.1.b) Number of seedlings sold by project-supported nurseries (Custom), disaggregated by male/female ownership	• TNS reports • Nursery managers	• Desk review • KIIs	…	• Mais vous pouvez faire aussi quelques entretiens avec les pépiniéristes pour trianguler et mieux apprécier • Il est rapporté au niveau de cet indicateur le total des plants greffés et non greffés produits par les pépiniéristes appuyés par le projet. Prendre le soin de mentionner dans les observations/le narratif le point des plants greffés vendus et le point des plants non greffés vendus. • Big difference between CRS and USDA targets !! for CRS: "assumes 24 nurseries selling 100 seedlings each" …"enable lead farmers to access elite tree grafting materials"; USDA contract says very little	• In the Report May 2018: they mention "Custom: Number of germlings sold by project supported Nurseries" – This includes 28,234 grafted seedlings and 40,600 nongrafted seedlings. • TNS already surpassed the final target for number sold. We think just reporting the number of seedling sold is fine. Although the survey results showed very little uptake of using grafted seedlings by farmers.
1.1 c) Total increase in installed storage capacity (dry or cold storage) as a result of USDA assistance *(Standard 11)*, disaggregated by type of storage (cold/dry), type of installation (refurbished/new)	• TNS reports • Project team	• Desk review • KIIs	…	• En fait pour plusieurs raisons, cet indicateur n'est pas suivi. Nous proposons que le sujet soit prise en compte dans les entretiens avec l'équipe du projet pour mieux vous expliquer. • La définition précise que l'indicateur est mesurable au niveau des producteurs et associations de producteurs- Les magasins construits sur besoin par les producteurs suite à une activité de BéninCaju sont à comptabiliser • En lisant le work plan, il semble que l'indicateur soit en lien avec l'activité N° 8.1.9 du farmer linkage. Si c'est le cas, il faudra l'affecter à l'équipe qui aura la mise en œuvre du farmer linkage • Quelle compéhension devrait-on avoir en définitive?	• Report May 2018: An inventory of existing storage facilities in the intervention area was carried out in 2017. It shows that, for a number of reasons, the available storage warehouses are underoperating: group sales are still marginal and also do not require nuts to be grouped in a store prior to sales. Nevertheless, we are calculating this statistic using data that is currently being collected as part of the annual yield survey. • Advisem: We found contradictory results to what TNS said. Most producers in fact stated they do not have access to storage warehouses. We are suggesting that BeninCajù look into their assessment in more detail.
(Expected result) OUTPUT 1.2: Increased use of financial services					
1.2 a) Value of loans provided as a result of USDA assistance *(Standard #6)*, disaggregated by male/female/joint/not applicable; by type of institutions (SILC, MFI, banks, other); by loan size: micro (USD 0 to USD 1,000), small (USD 1,000 to USD 10,000), medium (USD 10,000 to USD 100,000), and large (USD 100,000 and above)	TNS reports	Desk review	…	• Le manuel de USDA précise ceci: Count targeted individuals within the scope of the USDA project. • Pour la conversion en dollars, il est utilisé la moyenne de la période sur Oanda com • Clarifier si on peut considérer dans cet indicateur les crédits reçus par les membres SILC qui ne sont pas directement liés à la chaine de valeur cajou. • CRS contract specifically focuses on SILC; see USDA definition – is SILC within the scope if SILC members are not cashew farmers??	• Advisem: there is no real rationale to count farmers who are not using the loans for cashew production or processing. • This being said, we don't think it would be possible for TNS to assess this so easily. Survey findings showed the majority of loans were used for purposes other than cashew. Although there are still a significant number that do use these for cashew farming. We feel that TNS should just continue monitoring as they have been doing. All SILC group loans should be attributed to BeninCajù as these groups were created by them. Another option is to record if SILC individuals are involved in any way in cashew farming and then apply this adjustment factor. • A study conducted by CRS showed the percentage of loans that went to cashew production in SILC groups. It showed 46% of survey participants used loans for cashew production. So another option is to conduct a survey with SILC group members. • USDA: Value (in US dollars) of loans and credit extended to agricultural producers, fishers, pastoralists, ranchers, etc., cooperatives, MSME [micro (1-

APPENDIX 23 – REVISED PMP AND SUGGESTIONS FOR THE M&E SYSTEM (CONTINUED)

Indicators and agency responsible	Sources	Methods/tools	Frequency	Methodological considerations by TNS	Suggestions by Advisem
					5), small (6-50), medium (51-100)*], business enterprises (processors, service providers, manufacturers), and other entities. • The indicator counts the value of loans and credit disbursed to the recipient, not loans merely made (e.g. in process, but not yet available to the recipient). Loans and credit can be extended to farmers and agribusinesses by financial institutions such as commercial banks, government banks, non-bank financial institutions, financial NGOs and input suppliers, or equity financing. Making more financial loans shows that there is improved access to business development and financial services.
1.2.b) Number of individuals receiving financial services as a result of USDA assistance *(Standard #4)*, disaggregated by male/female	TNS reports	Desk review	...	CRS contract clearly covers SILC; PMP says "part of the cashew value chain" but this is not in the USDA manual	• Advisem: same rationale as above. • This refers back to the issue of contribution vs attribution. All financial institutions stated that they were more lenient on farmers and processors who worked with BeninCajù as opposed to others. All SILC group loans should be attributed to BeninCajù as these groups were created by them. • Also, BeninCajù is in the process of negotiating bank guarantees, and these should be considered attributions to BeninCajù, not large in number of loans, but large in amount. • While USDA classifies this indicator as an output, it looks to us that it could be one level down with the other indicators on trainings and number of sessions delivered.
1.2 c) Number of loans disbursed as a result of USDA assistance *(Standard #5)*, disaggregated by gender; by type of institution (SILCs, banks, MFIs); by loan size: micro (USD 0 to USD 1,000), small (USD 1,000 to USD 10,000), medium (USD 10,000 to USD 100,000), and large (USD 100,000 and above)	TNS reports	Desk review	...	...	Advisem: Same rationale as above.
1.2 d) Number of firms in target region that are accessing credit through any type of formal loan product (FFPr 2.2 3.1 (#1) – Illustrative), disaggregated by financial product	TNS reports	Desk review	...	• Report May 2018: The five new firms include: Oct-Dec: Triangle, Agbara and Olore; Jan-Mar: Yelokpon, Afokantan, Irede, Yinrado et Waduheheba • This covers firms with access to credit through form loan products in general, not exclusively as a result of intervention from BeninCajù.	• Advisem: BeninCajù has generally helped make financial institutions more comfortable with lending. However, results may change since May processors are defaulting. • But this indicator does not state as a result of BeninCajù, which allows BeninCajù to show influence (contribution) rather than just attribution.

APPENDIX 23 – REVISED PMP AND SUGGESTIONS FOR THE M&E SYSTEM (CONTINUED)

Indicators and agency responsible	Sources	Methods/tools	Frequency	Methodological considerations by TNS	Suggestions by Advisem
(Expected result) OUTPUT 1.3: Improved farm management (operations, financial)					
1.3 a) Number of individuals who have applied improved farm management practices (i e., governance, administration, financial management) *(Standard #3)*, disaggregated by male/female type of individual (agricultural producer, people in firms, people in government)	Producers	Producers survey	…	Mais nous souhaitons que vous compariez cet indicateur et le standard 2 pour mieux nous clarifier la difference et apprécier la pertinence de conserver les deux dans le cadre des performance	• Advisem: These two indicators should be kept separate as the indicator above (USDA Standard #2) measures all techniques that will imporve yield and productivity. This indicator here measures the quality of the farm management from a financial point of view. Questions in the midterm producer survey for these two indicators are clearly distinguished. Again, this indicator needs to assess "who have applied improved techniques," assessing usage before training. • This should be measured by external evaluators, as trainers/BeninCajù asking these questions could lead to biased results. • This indicator could be moved at the outcome level though, as prescribed by the USDA definition.
1.3.b) Percent of agricultural producers in target region/area who can identify key characteristics of a well-managed farm (FFPr 1 3.1 – Illustrative), disaggregated by male/female	Producers	Producers survey	…	…	Advisem: this indicator measure knowledge of farmers on well-managed farms. The one above measure if they apply their knowledge in their farm management. The midterm used the criteria that farmers had to name 3 characteristics to have a "passing" score. It should be noted that the baseline did not measure this indicator.
(Expected result) OUTPUT 1.4: Increased capacity of government institutions *(linked to both production and marketing)*					
1.4 a) Percent of producers satisfied with technical assistance services from INRAB and MAEP extension agents (Custom), disaggregated by commune	…	…	…	• Effectivement cet indicateur n'est peut être mesuré actuellement pour les raisons évoquées. • FENAPAB, CRADIB et DEDRAS sont des prestataires de formation sur les programmes GOLD et Silver. • Par contre le programme sur lequel est envisagé la collaboration avec les structures étatiques est "le farmer linkage" qui sera mis en oeuvre dans le cadre de l'accord avec l'ATDA4 • This indicator effectively measures PSAI work, but they don't have the means to collect this information. can we have CRS collect it? but then it's as if it measures their activities. if not, how?	• Advisem: No progress has been made on the "percentage of producers satisfied with technical assistance services from INRAB and MAEP extension agents," as only recently did the newly-formed government agency ATDA4, which was set up by MAEP to coordinate all cashew-related extension work and research, become operational. During the midterm the percentage of producers satisfied with technical assistance services from DEDRAS, FENAPAB, CRADIB extension agent was examined and revealed a high degree of satisfaction (82.9%, male: 83.1%, female: 81.6%). • CRS can easily have a question on the satisfaction of producers in regards to ATDA4 extension work, once this begins, in their yield survey.

