Foreign Agricultural Service, United States Department of Agriculture

Senegal Local and Regional Food Procurement Project

Baseline Evaluation

July 2019

Senegal Local and Regional Food Procurement Project

Counterpart, along with partners NCBA CLUSA and Virginia Tech University, will implement the LRP project for up to three years in Senegal. The program will work to link millet and cowpea producer organizations supported through USDA funded value chain projects with the school feeding programs at the 204 primary schools that will be supported through the McGovern-Dole program in the Saint-Louis Region. The baseline evaluation provides baseline data values as well as context and recommendations to inform project implementation.

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Acronyms and Terms

CLUSA	NCBA CLUSA
CNIFN	Cadre National Interprofessionnel de la Filière Niébé
KG	Kilogram
MGD	McGovern-Dole
MT	Metric Ton
PAFA	Projet d'Appui aux filières Agricoles
PO	Producer Organization
TACSS	Transition d'Alimentation dans les Cantines Scolaires au Senegal
USD	United States Dollar
USDA	United States Department of Agriculture
XOF	West African CFA Franc

1. Background and purpose

Counterpart, along with partners NCBA CLUSA (CLUSA) and Virginia Tech University, will implement the United States Department of Agriculture (USDA) funded Local and Regional Food Aid Procurement (LRP) Program called *Transition d'Alimentation dans les Cantines Scolaires au Senegal* (TACSS) for up to three years in Senegal. The program will work to link millet and cowpea producer organizations supported through USDA and other donor-funded value chain projects in Senegal with the school feeding programs at the 204 primary schools that will be supported through the McGovern-Dole (McGovern-Dole) program in the Saint-Louis Region. LRP aims at improved effectiveness of food assistance through local and regional procurement (LRP SO1).

TACSS will take over supply of school feeding commodities from McGovern-Dole once schools are deemed ready to begin procuring commodities on their own. Over the course of the project, LRP anticipates linking approximately 270 millet and cowpea producer hubs and organizations with McGovern-Dole schools through contracts between schools and producer hubs and organizations. TACSS will provide capacity building to ensure producer hubs and organizations are able to fulfil their delivery obligations.

1.1 Millet

TACSS' partner organization NCBA CLUSA has been working with millet producer organizations in Central Senegal since 2009. The first phase of their work focused on food security and productivity. The second and current phase, initiated in 2014, focuses on improved storage, organizational management, processing and increased trade. The second phase also introduces hubs. Hubs are one level above producer organizations and focus on access to inputs, cleaning and pre-treatment of millet for value addition, marketing and access to finance.

TACSS will work at the hub level to build hub capacity to deliver orders to McGovern-Dole schools. There are six hubs that have been selected to participate in TACSS based on their high volume of transactions and their professionalism. In total there are about 200 millet producer organizations that are members of these project hubs, with an average of 24 farmer members in each producer organization.

Millet hubs purchase millet from producer groups. However less than half of millet producer organizations in the survey are involved in trading millet. Some producer organizations, including those not involved in trading, provide inputs or input finance for members. Millet producer organizations may also store grain for their members for future consumption or sale. Hubs offer member producer organizations access to larger and higher value markets as well as access to lower cost finance. Producer organizations charge their members fees ranging from 1,000 to 5,000 West African CFA franc (XOF) annually and pay of share of these membership fees to hubs which use the fee revenue in part to finance millet purchases.

1.2 Cowpea

TACSS cowpea activities are implemented through the Cadre National Interprofessionnel de la Filière Niébé (CNIFN) based in Diourbel and supported by the Projet d'Appui aux filières Agricoles (PAFA). This project, started in 2011, is funded through the International Fund for Agricultural Development (IFAD) and has worked to improve production, processing and marketing of cowpea, among other value chains. PAFA works with approximately 100 producer organizations, many of them women led and focused. For many, cowpea is only one of several crops the groups produce. Cowpea producer organizations are not organized into hubs but many have access to storage facilities provided by PAFA.

PAFA is currently focusing on improved seeds, access to finance, processing, packaging and marketing. Cowpea products that PAFA helps producer organizations produce include cereal, powder (flour), and couscous. While PAFA does not promote hub organizations to aggregate production like CLUSA has with millet, PAFA is currently building 50 storage facilities each with 150 MT capacity that will be used by cowpea producer organizations. PAFA hosts events through which cowpea producer organizations are introduced to buyers and also provides contract assurance.

Just under 30 percent of producer organizations in the survey reported buying and selling cowpea. Instead many appear to act as intermediaries between producers and buyers, communicating with buyers to inform them on availability and with producers to let them know they have a buyer. The transaction that follows takes place independently between producer and buyer. As with millet, cowpea producer organizations also facilitate access to finance for production and inputs, and charge membership fees.

1.3 Purpose

The purpose of the baseline study is to produce baseline data to be used for assessing program outcomes and impacts during the final evaluation as well as to inform program implementation during TACSS implementation. The study also aims to assess the capacity of producer groups to meet the increased demand for millet and cowpea from McGovern-Dole schools and aims to provide other findings and recommendations that may be useful during program start-up.