APPENDIX 23 – REVISED PMP AND SUGGESTIONS FOR THE M&E SYSTEM (CONTINUED)

Indicators and agency responsible	Sources	Methods/tools	Frequency	Methodological considerations by TNS	Suggestions by Advisem
1.4.b) Number of international markets covered by government trade promotion agencies (i e., buyer research reports, regulations and standards reports, etc.) (FFPr 2.4.1 (#5) – Illustrative), disaggregated by major market (North America, Europe, Middle East)	TNS reports	Desk review	...	Report May 2018: Our first activities associated with this indicator were just launched this quarter. An expert on global cashew markets was hired to carry out a study on Asian export markets. The report will be presented and made available to CNTC, the cashew processors' association, to help them develop strategies to enter these markets.	Advisem: this indicator could be eliminated, and disaggregate processor sales by market (national, regional, international), and if linked through BeninCajù or not.
(Expected result) OUTPUT 1.5: Increased access to market information					
1.5 a) Percent of producers (farmers) who have access to current market information through their cooperatives or producer associations (FFPr 1.4 3/2.4.3 (#5) – Illustrative), disaggregated by male/female	Producers	Producers survey	...	• Comme recommandé par le PMP, cet indicateur est calculé à partir d'une enquête auprès des producteurs. Au cours de l'enquête de rendement, les questions sont adressées aux producteurs échantillonnés pour savoir s'ils ont été informés sur les prix du marché et quels acteurs leur ont communiqué ces prix. • Le même indicateur est dupliqué au niveau de la composante PSAI. Le retirer du PSAI et l'assigner seulement à la production • Report May 2018: This information comes from the 2017 yield survey. The 2018 yield survey • is currently underway and updated data from this survey will be reported next semester.	Advisem: This indicator is appropriate as it is.
(Expected result) OUTPUT 2.1: Increased value added to post-production agricultural products					
2.1 a) Average margin (USD/metric ton) between farm gate price and end product price for selected agricultural value chains (FFPr 2.1 (#2) – Illustrative), disaggregated by product	• Producers • Processors • TNS reports	• Producers survey • Processor survey • Desk review	...	• Vous pourrez en plus analyser la méthode de calcul de cet indicateur dans le système M&E du projet • Report May 2018: This is the average margin of all three products: cashew apple juice (USD 1888 50), processed kernels (USD 2633.69), and raw cashew nut (USD 597.79).	• Advisem: The calculations seem appropriate. Including units would be helpful.However, should this be reported as a percentage of the end product price? This would allow for easier visualization at different product costs. • Also, why are the targets decreasing over the semesters? Would "increased value added to post-production agricultural products" not mean increasing targets? • This indicator target should not be reported as an average of the various products.
2.1.b) Volume of product (metric tons) meeting international quality standards (FFPr 2.1.1 (#1) – Illustrative), disaggregated by quality type (AFI, HACCP, other)	• Processors • TNS reports	Processor survey OR desk review	...	C'est exactement ce qui est fait pour le suivi de cet indicateur	Advisem: This has to do with the certification procedures. What processors are certified, and how much do these processors sell (of certified nuts).

APPENDIX 23 – REVISED PMP AND SUGGESTIONS FOR THE M&E SYSTEM (CONTINUED)

Indicators and agency responsible	Sources	Methods/tools	Frequency	Methodological considerations by TNS	Suggestions by Advisem
2.1 c) Percent of registered firms in target sectors that obtain certification with international standards related to product quality (FFPr 2.1.1.1 (#1) – Illustrative), disaggregated by quality type (AFI, HACCP, other)	• TNS reports • Processors	• Desk review • Processor survey	…	Report May 2018: All 13 firms have a certification such as AFI, HACCP, or BRC.	Advisem: The midterm did not find such high results – 14 firms (AFI and HACCP 35.7%). If only nut processors are examined it is 100% for AFI and HACCP and 50% for BRC. However, only four nut processors are operational. Does the BeninCajù value include those who closed down?
(Expected result) OUTPUT 2.2: increased efficiency of post-production processes					
2.2 a) Average production cost per unit (USD/metric ton) of output for selected agricultural commodities (cashew) (FFPr 2.1.2 (#2) – Illustrative), disaggregated by size/type of processor	• TNS reports • Processors • (producers)	• Desk review, • Processor survey (will provide a comment at producer level based on data collected)	…	• Jusqu'à pésent cet indicateur et celui qui vient après sont calculés seulement au niveau de la transformation. Quelle est la bonne compréhension de cet indicateur? Quels produits doit-on prendre en compte? Noix brute, amande/pomme? A quelle composante l'affecter? • Need to decide what we want to measure. Does not include cost of raw materials; direct costs only. Need to check w/Shakti that we're calculating this correctly • Report May 2018: This is an average of the average production cost to produce 1 MT of cashew apple juice and 1 MT of cashew kernels. For kernels, the average cost is USD 8416.05, a rough estimate calculated on the basis of 2017 data of 03 factories (Tolaro, Kake 5, La Lumière). For cashew apple juice, the average cost is USD 1826.40 for the equivalent of 1MT of cashew apple juice. Because it is difficult to get detailed cost data from processors (given its sensitive nature), this is only an estimate of the true production cost. In addition, this is not the appropriate method of calculation as defined by the indicator (cost per USD 1 of sales). TechnoServe is in the process of trying to obtain better data in order to calculate the average cost as defined. Otherwise, the units for the target are unclear, since USD 415 in costs per USD 1 of sales would never be ideal for a business of any kind.	• Advisem: This indicator is relevant for nut processors, as one of the main elements is the efficiency in production. Nonetheless, the indicator seems to have an inappropriate target and should probably be revised, as the target appears to be in wrong units. • Please note the definition: *This indicator measures the average production cost per USD 1.00 of cashew product sales of participating processors. Average production cost includes the cost of raw materials, labor costs, transportation costs, electricity and operational costs, and any other costs required to produce the final product sold to end buyers. Participating processors include existing and new processors receiving technical assistance or other support (such as access to finance) from the project.* • Targets should be separated for nut processors and apple juice processors..

APPENDIX 23 – REVISED PMP AND SUGGESTIONS FOR THE M&E SYSTEM (CONTINUED)

Indicators and agency responsible	Sources	Methods/tools	Frequency	Methodological considerations by TNS	Suggestions by Advisem
2.2.b) Percent of product loss due to spoilage or improper processing (Custom), disaggregated by end product	Processors	Processors survey (will provide a comment at producer level based on data collected)	...	• Pouvons-nous valider cette méthode? • Pour les amandes nous utilisons le rapport entre le rendement réel obtenu par les usines et le rendement normal théorique • Report May 2018: This is the average of the product loss rate for cashew apple juice (6.7%) and kernels (2.07%).	• Advisem: Processors either could not report on this or did not want to report this. The strategy to obtain this information should be revised as this is sensitive information. • Targets should be separated for nut processors and apple juice processors.
2.2 c) Percent of agricultural producers (farmers) in the target region that have access to quality storage and/or post-harvest processing facilities (FFPr 2.1 2.2 (#2/#3) – Illustrative), disaggregated by male/female	Producers	Producers survey	...	• L'indicateur est suivi également à travers les enquêtes de rendement que vous pouvez consulter • Nous proposons que cet indicateur soit réafecté à la production. Les données des enquêtes de rendements permettent de le renseigner • Report May 2018: An inventory of existing storage facilities in the intervention area was carried out in 2017. It shows that, for a number of reasons, the available storage warehouses are underoperating: group sales are still marginal and also do not require nuts to be grouped in a store prior to sales. Nevertheless, we are calculating this statistic using data that is currently being collected as part of the annual yield survey.	Advisem: we document this indicator with the producer survey. Only 17.9% of producers reported to have access to quality storage. We have suggested that BeninCajù revisit their past findings. It might be that there is a need to support the building of storage facilities. And it is important to measure progress here.
(Expected result) OUTPUT 2.3: Increased access to markets to sell agricultural products					
2.3 a) Number of distinct markets to which selected agricultural products are exported (FFPr 2 2 (#2) – Illustrative), disaggregated by processor	• TNS reports • Processors	• Desk review • Processors survey • KII with export agencies	...	...	Advisem: this indicator looks similar to 1.4.b) above except here it's about processed and raw nuts, so slightly different. Again, it would be possible to merge them into one indicator.
2.3.b) Number of purchase contracts resulting from processor attendance at international trade fairs/conferences and trade missions (Custom), disaggregated by processor	TNS reports	Desk review	...	Report May 2018: Relationships (and therefore contracts) between processors and buyers develop over long periods of time, from multiple interactions. It is, therefore, very difficult to attribute a contract to one particular interaction. As we are not confident in the source of certain contracts, we prefer to approach this indicator with caution. No update from previous period.	Advisem: based on the comment provided in the last report and information obtained in the field, we can question the relevance of this indicator. In the midterm, only one processor stated that they got a contract because of participation in a given fair. It is unlikely that TNS will reach the target if they measure the indicator with caution. Probably best to remove.

APPENDIX 23 – REVISED PMP AND SUGGESTIONS FOR THE M&E SYSTEM (CONTINUED)

Indicators and agency responsible	Sources	Methods/tools	Frequency	Methodological considerations by TNS	Suggestions by Advisem
(Expected result) Output 2.4: Improved transaction efficiency					
2.4 a) Number of private enterprises, producers' organizations, water users' associations, women's groups, trade and business associations and community-based organizations (CBOs) that applied new technologies or management practices as result of USDA assistance *(Standard #7)*, disaggregated by gender of ownership/membership; new/continuing; type of organization	TNS reports	Desk review	…	• Indicateur affecté aussi bien à la production qu'à la PSAI. • Clarifier les organisations à prendre en compte. • Pour calculer cet indicateur nous comptons aussi bien les cooperatives appartenant au réseau FENAPAB dans la zone d'intervention du projet, que les unités de transformation de pomme et les usines de transformation de noix et le GIE Sweet Benin regroupant l'ensemble des transformateurs de jus. • Le critère d'inclusion est donc le fait d'opérer dans l'une au moins des chaines de valeur du cajou. • A partir du prochain rapportage, il est retenu de comptabiliser dans cet indicateur les groupes ci-après: les groupes constitués en CVPA au cours de la période de rapportage; les groupes SILC constitués • Report May 2018: This covers producer groups, cashew nut processors, and cashew apple processors.	Advisem: this indicator is linked to USDA Standard Indicators 2 and 3, but we are not measuring here the "individual" application of a practice, but rather the institutionalization of a practice within an entire organization. Hence this indicator must be measured through an assessment of each of the organizations and processors mentioned in the previous column and if they are utilizing systematically any new technologies or management practices.
2.4.b) Number of shared value initiatives identified and tested (Custom), disaggregated by value chain actor link; commune	…	…	…	• Pour l'instant il n'y a rien à mesurer sur l'indicateur. Mais il serait bien d'analyser la pertinence de maintenir ou non cet indicateur pour la suite du projet • Proposition d'affectation au farmer linkage • Report May 2018: The project is just initiating its activities related to this indicator.	• Advisem: This indicator measures the total number of shared value initiatives facilitated by the project and tested jointly by producers, processors and/or international buyers in a given year. A shared value initiative test consists of a formal or informal agreement between producers, processors and/or international buyers to improve how marketing relationships and/or investments create additional value for producers, processors and/or international buyers compared to normal open market transactions. • Unit of measure: Number of models, thus, this indicator should be measuring farmer linkage promoted by the project. This is an important aspect and should be left in. However, BeninCajù should analyze the "unit of measurement" for this indicator.
2.4 c) Percent of firms in selected value chains that actively use business/marketing plans (FFPr 2 3 2 (#3) – Illustrative), disaggregated by firm size	Processors	Processors survey	…	…	Advisem: Midterm survey found "78%" (TNS should clarify if business/marketing plans are being actively used).

APPENDIX 23 – REVISED PMP AND SUGGESTIONS FOR THE M&E SYSTEM (CONTINUED)

Indicators and agency responsible	Sources	Methods/tools	Frequency	Methodological considerations by TNS	Suggestions by Advisem
(Expected result) Output 2.5: Improved capacity of key organizations in the trade sector and extension services					
2.5 a) Number of industry associations who are aware of international production and handling standards (FFPr 2.4.4 (#1) – Illustrative), disaggregated by standard type (AFI, HACCP, other)	• TNS reports • Project team	• Desk review • KIIs	…	• Nous proposons que le sujet soit approfondi lors des entretiens avec l'équipe du projet • Associer la composante « transformation » pour définir les normes et standards autres	Advisem: This was not discussed at length with CNTC, or Sweet Benin. We discussed certification (or seeking certification for Sweet Benin) both associations are aware.
2.5.b) Number of members of targeted producer associations/cooperatives (FFPr 1.4.4 (#4) – Illustrative), disaggregated by male/female; by length of membership (to understand turn-over)	TNS reports	Desk review	…	…	Advisem: Important to keep this indicator and disaggregate between formal and informal associations.
2.5 c) Number of industry associations who are aware of international food safety standards	• TNS reports • Project team	• Desk review • KIIs	…	• Nous proposons que le sujet soit approfondi lors des entretiens avec l'équipe du projet • Nous demandons aussi de voir sic et indicateur peut être enlevé puisqu'il est assez similaire à celui du 2 5.a • Report May 2018: This indicator covers CNTC, the cashew processor association, FENAPAB, the cashew producer association, and IFA, the cashew industry association. IFA includes CNTC and FENAPAB, but, as it is a separate association with it's own leadership and services, we include it in this indicator.	Advisem: we would remove this one because it is very close to 2.5 a, or include food safety standards above.
2.5 d) Percent of producers satisfied with technical assistance services from DEDRAS, FENAPAB, CRADIB extension agents	• TNS reports • Producers survey	• Producer survey • Desk review	…	…	Advisem: this can be removed or perhaps changed into "receiving technical assistance dissagregated by training organization (ATDA4, Processors, CRADIB, DEDRAS, FENAPAB)."
(Expected result) Output 2.6: Increased leverage of private-sector resources					
2.6 a) Value of joint public/private initiatives aimed at improved agricultural productivity and production (FFPr 1.4 5 (#4) – Illustrative), disaggregated by subject area	TNS reports	Desk review	…	Les PTFs peuvent-elles être considérées comme partenaires publics? Les interprofessions considérés comme privé?	Advisem: Based on the discussions held, only indicator 2 6.b) should be kept (as this is a USDA Standard indicator, and not 2 6.a)) This being said, current regulation does not allow for PPPs in Benin. So we need to define PPP here, and we may end up having to remove this indicator. Also, no targetwas found for this indicator.

APPENDIX 23 – REVISED PMP AND SUGGESTIONS FOR THE M&E SYSTEM (CONTINUED)

Indicators and agency responsible	Sources	Methods/tools	Frequency	Methodological considerations by TNS	Suggestions by Advisem
2.6.b) Value of new public and private sector investment leveraged as a result of USDA assistance *(Standard #9)*, disaggregated by type of Investment (private/public) (USD) (cumulative)	TNS reports	Desk review	...	• Affecté à la coordination du projet • Nous non plus on ne voit pas la difference entre le 2 6.a et le 2.6.b • Suggestion: supprimer l'un des deux • USDA: Investment is defined as any use of public or private sector resources intended to increase future production output or income, to improve the sustainable use of agricultural-related natural resources (soil, water, etc.), to improve water or land management, or anywhere along the food, feed and fiber system and natural resources management. "Private sector" includes any investment from a private actor, including for example for-profit companies, corporate investment banks, etc. "Public sector" includes any investments provided by public actors, for example, other donor agencies including USG (i.e. MCC, USAID, OPIC), local or national host-country government. "Leveraged as a result of USDA assistance" indicates that the new investment was directly encouraged or facilitated by the activities funded or resources provided by USDA. New investment means investment made during the reporting year.	Advisem: this indicator should be kept if public and private investments can be measured.
2.6 c) Number of public-private partnerships formed as a result of USDA assistance *(Standard #8)*	TNS reports	Desk review	...	Proposition de supprimer	Advisem: again, technically PPP are not allowed in Benin, so we need to review this concept. It might be preferable to remove.
2.6 d) Value of new private sector investment leveraged as a result of USDA assistance, disaggregated by subject area, type of investor (public or private) (USD) (cumulative)	TNS reports	Desk review	...	• On aimerait savoir si la valeur de cet indicateur mérite le travail qu'il le faut • Ok pour la suppression	Advisem: already measured with 2 6.b), so better to remove.

Notes:
1. FFPr INDICATOR 15: Number of jobs attributed to USDA assistance: DEFINITION: Jobs are all types of employment opportunities created during the reporting year in agriculture- or rural-related enterprises (including paid on-farm/fishery employment). Jobs lasting less than one month are not counted in order to emphasize those jobs that provide more stability through duration. Jobs should be converted to full-time equivalents (FTE). Thus, a job that lasts four months should be counted as 1/3 FTE and a job that lasts for 130 days should be counted as ½ FTE. Number of hours worked per day or per week is not restricted as work hours may vary greatly. Each job created should only ever be reported once in order to add the total number of jobs across years.
2. Nut processors expressed that no job creation occurred as a result of BeninCajù assistance, which the consultants would recommend confirming.
3. Note that for farmers it was asked the number of days that they hired new employees.

APPENDIX 24 – VALUE CHAIN ANALYSIS INDICATORS

Below are the original value chain functions, program indicators and evaluation approach. Please note that not all indicators were utilized in the VCA.

Relevant indicators	Dimension of indicator to measure	Tool and approach	Analysis/remarks
Input Supply			
Custom: Number of germlings sold by project-supported nurseries	Total Quantity of germlings and its value	Calculated from the total number of ha cultivated adjusted for mortalities	Aggregated
Number of jobs attributed to USDA assistance	Job as a result of additional demand of inputs/tools – input supplier's enterprise budget	To be covered through FGD and KII – project staff	Aggregated for total input suppliers/by type
Production			
Number of individuals who have applied new techniques or technologies as result of USDA assistance	The average cost implication of the use of new techniques/technology (disease/pest management/GAP)/ other)	Producers survey to capture the increase/reduction in cost on new technique/ technology	Aggregated impact at the holistic value chain level
Number of jobs attributed to USDA assistance	Job as a result of additional work undertaken on the farm/increased volume of produce and new practices	To be covered through FGD and KII – project staff	Aggregated for total volume or hectares
Percent of producers (farms) who have access to current market information through their cooperatives or producer associations	Change in prices as a result of market info	To be covered in the producer survey or to be covered through FGD	Covered under farm budget
Number of hectares under sustainable agroforestry practices	Changes in cost and benefit per hectare (farm models?)	To be covered under FGD	Aggregated for total ha under sustainable agroforestry
Number of individuals who have applied improved techniques and technologies as a result of USDA assistance	Already covered under indicator above (number of ha)	Covered in producer survey or project records	Impact covered under farm budget
Volume of selected crops (cashew) produced per hectare in kilograms (yield).	Average increase in Yield in kilograms	To be covered in producer survey and FGDs	Averaged and triangulated from producers' survey and FGDs
Value of sales by project beneficiaries (cashew apple, raw cashew nuts. Processed kernel)	Quantities times prices	Calculated based on other indicators related to yields and prices	Calculated from Farm budgets
Average margin between farm gate price and end product price for selected agricultural value chains	Farmgate price	FGDs with producers	Calculated from farm budgets
Average production cost per unit of output for selected agricultural commodities	Typical farm budget developed	FGDs with producers	Calculated from farm budgets
% of product loss due to spoilage or improper processing	As part of typical farm budget	FGDs with producers	Calculated from farm budget and aggregated at the value chain level
Percent of agricultural producers (farms) in the target region that have access to quality storage and/or post-harvest processing facilities (illustrative)			Contribute to reduced losses
Number of shared value models identified and tested	Cost reduction per transaction and number of transactions per year	FGDs with producers or producers' association	Aggregated benefit in value terms

APPENDIX 24 – VALUE CHAIN ANALYSIS INDICATORS (CONTINUED)

Relevant indicators	Dimension of indicator to measure	Tool and approach	Analysis/remarks
Traders/Intermediaries (if this function exist)			
Number of jobs attributed to USDA assistance	Job as a result of additional work undertaken on the farm/increased volume of produce and new practice	To be covered through FGD and KII – project staff	Aggregated for total number of traders and the proportion of produce handled by this category of actors
Average margin between farm gate price and end product price for selected agricultural value chains	Farmgate price Traders' price	FGDs with producers/ traders	Average of all enterprise budgets/batch or consignment estimates
Average production cost per unit of output for selected agricultural commodities	Enterprise/Consignment budgeting	FGD with traders	Average of all enterprise budgets/batch or consignment estimates
Average production cost per unit of output for selected agricultural commodities	Typical product(s) budget(s) developed	FGDs with traders	Average from all enterprise budgets/batch or consignment estimates
% of product loss due to spoilage or improper processing	Typical product(s) budget(s) developed	FGDs with traders	Percent of average from all enterprise budgets/batch or consignment estimates
Processors			
Average margin between farm gate price and end product price for selected agricultural value chains	Farmgate or Traders' price and Final Prices adjusted for conversion ratio	Producers' survey/ processors' or FGDs with producers/traders or published statistics	Average of all enterprise budgets/batch or consignment estimates
Percent of registered firms in target sectors that obtain certification with international standards related to product quality (illustrative)	Differential in prices for certified processes/products	FGDs with processors	Averages and aggregates worked out for the proportion of produce complying to standards
Average production cost per unit of output for selected agricultural commodities	Typical product(s) budget(s) developed	FGDs with processors or KII with processors	Average from all processors
% of product loss due to spoilage or improper processing	Typical product(s) budget(s) developed	FGDs with processors or KII with processors	Average and aggregated for the total volume of produce
Number of distinct markets to which selected agricultural products are exported (illustrative)	Proportion of sale in each market accessed	FGDs with processors or KII with processors	Volume and values for different end markets
Number of shared value models identified and tested	Cost reduction per transaction and number of transactions per year	FGDs with processors or KII with processors	Average cost reduction, aggregated for the volume affected
Traders (Final Products) – if applicable			
Number of international markets covered by government trade promotion agencies (i.e., buyer research reports, regulations and standards reports, etc.)	Increased sale value and volumes	To be covered by survey or estimated from export statistics	Aggregates
Average margin between farm gate price and end product price for selected agricultural value chains	Purchase and sale prices	Processors' survey or FGDs with traders and price statistics (if available)	Averages worked out based on the prices

APPENDIX 24 – VALUE CHAIN ANALYSIS INDICATORS (CONTINUED)

Relevant indicators	Dimension of indicator to measure	Tool and approach	Analysis/remarks
Volume of commodities sold by project beneficiaries (raw cashew nut, processed kernel, value added products)	Proportion of produce handled by this channel	Project data, FGDs with each type of actors	Aggregates
Average production cost per unit of output for selected agricultural commodities	Typical product(s) budget(s) developed	FGDs with traders/exports if other than processors themselves	Averages worked out

APPENDIX 25 – AN ANALYSIS OF GOLD VERSUS SILVER TRAINING

The project delivers two packages of training to cashew producers at the village level, termed "Gold" and "Silver." Gold and Silver training packages both include aspects of farm and plantation management, cashew production and post-harvest handling, association-led access to finance for inputs and crop aggregation, other entrepreneurial activities, and CRS' "smart skills" package. Gold training comprises 28 days over a two-year period and Silver training, 10 days over a one-year period. The consultants were told that Gold training is essentially Silver training done twice, and a review of the training schedule[1] supports this view, with some minor exceptions.