2. Methodology

The baseline study featured mixed methods methodology, with a survey of millet and cowpea producer organizations, millet hubs, as well as qualitative interviews. Fieldwork was carried out from April 30 through May 10, 2019.

2.1 Survey

The baseline survey featured simple random samples of millet and cowpea producer groups. The sample frame was the list of 198 millet producer organizations and 99 cowpea producer organizations provided by the project. Using a 95% confidence interval and a 5% margin of error with simple random sampling results in a sample size of 131 millet producer organizations and 79 cowpea organizations across the five TACSS regions (Fatick, Kaolack, Kaffrine, Diourbel and Louga). Additionally, all six millet producer hubs affiliated with TACSS were surveyed.

The survey was completed by an 8-person enumeration team (7 interviewers and 1 supervisor) using tablets and Open Data Kit (ODK) over approximately 10 working days. Interviewers received a one-day training and conducted pilot interviews and the questionnaire was refined through these steps.

The baseline survey collected data on producer organizations' current contribution to the following results.

- Value of annual sales of farms and firms receiving USDA assistance (USDA LRP 7)
- Volume of commodities sold by farms and firms receiving USDA assistance (USDA LRP 8)
- Share of sales in past year by market outlet (e.g. local trader, regional trader, processors/exports)
- Volume and average price of sales by month
- Number of current members of producer organization
- Training received in past year by organization or members including provider, topics, frequency and effectiveness
- The level of millet and cowpea consumption (kilogram per child) throughout the canteens[1]

The time frame for these indicators is the season immediately previous to the study, or since the last harvest, which for millet and cowpea in Senegal is primarily around September. In some cases, producer organizations had purchased product that they have not yet sold but intend to sell in the coming months. In order to capture this information, we asked respondents which months they expect to sell their remaining stock and what price they expected to receive. These expected results are noted in the results that follow.

[1] The last indicator (which is not a USDA requirement) will not be possible to collect through this study as it would require complex longitudinal data collection from schools. The IMC Baseline Team, which is also carrying out the MGD baseline study, included in its MGD baseline study recommendations for how Counterpart can build the capacity of its schools feeding programs to track their inventory. This will be imperative for LRP and MGD to lead to sustainable school feeding program.

2.2 Qualitative data collection

The IMC Baseline Team conducted 22 key informant interviews in all 5 TACSS procurement regions. Sampling was purposeful in response to logistical considerations. However, effort was made to interview a mix of both more urban and more rural producer organizations. The interviews were distributed as follows:

- 6 with millet producer organizations
- 6 with millet producer hubs
- 8 with cowpea producer organizations
- 1 with CLUSA
- 1 with CNIFN

These interviews assessed producer organizations' ability to meet increased demand from McGovern-Dole schools as well as capacity gaps that might hinder their ability to meet this demand. A question checklist was used to ensure that interviews addressed the same key questions for all respondents while also allowing flexibility to uncover important but unanticipated information.

2.3 Limitations

One limitation for the baseline study was that, because TACSS is a new initiative, limited detailed information about its implementation was available. This presented challenges for the Evaluation Team to fully understand how the project intended to work and to design methodology accordingly. For example, the Evaluation Team only learned about the inclusion of processed millet and cowpea products while fieldwork was underway. Consequentially, the questionnaire does not reflect this focus on processing.

Another limitation is that, as mentioned above, the survey was conducted before all sales were made and therefore some sales figures are projections rather than actual numbers. This is unavoidable unless a survey was done at the very end of the season when all sales are made. However, such a survey would have suffered from more recall error as respondents tried to remember details of transactions made as many as 9 months in the past.

3. Results

3.1 Survey

The survey results below are presented for cowpea producer organizations, millet hubs and in many instances, millet producer organizations. Note that for millet, hubs are the level at which TACSS will work and therefore USDA indicator results are drawn from this level only.

Table 1 below shows the total number of producer organizations and hubs affiliated with the project, and the average number of members per organization. Cowpea producer organizations are the largest, with an average of 166 member farmers. Millet hubs are networks of producer organizations and have 64 millet producer organization members on average. Millet producer organizations are the smallest, with just under 24 members on average. Note that millet hubs report having about twice as many producer organization members as are participating in the project, as many millet producer organizations trade with hubs even if they are not yet formally registered members of the hubs.

Additionally, the table below shows the percent of producer organizations buying and selling cowpea or millet. Only just over a quarter of cowpea and millet producer organizations trade these crops. All six hubs sell millet. Based on qualitative interviews, producer organizations that are not selling are likely providing or facilitating access to finance and/or inputs. Additionally, some producer organizations act as intermediaries between their farmer members and buyers without ever actually purchasing the crop.