Originally, the Gold and Silver training packages were planned to be courses that would result in FENAPAB certification and allow producers to receive a better price for an increased quality of nuts. However, FENAPAB is also one of the organizations doing the training, which is a conflict of interest, and it became known that buyers do not currently pay a premium for better nut quality. One notable, albeit limited, exception is Tolaro direct-sourcing farmers via an end-of-season "bonus." Currently, there are no criteria to graduate producers from the programs by demonstrating they are doing specific things.

In addition, Gold villages were originally selected to be close to the original BeninGold nut processing plants, but none of these are currently operational.

Silver producers were very slightly more likely than Gold producers to self-report applying techniques they learned for good agricultural practices, good harvest and post-harvest practices and good farm management practices (see Table 9, Section 4.2.1 of the report). However, producers who had undertaken the Gold training were significantly more likely to apply the majority of these practices than producers who had undertaken Silver training (see Table A25-1). For good harvest and post-harvest practices there were very few significant differences between Gold and Silver; where there were differences, Silver producers often performed better than Gold producers (see Table A25-1). For example, Silver producers were significantly more likely to collect nuts at three-day intervals or less; however, they were also more likely to wait more than 7 days to collect nuts. Silver producers were also more likely to store nuts in a closed room and less likely to store them outside.

Because Silver and Gold producers are located in different communes that have different cashew growing characteristics—for example, trees grown further north typically have higher production capacity—the consultants conducted general analyses categorizing control producers by "Gold" and "Silver" areas and analyses by commune. Generally, Silver BeninCajù producers consistently had higher production (kg) and income (sales only) values than their "Silver" control producer counterparts, while Gold BeninCajù producers had higher production and income values for non-standardized and productive trees, but lower values by hectare and tree than their "Gold" control producer counterparts[2,3] (see Table A25-2).

[1] *Normes des mesures de performance et critères d'évaluation des producteurs bénéficiaires des interventions de BeninCajù*.

[2] Note that "tree values" are based upon the question "Combien d'arbres de cajou avez-vous?" and "productive tree" values upon the question "Combien d'arbres (entre 5 et 25 ans) avez-vous qui produisent encore?"

[3] Analyses by productive tree have a much smaller sample size (378 individuals) versus non-standardized (579 individuals), hectare (578 individuals) and tree (472 individuals) analyses. This ultimately leads to the results for productive trees being less reliable because of the smaller sample size. This aspect is further exacerbated when calculations are done at the commune level (for instance, Djidja sample size is 12, and Djougou sample size is 36).

APPENDIX 25 – AN ANALYSIS OF GOLD VERSUS SILVER TRAINING (CONTINUED)

Table A25-1
Percentage of BeninCajù Producers who are Applying Good Agricultural and Harvest/Post-Harvest Techniques, by Silver and Gold Training

Practices learned and applied	BeninCajù		
	Gold	Silver	Total
Good agricultural practices in last 12 months			
Percent undertaking intercropping**	58.5	45.9	50.1
Percent undertaking pruning**	80.9	67.3	70.7
Percent undertaking thinning*	68.9	57.4	59.0
Percent undertaking weeding	83.6	77.2	76.7
Percent making firebreak**	84.7	72.9	74.8
Percent with presence of pests	55.7	52.5	54.2
Percent with cattle intrusion***	44.8	62.0	55.9
Good harvest and post-harvest practices			
Percent collecting nuts from the ground	98.4	97.7	97.9
Percent collection interval: < 3 days***	28.9	48.8	40.8
Percent collection interval: 4-5 days	34.4	11.9	20.0
Percent collection interval: 6-7 days	15.3	8.3	11.5
Percent collection interval: 7+ days*	20.8	30.4	27.2
Percent separate nut/apple with nylon string	17.5	13.9	14.5
Percent drying nuts before storing	85.8	78.5	81.7
Percent using sound to estimate dryness	38.2	47.5	44.2
Nut storage: Percent using a closed room***	72.1	87.8	81.9
Nut storage: Percent using roof	3.3	0.7	1.9
Nut storage: Percent using outside***	19.7	4.3	10.1
Nut storage: Percent using cooperative	2.2	5.9	4.3
Package nuts: Percent using jute bags	91.3	89.8	89.5
Percent knowing how buyers judge nut quality	57.9	50.2	51.1

Statistical tests (Chi-square): *** p<0.001, ** p<0.01, * p<0.05.

On average, Silver producers reported having larger plantations (9.92 ha versus 7.51 ha), but fewer trees (721 versus 1,261) and fewer productive trees (417 versus 560). This means that findings standardized by tree and hectare units are the reverse of what would be expected. Analyses by commune illustrate that data standardized by hectare show no general trends, with sometimes Gold and sometimes Silver being higher or lower[4] than the control values. When analyses by commune were examined with data

[4] Note that the Total BeninCajù values are sometimes different from Gold or Silver values because of those BeninCajù individuals that stated they did not undertake the BeninCajù training (and however, importantly, were in the lists).

APPENDIX 25 – AN ANALYSIS OF GOLD VERSUS SILVER TRAINING (CONTINUED)

standardized by productive tree, Gold values were always higher than the control values, whereas Silver values were sometimes higher and sometimes lower (see Table A25-3).

Table A25-2
Production and Income of BeninCajù Producers (Gold and Silver) and Control Producers in "Gold" and "Silver" Areas

Production and income	BeninCajù		Control	
	Gold	Silver	'Gold' areas	'Silver' areas
Production (kg) – Calculated from sales, uses and in-kind expense payments				
Production (non-standardized)	1,524	1,279	1,399	979
Production by hectare	254	290	332	217
Production by tree	3.08	2.54	3.59	2.44
Production by productive tree	16.98	8.40	8.51	6.41
Cashew income (FCFA) – Calculated from sales only				
Cashew income (non-standardized)	811,111	652,480	684,735	487,801
Cashew income by hectare	143,397	149,268	170,992	111,291
Cashew income by tree	1,550	1,318	1,792	1,212
Cashew income by productive tree	9,018	4,575	4,280	2,949

The 2017 BeninCajù yield survey reported that Gold producers had 312 kg/ha of production and Silver producers, 287 kg/ha. The survey authors indicated that the difference was likely a result of geographic differences rather than differences in training, as the Gold and Silver producers had been coached during the same period on the same themes.

Because the trends do not indicate that Gold training consistently provides greater benefits than Silver training, and considering that Gold training is essentially Silver training done twice, in the future BeninCajù could focus on Silver training in the first year and refresher training in the second year, rather than repeating a whole year of training.

Ultimately, KIIs with project staff revealed that the majority of Gold training has already been completed or is currently in progress. However, these results could be used for future training programs.

APPENDIX 25 – AN ANALYSIS OF GOLD VERSUS SILVER TRAINING (CONTINUED)

Table A25-3

Production and Income of BeninCajù Producers (Gold and Silver) and Control Producers by Commune

Commune	BeninCajù			Control	BeninCajù			Control
	Gold	Silver	Total		Gold	Silver	Total	
	Production (kg) by hectare				Cashew income (FCFA) by hectare			
Dassa Zoumè		111	122	141		94,523	93,014	62,015
Glazoué		395	394	217		161,286	160,090	90,158
Savalou	262		267	449	159,836		162,812	213,413
Bantè	260		255	209	128,375		125,763	110,303
Ouèssè		258	258	239		112,292	112,292	118,794
Savé		173	174	126		69,771	70,975	57,766
Djidja		492	430	317		253,664	224,598	140,224
Tchaourou		235	231	268		194,007	189,330	161,699
N'Dali		275	275	259		178,289	178,289	180,981
Bassila		341	371	208		172,419	191,190	110,010
Djougou	223		223	253	132,921		132,921	168,817
	Production (kg) by productive tree				Cashew income (FCFA) by productive tree			
Dassa Zoumè		2.1	2.7	2.6		2,279	2,423	1,214
Glazoué		14.7	14.8	10.0		6,110	6,098	3,875
Savalou	13.8		13.6	8.8	7,401		7,300	3,788
Bantè	16.7		16.2	6.7	7,724		7,503	3,316
Ouèssè		4.2	4.2	8.1		1,751	1,751	3,537
Savé		5.8	5.8	2.7		2,034	2,092	1,048
Djidja		5.7	5.3	9.3		3,100	2,885	4,067
Tchaourou		9.8	9.4	6.5		4,523	4,349	4,229
N'Dali		10.0	10.0	5.2		7,277	7,277	3,873
Bassila		8.0	21.1	10.3		5,371	13,176	4,958
Djougou	27.4		27.4	12.2	17,936		17,936	8,845

No statistical analyses done by commune, as sample sizes are very small.

APPENDIX 26 – THE CASHEW VALUE CHAIN

Cashew is an important cash crop of Benin, representing nearly 10% of exports[5] with great potential to become the "third pillar of Benin's economy,"[6] as well as offering strong prospects to improve nutrition, rural livelihoods and employment—especially through better value chain organization and the promotion of local industrial processing.

Production

The current production level is estimated between 120,000[7] and 140,000[8] RCN tons, ranking Benin the fifth cashew producer worldwide. The government has fixed an ambitious target of 300,000 tons per annum by 2021, although the International Trade Center (ITC) projects the figure will be closer to 244,000 RCN tons by 2025.[9]

Global cashew production has reached 790,000 metric tons (kernel basis) in 2017-2018, an increase of 32% from the previous decade. Over 90% of the world's cashew production comes from only 10 countries.[10] West Africa is a major production zone, representing 43% of worldwide cashew production, followed by India (25%), East Africa (12%) and Vietnam (9%).[11]

In 2017, Benin exported 83,668 tons of RCN while 15,615 tons of RCN was processed locally and exported as kernels. The total value of global exports of kernels and RCN amounted to USD 7.65 billion in 2017, which is about 70% higher than that realized in 2013. There has been a sharp increase in RCN pricing in the past five years, followed by an increase in the price of kernels that has levelled off in the past year.

Pricing

Benin follows a limited price regulation mechanism, where the floor, or minimum, price is set under the arbitration of the Ministers of Trade and Agriculture (which actually have no power to set the price), along with a schedule of sale. The actual farm gate price fluctuates widely above this minimum price, as it depends on world market forces. It is also influenced by changes in the FCFA-USD exchange rate.

Market analysis from previous years shows a recurring cycle of trends and actions that have put a direct pressure on pricing (see Table A26-1). The advice given to value chain operators by support agencies (such as Nitidea's N'Kalo service and CashewInfo.com's market reports) can be contradictory (for example, telling suppliers to hold stock, while telling buyers to purchase quickly). It has a short-term, non-holistic view that does not prioritize the potential of value-addition in the full market chain. Because

[5] <http://www.theafricareport.com/West/benin-foreign-trade-recovery-in-sight.html>.
[6] <https://www.jeuneafrique.com/mag/519406/economie/grand-format-benin-anacarde-letat-doit-accompagner-la-creation-de-nouvelles-plantations/>.
[7] <https://www.ecofinagency.com/agriculture/1603-38208-benin-cashew-farm-gate-price-rises-by-cfa150-per-kg-for-the-2017-18-marketing-season>.
[8] <http://quotidien-lematinal.info/dynamisation-de-la-filiere-anacarde-au-beninle-gouvernement-pense-a-de-nouvelles-usines/>.
[9] *Cashew Nuts in Benin – The West African Peral*. Brochure by ITC developed in association with APIEX, CNTC and the National Cashew Exporters' Council (CoNEC).
[10] Vietnam, Nigeria, India, Côte d'Ivoire, Benin, Philippines, United Republic of Tanzania, Guinea-Bissau, Indonesia and Brazil.
[11] International Nut and Dried Fruit Council. *Statistical Yearbook 2017-2018* (https://www.nutfruit.org).

APPENDIX 26 – THE CASHEW VALUE CHAIN (CONTINUED)

actors of the domestic cashew value chain operate with scarce market information, the influence of information providers often has significant impact on pricing, namely through speculation. Beninese processors, however, are generally more cautious than their Asian counterparts—out of prudence, awareness of higher risk levels and funding limitations—and reluctant to fall into a speculative bubble that has seen many Asian processors go bankrupt.

Table A26-1
Seasonal Value Chain Trends – Impact on Price

Timeline	Events	Pressure on price
Pre-campaign	Expected worldwide processing capacity (demand)	Variable
	Expected worldwide supply/demand levels (including climate conditions and supply/demand of alternative nuts)	Variable
	Expected stock levels (national supply)	Variable
	Forecasted United States currency exchange rate trends	Variable
	Forecast of retail price of kernels in coming months	Variable
	Minimum price set by government	Variable
	Pre-financing contracts from international traders and local processors	Cap on pricing for contract buyers/increase in pricing for non-contract buyers
Early campaign	Strong competition to procure highest quality RCN	Upward
	Speculation of price increase	Upward
	Competition from international RCN buyers and traders (mostly for Asian processing)	Upward
	Retention by producers/cooperatives and wholesalers, due to speculation of further price hikes	Upward
	Retaliation from international buyers—advising all traders to stop buying above a certain threshold	Downward
	Local processors unable to compete/fund procurement (inability to buy above a certain threshold/risk of increase in projected losses)	Downward
Mid-campaign	Signature of procurement contracts with price caps	Cap on pricing for contract buyers/increase in pricing for non-contract buyers
	Release of stock held by producers/wholesalers (realizing that prices are not increasing and might fall)	Capping
	Increase in supply due to release of stock	Downward
	Traders worry of defaulting on contracts rush to buy	Upward
	Processors worry to not have enough stock, and buy to reduce their production loss	Upward

APPENDIX 26 – THE CASHEW VALUE CHAIN (CONTINUED)

Timeline	Events	Pressure on price
	Decrease in quality	Increase in price for top quality (as less supply of good quality RCN)
	Decrease in quality impacts international confidence	Fewer orders—downward pressure on prices
	Break in supply/export chain for some actors leads to defaults in contracts, being stuck with large stocks, and refusal of banks to continue funding	
End of season	Further decrease in quality	Increase in price for top quality/less supply of good quality RCN
	Further release of stock held by processors	Downward
	Decrease in quality	Downward
	Decrease in demand	Downward

According to price and trade data maintained by ITC, the price per kilogram of Benin's exported kernel has increased significantly, from USD 5.92 in 2014 to USD 7.83 in 2017—an increase of nearly 32.3%. Additionally, Benin's RCN has consistently sold above West African competitor prices, and market data from N'Kalo and Cashewinfo show that kernels processed domestically are regularly selling at USD 0.20 per pound above the regional market price.

Products

While cashew nuts are harvested and either exported or, to a much lesser degree, processed locally to extract the kernel, other products such as the cashew apple are mostly left unused. Thanks to programs such as BeninCajù, the value-addition from monetizing cashew by-products and promoting a diversified portfolio of products has become an important strategy for Benin's economic growth:

- Cashew apples are increasingly pressed to extract cashew apple juice for domestic and regional sales. The organization of by-product processing into a profitable value chain may still hold the key to tremendous value-addition, as by-products, such as animal fodder, and secondary processed products (such as jams, alcohol or paste) remain unexploited for lack of know-how and promotion of domestic consumption.
- Once the kernels are extracted from the RCN, CNSL oil is also pressed out from the discarded shell and often monetized, while the CNSL-free shells are recycled as biofuel by processors and sometimes sold.

Service Providers

Business development services are provided by organizations such as FENAPAB, the Association of Cashew Kernel Processors, equipment manufacturers, input suppliers, financial institutions, the ACA, the iCA, and development interventions such as BeninCajù. These organizations are essential for activities in

APPENDIX 26 – THE CASHEW VALUE CHAIN (CONTINUED)

the value chain, notably processing, to become sustainable. An effective program such as BeninCajù must continue to support and facilitate business development, investments, improved processing techniques, efficient management of operations, certification, adequate financing mechanisms, and access to markets. Strong demand for cashews will continue to push actors to mobilize innovative resources to advance competitiveness and encourage the government to promote the sector's viability by implementing adequate measures. At the same time, improved access to market information and know-how will also strengthen stakeholders' ability to make sound decisions.

Value Chain Functions and Integration

The cashew value chain is comprised of five main functions: input supply, production, processing, control and governance, and trade. Marketing is driven by actors across the entire chain, with some actors involved in multiple linkages and driving the product's movement towards the international or domestic retail markets. The value chain is fragmented, as there are no strong binding links among the different value chain actors, with many functions falling along a continuum between the formal and informal sectors.

Input Supply

Inputs necessary for cashew production include agrochemical inputs, packaging, labour, materials and equipment. Relatively speaking, cashew production is a low-input production model. The cost of inputs stands at about 230 FCFA/kg of RCN, and mainly includes manual labour costs. In many plantations, intercropping is practiced, where cashew trees indirectly benefit from agricultural practices such as fertilizer treatment and irrigation.

Generally, producers propagate their own nursery plants, while a segment of fruit tree nursery enterprises (which produce grafted seedlings) are also emerging, but are still limited in scale. These, alongside access to certified seedlings and improved production techniques, can help achieve optimal yields.

Production

An estimated 562,000 ha of land was under cashew production during the 2012-2016 period, peaking at 700,000 ha in 2015.[12] The main types of actors involved in production are nurseries, which provide seedlings, smallholder and larger producers, whose livelihoods depend on their harvest, and associations, primarily cooperatives. Dealers and agents are the marketing actors who push the process forward, linking the producers (individuals or associations/cooperatives) with actors in the next step of the value chain. In some cases, domestic processors and producers may also act as RCN traders.

The following are the characteristics of the production system in the context of the BeninCajù program:

- *Low ratio of productive trees* – The number of trees varied per hectare between and among the control and beneficiary farmers. On average, 116 trees per hectare were reported for both groups (control: 104 trees; treatment: 129) and an average of 76 productive trees per hectare (control: 73 productive trees; treatment: 80 productive trees). The ratio of productive trees to

[12] Crop statistics, FAOSTAT (www.fao.org/faostat/en/). Data available up to 2016.

APPENDIX 26 – THE CASHEW VALUE CHAIN (CONTINUED)

total trees was noted to be slightly higher for control producers (70%) compared to beneficiary producers (63%). The ratio of productive trees to total trees is a significant indicator, as a cashew plantation with at least 70% productive trees can be considered at an optimal ratio (with 30% plant replacement ratio).[13]

- *Range of plantation size* – The majority of the beneficiary producers (55%) and control producers (62%) have plantations smaller than 5 ha. Farmers tend to systematically overestimate their farm size, and have particular difficulty accurately estimating the number of hectares of productive cashew trees (while also excluding other crops). Improved measurement techniques, such as geographic information systems and aerial image surveys, will help understand plantation size better and thus related indicators, such at productivity levels.

- *Low yield* – The average production yield of the BeninCajù beneficiaries was slightly higher than the control group (274 kg/ha compared to 257 kg/ha), but lower than the national average, which has consistently been recorded as 325 kg/ha in the past five years.[14] Among the beneficiaries, the highest yield achieved was reported to be 1,992.5 kg/ha, against a highest yield of 1,607 kg/ha in the control group, with 24 producers (7 control and 17 treatment) reporting a yield of more than 1,000 kg/ha. When yield is compared on the basis of productive trees only, beneficiary producers realized about 61.9% higher yields than the control group producers. Comparison at the regional level shows that Benin has one of the lowest yields (Ghana is at 900 kg/ha).[15] It is important to note, however, that Total Factor Productivity is a better indicator of production benefit, and comparison between demo plots and neighbouring countries' experiences, with better land management and technical mapping, can provide a more accurate measure of productivity levels. It is also important to note that input and land costs vary greatly between countries, and it is entirely possible to maximize yield while simultaneously going from profit to loss due to input costs.

- *Farm-family oriented production system* – The production system is very family-oriented, with 99.5% of the farms having some family engagement. Only 0.5% of the farms are completely run by waged employees. Production does create some employment, with approximately 46% of farmers having both family members and paid employees.

Trade

Trade is the most powerful driver of the cashew value chain in Benin. It mainly concerns RCN traded on the international market and, to a much lesser degree, to local processors. India and Vietnam are the dominant export destinations. Dealers and agents are the marketing agents who push forward the process, linking the producers (individuals or associations/cooperatives) with the actors in the next step of the value chain. In some cases, domestic processors as well as producers may also act as RCN traders.

[13] Keeping in mind that it will take two to three years from the time one plants until the time one can harvest nuts.
[14] Crop statistics, FAOSTAT (www.fao.org/faostat/en/). Data available up to 2016. This number is substantially higher than the yield presented at the baseline survey (225 kg/ha) and midterm survey (274 kg/ha).
[15] <http://quotidien-lematinal.info/dynamisation-de-la-filiere-anacarde-au-beninle-gouvernement-pense-a-de-nouvelles-usines/>.

APPENDIX 26 – THE CASHEW VALUE CHAIN (CONTINUED)

Other actors directly involved in the cashew trade are transporters, customs officials, financial institutions, public or private quality and control agents, and international exporters.

The RCN harvest and trading season starts in the first quarter of the year. Exports generally launch in April and wane in August. On the international market, RCN from Benin are known for their higher KOR, which averages a score of nearly 49.[16] This internationally-recognized quality standard, which measures the quantity of usable kernels after shelling the RCN, is important for buyers, as it is an indicator of the expected output in kernels and, thus, revenue potential. Based on Advisem's research, producers are able to sell their harvest fairly easily. The proportion of produce sold was reported to be 78.9% (treatment: 78.4%; control: 79.5%), although this is difficult to accurately measure because there is very little bookkeeping. The remaining volume is either given in kind as compensation for manual labour or held for future sales.

The RCN export sector is dominated by registered international traders. All trading is calculated in USD and influenced by currency fluctuations. Nearly 100% of Benin's RCN is destined for only two markets (India and Vietnam). Locally processed kernels, however, are largely exported to Europe and North America by traders, who link with secondary industrial processors (seasoning and packaging) for international brands, and then re-export to worldwide destinations. The multinational retail buyers are the true price makers. They finance the entire sector and therefore have the power to set the price in their interest. There are few of them and they use an informal price-setting mechanism for the duration of the harvest season, which is in direct competition with local processing.

Over the past five years, the quantity of RCN officially exported has decreased from 115,670 tons to 83,688 tons (Trade Map, ITC[17]). Although some of this decline could be explained by an increase in local processing, trade is poorly controlled by local authorities, and supply management lacks transparency. The borders are porous and unreported exports via neighbouring countries, motivated by taxes and port costs, offer an explanation for the disparities in figures (production, price, exports) communicated by various sources.

A very small portion (about 13%) of Benin's RCN is processed domestically. Kernels from these local units are either consumed locally (in the case of artisanal/small-scale processors), sent to other units for further processing (for satellite processing), or exported to the Netherlands or the United States for secondary processing and packaging for multinational brands (industrial-scale processors).

Processing

It is no surprise that processing in Benin is underdeveloped and only a small fraction of domestic production is locally processed (13%). Processing in Benin involves two main products: the extraction of the cashew kernel from the RCN and, to a lesser degree, the processing of the cashew apple into juice. The cashew shells are used as an energy source, CNSL oil is used as an industrial input, while waste from the kernels (peel, infested kernels) and the apples (peel, pulp) is used as animal fodder. Due to the perceived opportunities for value addition and overall development potential, processors receive support from numerous international development programs, such as BeninCajù.

[16] <http://cir-benin.com/images/Pdf/cashew_nuts_of_benin_brochure.pdf>.
[17] <http://www.intracen.org/itc/market-info-tools/trade-statistics/>.

APPENDIX 26 – THE CASHEW VALUE CHAIN (CONTINUED)

A major challenge to the cashew industry is that processors are vulnerable price takers. They must compete with multinational exporters for the inputs (RCN), with limited financial resources and in an informal context of difficult infrastructures and cash-based transactions. They must also navigate a context of international global trends, affected by USD currency fluctuation, and a considerable lack of local expertise. The price of their kernels is also largely driven by multinational companies such as Costco, Kraft, and Walmart, and global market trends.

This situation leaves a very small margin for local processing to be profitable. The value-addition opportunities are obvious and could have significant long-term impact, but ambitious entrepreneurs have had difficulty keeping up with the pace of mechanized processing techniques, and implementing competitive best practices. The relatively high cost of inexperienced manual labour, India and Vietnam's protectionist measures, the need to import equipment as well as know-how, and a financial sector that is reluctant to provide the necessary assistance means that many processing units are functioning under capacity, often at a loss, and have suspended their activities until the processing margins offer a profitability outlook.

Additionally, Benin's regulatory framework is not yet discernable, and professional associations have had trouble exerting influence on the sector's organization.

Control and Governance

The control and governance rules and buyers' requirements are essentially grounded in the internationally-recognized standards applied by major market players. For RCN quality, the KOR is used systematically by buyers (along the value chain, until it enters a processing unit) to validate quality and justify price. A shift is then made and actors internationally recognize the Association for Food Industries' (AFI) kernel grading specifications, which are industry-approved worldwide, as the standard used to categorize quality (grades) and determine price.

In addition to these two basic RCN/kernel quality standards, the industry also applies the standards listed in Table A26-2 and Appendix 28 to regulate hygiene, food safety, and social and labour practices of processed goods. It is important to make a distinction between standards and certifications. These terms are often erroneously used interchangeably. Recognized international standards, such as HACCP, ISO, and BRC are certified by third party certifiers (such as SCS, NSF or Flocert) via on-site audits.

Agricultural products in West Africa are generally subject to both formal and informal taxation as they progress along the value chain checkpoints during the course of being handled, such as logistic transfers and product quality controls. Informal sale transactions also involve untraceable expenses at checkpoints manned by official and unofficial local authorities. Bribes are often collected in lieu of formal taxes, leading to a system that lacks transparency. It is therefore difficult to adequately break down the margins, but the context justifies the higher prices at final destination.[18]

[18] <http://www.africancashewinitiative.org/files/files/downloads/aci_benin_gb_150.pdf>.

APPENDIX 26 – THE CASHEW VALUE CHAIN (CONTINUED)

Table A26-2
Summary Description of Types of Certification

Certification	Mandate
African Cashew Alliance (ACA)	The ACA offers the ACA SEAL label, which confirms compliance with principal internationally-recognized standards of quality, food safety and social and labour standards. It does not, however, provide the same level of verification of compliance as BRC or HACCP.
British Retail Consortium (BRC)	Provides a framework to manage product safety, integrity, legality and quality, and the operational controls for these criteria in the food and food ingredient manufacturing, processing and packing industry.
USDA Organic Certification, Flocert, Ecocert, BIO EU	Various organic bio and fair trade certification programs.
SCS Global Services	SCS is accredited to provide services under a wide range of internationally recognized certification programs. Consistent with its mission, SCS is a chartered benefit corporation reflecting its commitment to socially and environmentally responsible business practices.
SGS, LCSSA, ABSSA	Certifies that products for import (a random sample from each sale inventory) are free from regulated pests, and conform with all phytosanitary requirements as specified from the importing buyer and country.

Institutional Services and Enabling Policies

The ATDA4 within the Ministry of Agriculture will undertake cashew-related extension under a strategy providing critical extension services to cashew producers, particularly in scaling-up access to high-yielding varieties and yield-increasing practices. While a number of business development service and training providers may be helpful in the short-term, an extension program using public-private partnership models may be more appropriate, sustainable and effective. Change in the cashew value chain has to be led by the industry and facilitated by the public sector, and not the other way around.

Government interventions have a direct influence on pricing and demand—notably through floor price determination, subsidies, fiscal benefits, and export tax. It is critical to better understand the regional business environment within a global context so as to implement effective policies that promote competitiveness of the cashew industry in Benin.

Value Addition

The distribution of product margins varies according to the different products (RCN, kernel, cashew apple juice and by-products) and seasonality.

The profitability of RCN production comes mainly from the strong price increases in the past five years, a low need for costly inputs, and the low level of manual intervention prior to the harvest season. The sector in Benin, however, remains an underperformer and could gain significantly from cashew

APPENDIX 26 – THE CASHEW VALUE CHAIN (CONTINUED)

processing, as nearly 87% of Benin's RCN is exported without any form of local value-addition. The potential for job creation and its impact on direct and indirect poverty reduction remains largely untapped. The Benin cashew industry, with support from the government and public-private partners, has much to gain from a concerted effort to shift its export portfolio towards locally processed cashew products.

Organization of the Cashew Value Chain

Benin's weak cashew sector organization means it is having difficulty leveraging a private sector voice to lobby the government for its development needs. Given the lack of strong organization among producers and processors, a dynamic informal sector and limited government regulation, multiple foreign actors operating at all levels of the chain influence and alter trade dynamics to suit their needs. Additionally, poor physical infrastructure and inappropriate warehousing capacity and use of facilities contributes to post-harvest losses. Electricity is expensive and often unreliable, especially in remote regions, making it difficult for processing plants to be competitive. Lag times at the port, in addition to relatively costly, inefficient handling and overloading, are additional constraints. The state's general difficulty in enforcing legal, economic and security measures, which is further compounded by porous borders and regional insecurity, adds to the fragility of this important value chain.

The country's financial industry is also under-developed, with banks concentrated in the capital offering few services in rural cashew producing areas. As noted in the evaluation report, banks are skeptical to support processors, contrary to RCN trading which has favourable pricing and a much simpler business model. Weak processing and technical knowledge, scattered development efforts by international partners and difficult access to extension services are other major challenges for the development of a viable processing sector.

Conclusion

Benin's cashew sector is in a strong position to improve the livelihoods of the Beninese population by offering diversified and regular income sources for producers, better socio-economic inclusion of women and youth through employment, and overall economic gains for the country through significant job creation, value addition from processing (of RCN, apples and their respective by-products) and exports, and transfer of skills and technology to its labour force. The promotion of local consumption would also fare well for the sector, as this has the potential to make the value chain more resilient to international market influence, while also accelerating the country's sustainable development. Benin is in a distinct position in terms of the quality of its cashew production and processing potential. A focus on strategies to strengthen institutional capacity, improve industrial activities, and facilitate market linkages is evident from this analysis. The value chain can also benefit from stronger and formal linkages, improved access to service providers and market information, fiscal privileges and subsidies to promote investments in processing, vocational training to improve productivity, local production packaging and equipment, and overall business guidance services.

APPENDIX 27 – EVIDENCE OF SAVINGS, LOANS AND INVESTING

The evaluation conducted a specific analysis of the saving and loans habits of survey respondents. Over the last 12 months, 45.6% (males: 45.6%, females: 46.0%) of BeninCajù producers, compared to only 26.9% (males: 27.6%, females: 21.8%) of control producers, reported that they had saved money. Additionally, 27.6% (males: 26.4%, females: 33.3%) of BeninCajù producers, compared to 14.2% (males: 14.7%, females: 11.5%) of control producers have received a loan since 2016. At the time of the baseline study, 40% of the surveyed BeninCajù producers and 35% of the surveyed control producers had received credit over the five previous years, suggesting that project activities around business management training and SILCs may be having a positive influence on individuals' desire and ability to save and obtain loans. Of those individuals who have saved, 89.8% of BeninCajù producers and 92.2% of control producers said they have saved some of their cashew nut income.

Those who reported saving generally kept their money in MFI institutions (BeninCajù: 40.0%, control: 45.7%), at home (BeninCajù: 31.5%, control: 34.1%), and with tontines (BeninCajù: 30.6%, control: 14.0%) and SILCs (BeninCajù: 9.8%, control: 0.0%); however, some BeninCajù respondents may have referred to SILCs as tontines. Those individuals who are not saving said it was because they did not have money to save (BeninCajù: 86.6%, control: 80.3%). Of those individuals who obtained loans, they generally received them from MFIs (BeninCajù: 67.6%, control: 79.4%), SILCs (BeninCajù: 14.1%, control: 1.5%), CVPAs (BeninCajù: 12.7%, control: 4.4%), and other sources (BeninCajù: 3.5%, control: 5.9%).

It is also important to examine the savings and loans habits of the entire survey populations to better put the information into context. Of all surveyed producers, saving is generally done in MFI institutions (BeninCajù: 18.2%, control: 12.3%), at home (BeninCajù: 14.4%, control: 9.2%), and with tontines (BeninCajù: 14.0%, control: 3,8%) and SILCs (BeninCajù: 4.5%, control: 0.0%), while loans are generally received from MFIs (BeninCajù: 18.6%, control: 11.3%), SILCs (BeninCajù: 3.9%, control: 0.2%), and CVPAs (BeninCajù: 3.5%, control: 0.6%). Thus, the survey data clearly shows a higher percentage of BeninCajù producers accessing savings and loans through SILCs and MFIs compared to control producers.

BeninCajù beneficiaries appear to be somewhat more likely to say they are saving to invest in maintaining their cashew plantation(s) or installing a new one, compared to control individuals who appeared more likely to invest in cash or food crops (see Figure A27-1).

An examination of what producers have actually used their loans for results in similar percentages, especially around investing in their cashew plantation(s) (BeninCajù: 72.5%, control: 73.5%). Other important uses of loans were to pay expenses for other crops, to pay education and medical expenses, and to invest in other IGAs (see Figure A27-2). Thus, although a greater percentage of BeninCajù producers have reported receiving loans than control producers, the percentage who are using these loans to invest in their cashew farms is almost the same.

APPENDIX 27 – EVIDENCE OF SAVINGS, LOANS AND INVESTING (CONTINUED)

Figure A27-1
Percentage of BeninCajù (235 respondents) and Control (128 respondents) Producers, Stating they Were Saving for Various Reasons

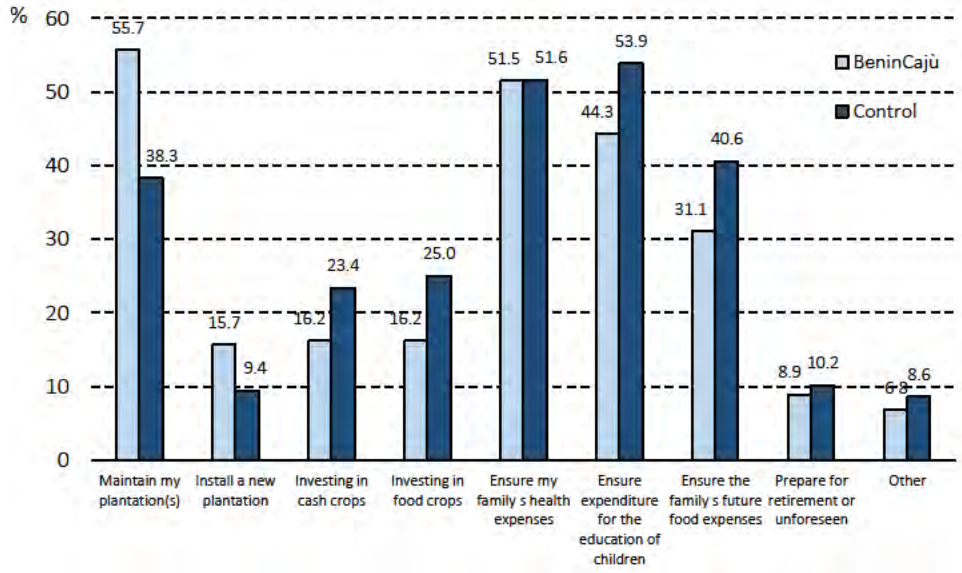
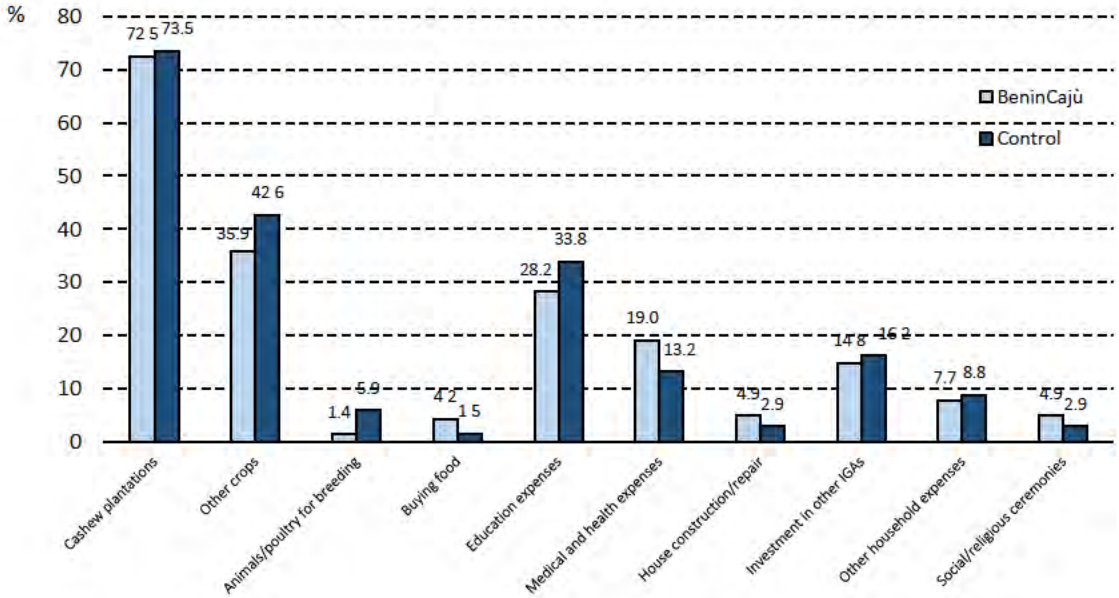


Figure A27-2
Percentage of BeninCajù (142 respondents) and Control (68 respondents) Producers, Stating their Loans were Used for Various Reasons

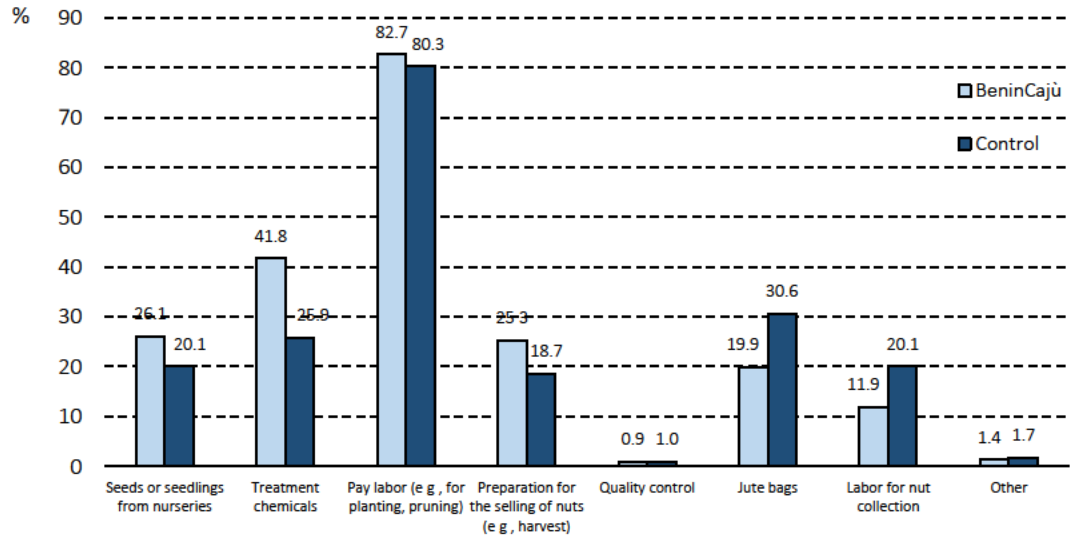


APPENDIX 27 – EVIDENCE OF SAVINGS, LOANS AND INVESTING (CONTINUED)

The evaluation also looked at whether producers were investing revenue generated from their cashew crops directly back into their cashew plantations or food crops. BeninCajù producers are significantly more likely to invest their cashew income into both food crops (BeninCajù: 72.0%, control: 64.8%) (X^2=5.72, df=1, p=0.017) and back into their cashew plantation(s) (BeninCajù: 68.3%, control: 61.3%) (X^2=5.19, df=1, p= 0.02).[19] BeninCajù producers appeared more likely to purchase chemicals to treat their plantations than control producers, who were more likely to invest directly into jute bags and nut collection (see Figure A27-3).

Figure A27-3

Percentage of BeninCajù (352 respondents) and Control (294 respondents) Producers, Stating how they Invest their Cashew Earning back into their Cashew Plantations



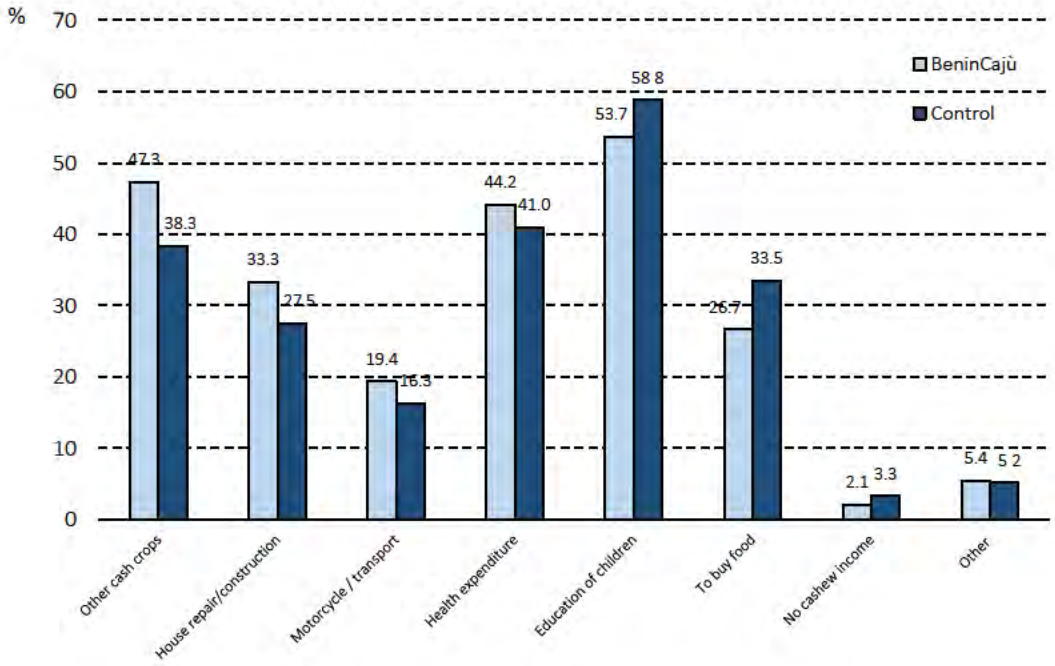
Apart from investing directly back into their cashew plantations, producers typically use their income for education expenses for their children, health expenses, investment in other crops, buying food, and investment in their house (see Figure A27-4).

[19] The Chi-square test is intended to test how likely it is that an observed distribution is due to chance. It is also called a "goodness of fit" statistic, because it measures how well the observed distribution of data fits with the distribution that is expected (equal distributions). Significant differences are seen in the number of individuals who invest their cashew income into both food crops (treatment: 371 of 515 individuals, control: 311 of 480 individuals) and back into their cashew plantation(s) (treatment: 352 of 515 individuals, control: 294 of 480 individuals).

APPENDIX 27 – EVIDENCE OF SAVINGS, LOANS AND INVESTING (CONTINUED)

Figure A27-4

Percentage of BeninCajù (352 respondents) and Control (294 respondents) Producers, Stating how they Invest their Cashew Earning back into their Cashew Plantations



APPENDIX 28 – TYPES OF CERTIFICATION/INTERNATIONAL STANDARDS AND IMPACT ON THE VALUE CHAIN

Name of internationally recognized standard	Implication for the value chain
Kernel outturn ratio (KOR)	This globally accepted formula is used to determine the amount of usable kernels after shelling the cashew nuts. The KOR is measured taking a ramdom sample and determining the weight of kernels in lbs per bag of raw cashew nuts (80 kg or 176 lbs).
Association of Food Industries (AFI)	The AFI standard for cashew kernels is the globally accepted set of guildelines. It specifies the quality and storage conditions, packaging guidelines, list of approved pesticides and benchmarks for residues, import/export documentation, moisture levels, and parameters for grading (classification).
Hazard Analysis Critical Control Point (HACCP)	Provides a systematic preventive approach to food safety that identifies, assesses, and controls the risk of biological, chemical, and physical hazards in production processes.
Preventive Controls Qualified Individual (PCQI)	The Preventive Controls for Human Food regulation (often referred to as FSMA (FDA Food Safety Modernization Act) is a law enacted to ensure safe preparation of food products for human consumption in the US in order to prevent food borne illnesses.
Good Agricultural Practices (GAP)	Provides growers guidelines and principles to apply for on-farm production and post-production processes, to provide safety and healthy cashews, minimizing potential hazards, such as pathogens, contaminants, and pest management materials.
Good Manufacturing Practices (GMP)	Defines procedures to be used in the processing, packaging, storing, and transport stages by handlers to ensure the quality of the product. GMPs are used by handlers to treat cashews under the best sanitary conditions.
ISO 6477	Specification of requirements, as moisture content, grading, sampling, methods of test, packing and marking. This standard is rarely used, as the AFI standard became industry-accepted.
ISO 22000	ISO 2000 is a Food Safety Management System that can be applied to any organization in the value chain. Becoming certified to ISO 22000 allows a company to show their customers that they have a food safety management system in place.
United Nations Economic Commission for Europe (UNECE)	Codifies various aspects pertaining to kernel processing (applies only to raw cashew kernels processing, obtained by heating, shelling and peeling, not to secondary processing such as salting, sugaring, flavouring, roasting or oil frying). Similar to the AFI standard, but less popular, this standard specifies the quality and storage conditions, packaging guidelines, list of approved pesticides and benchmarks for residues, import/export documentation, moisture levels, and parameters for grading (classification).

APPENDIX 28 – TYPES OF CERTIFICATION/INTERNATIONAL STANDARDS AND IMPACT ON THE VALUE CHAIN (CONTINUED)

Mandate	Challenges	Advantage	Markets
African Cashew Alliance (ACA)			
Confirms compliance with internationally-recognized standards of quality, food safety and social and labor standards.	Not an internationally recognized certification body yet, although has strong recognition with Cashew Sector traders/buyers and accross the value chain. Most international buyers (Kraft, Costco, Intersnack, ..) avoid buying directly from factories until they've been in operations for a few years and have built up their credibility and certification portfolio. In the meantime, they will accept to buy from their designated traders, who will conduct quality check for each shipment, in additional to ACA certification for the factory and ISO-certified indepedent bodies who conduct phytosanitary checks for each sale.	It has the advantage of being adapted to local context and takes into consideration the feasibility and access to ressources needed to implement a certification scheme. The bigger ones, such as BRC, might require too many investments and not provide a significant ROI. The ACA seal is a great mechanism to move forward with the certification process as it is cheap (donor-funded) and provides lots of training and technical support. Can add credibility to the brand and act as an effective entry-to-market tool, opening up new business opportunities around the world.	The Seal was developed to ensure its compliance with the requirements of the US Food Safety Modernization Act. Food industry giants in Europe and North America (Kraft Foods, Intersnack, Costco, ..) recognize the ACA SEAL for the Cashew Sector.
British Retail Consortium (BRC)			
Provides a framework to manage product safety, integrity, legality and quality, and the operational controls for these criteria in the food and food ingredient manufacturing, processing and packing industry.	Very high cost of implementation, requires strong technical and theoretical knowledge and allocation of ressources (production traceability, internal laboratory, etc..) which many processors (notably independent or smaller ones) may not be able to invest in. Many companies need dedicated staff and other costly resources to develop a separate team to coordinate implementation of all the regulatory requirements to be compliant. This approach has proven effective for large companies, but for those that fall into the small and very small categories it has been a challenge.	Top global market leader in Global Food Safety Initiative (GFSI) scheme, guarantees due diligence and supplier approval. a program that aims to harmonize international food safety standards with the support of the world's top retailers and food manufacturers. BRC global standard recognition meets the requirements of major players under a single, internationally recognized food safety management system. Can add credibility to the brand and act as an effective entry-to-market tool, opening up new business opportunities around the world.	The BRC standard is recognized by the Global Food Safety Initiative (GFSI), a program that aims to harmonize international food safety standards with the support of the world's top retailers and food manufacturers. GFSI recognition therefore means that you can use the BRC global standard to meet the requirements of these major players under a single, internationally recognized food safety management system.
USDA Organic Certification., Flocert, Ecocert, TradinOrganic, BIO EU			
These bodies provide organic and bio certifications in accordance with regulations that describe how the word "organic" or organic/bio seals can be used on agricultural products.	Pursuing this strategy can be risky. If proper organic techniques are not adequately implemented, cashew producers and processors will not be able to protect their goods from pests and disease, which can have a very serious impact on their livelihood, reputation, and business viability.	Given the right conditions (input availability, expertise, appropriate marketing channels,) this option could increase sales margins significantly, without much impact on costing. The aims of this strategy also align well with the environemental policy of many development/aid projects. Fostering an organic certification framework and an enabling environment for organic production and processing will contribute to a robust agroecology and agroeconomy in the region that could support certified organic production of cashew and other products for years to come.	key retailers willing to pay a premium price for products that meet organic quality and traceability requirements. "Organic" has specific standards and programs for EU & North America

APPENDIX 28 – TYPES OF CERTIFICATION/INTERNATIONAL STANDARDS AND IMPACT ON THE VALUE CHAIN (CONTINUED)

Mandate	Challenges	Advantage	Markets
		This option can provide a considerably higher price point, credibility to the brand, and act as an effective entry-to-market tool – opening up new business opportunities around the world (mostly niche affluent markets willing to pay a premium for organic/bio goods) and direct access to niche retailers.	
SCS Global Services			
Accredited to provide services under a wide range of internationally recognized certification programs.	Very high cost of implementation, requires strong technical and theoretical knowledge and allocation of ressources (production traceability, internal laboratory, etc..) which many processors (notably independent or smaller ones) may not be able to invest in. Many companies need dedicated staff and other costly resources to develop a separate team to coordinate implementation of all the regulatory requirements to be compliant. This approach has proven effective for large companies, but for those that fall into the small and very small categories it has been a challenge.	Given the right conditions (input availability, expertise, appropriate marketing channels,) this option could increase sales margins significantly and credibility of the brand. The aims of this strategy also align well with american and international regulatory requirements. This option can provide a considerably higher level of purchase orders and act as an effective entry-to-market tool – opening up new business opportunities around the world.	Important steps to reach US market, for stakeholders implementing and maintaining a facility Food Safety Plan.
SGS, LCSSA, ABSSA			
Certifies that products for import (a random sample from each sale inventory) are free from regulated pests, and conforms with all phytosanitary requirements as specified from the importing buyer and country.	This is normally a straight forward process, and an obligation. It is done prior to the final confirmation of each sale (requested by the buyer), and the certificate accompanies the shipment transit file.	Responds to phytosanitary import requirements and allows the processing company to track any trends in results, to flag and prevent serious food safety issues from arising.	This is a requirement to reach the international market.