Table 1: Millet and cowpea organizations

	Cowpea producer organizations	Millet hubs	Millet producer organizations
Number of organizations	99	6	198
Mean number of members per organization[2]	166.1	64.3	23.5
Percent selling commodities	27.8	100	26

Table 2 shows the volume, in metric tons (MT), of commodities sold so far this season for cowpea producer organizations and millet hubs affiliated with TACSS (this corresponds to USDA indicator LRP 7). The table shows producer organization and hub totals and not averages. Cowpea producer organizations have sold 237 MT so far this season while millet hubs have sold 410 MTs. Table 2 also shows which organizations and hubs have purchased but not yet sold at the time of the survey. The total combines these two figures to approximate the volume of commodities that will be sold during the 2018/2019 season. Cowpea producer organizations are expected to a total of 292 MTs this season while millet hubs are expected to sell 715 MTs.

[2] For producer organization a member is a household. For hubs, a member is a producer organization. Note that hubs have members which are not yet registered and therefore not considered among the 200 millet POs affiliated with the project.

Table 2: Volume of commodities sold this season (MT) (USDA LRP 7)

	Cowpea producer organizations	Millet hubs
Volume of sales to date	236.6	410
Purchases unsold	55.4	305
Total	292	715

Table 3 shows the value of sales of cowpea and millet that have already been sold and the expected value of what will be sold (this corresponds to USDA indicator LRP 8). The price for what will be sold is according to respondent expectation for the price they will receive (see table 4 below) and should be interpreted with caution. At the time of the survey, cowpea producer organizations had generated nearly 140 million XOF in revenues compared to 77 million for millet hubs. End of season projections show 181 million XOF revenue for millet producer organizations compared to 142 million for millet hubs. Due to higher prices, cowpea producer organizations have higher sales revenues despite having lower sales volumes.

Table 3: Value of commodities sold this season ('000 XOF[3]) (USDA LRP 8)

	Cowpea producer organizations[4]	Millet hubs
Value of sales to date	139,498	77,135
Purchases unsold	41,874	64,320
Total	181,372	141,455

Sales prices in XOF per kilogram (KG) are shown in table 4 below. The table shows average prices for what was already sold as well as the prices respondents expect to receive for the portion of millet and cowpea was unsold at the time of the survey. The prices for crops that have already been sold are in all three cases lower than what respondents expected to earn from sales of crops they still had in storage. This result is intuitive as producer organization and hubs are holding on to production hoping for a higher price later in the season when supply is low.

Table 4 also shows average prices per month. For months November through the first part of May, the prices are actual prices based on actual sales. For the second half of May through September, the table shows the respondents' expected prices. Note that in addition to containing expected

[3] AT the time of the survey, 1 USD = 585 XOF.
[4] Note that this includes revenue for some processed products in addition to unprocessed cowpea.

prices, there are a limited number of transactions per month, and therefore monthly prices should not be interpreted as reflective of precise monthly market prices.[5]

Table 4: Average sales price by month (XOF/KG)

	Cowpea producer organizations	Millet hubs	Millet producer organizations
Average actual price	590	188	180
Average expected price	756	211	216
Average monthly prices			
November	550		190
December	650		137
January	513	225	157
February	360	216	187
March	508	188	183
April	825	185	190
May	875	200	210
June	767	205	221
July	750		218
August		213	205
September			210

Table 5 shows volume of actual sales by month, up to the time of the survey in early May. Cowpea organizations reported selling the majority of their cowpea in the first part of May. However, this result is influenced by one large cowpea organization that made a very large sale in May. Aside from May and this single large transaction, February is the month with the most cowpea sales by volume. March and April were the busiest sales months for millet hubs and producer organizations, with 92 percent and 77.8 of sales to date this season taking place in those two months.

[5] Average millet retail prices for Kaolack over the period from 2013/2014 to 2017/2018 show prices gradually decreasing from October to February and then increasing gradually from March to September. (http://fews.net/west-africa/senegal/price-bulletin/may-2019). Historical monthly price information for cowpea was not found.

Table 5: Volume of sales by month to date (% of sales to date)

	Cowpea producer organizations	Millet hubs	Millet producer organizations
November	2.1	0	2
December	2.3	0	2.6
January	3.1	0.7	4.9
February	8	7.3	12.7
March	1.4	50.5	30.8
April	1.4	41.5	47
May (first half)	81.8	0	0

Table 6 below shows the share of sales by volume going to different market outlets. Institutional buyers such as government or international organizations are the largest buyer by volume for cowpea producer organizations accounting for 87.7 percent of purchases. Cowpea producer organizations sell about 9.1 percent to wholesalers and 2.3 percent within their community. Based on qualitative interviews, what is sold within the community is likely to include a large share of processed cowpea products.

For millet producer organizations and hubs, wholesalers are the largest market outlet at 52.8 percent for millet hubs and 83.2 percent for millet producer organizations. Millet hubs sell 44.4 percent to processors and 3.8 percent to input dealers to repay inputs provided on credit at the beginning of planting season. For millet producer organizations, 9 percent of sales went to processors, 5.2 percent to retailers and 2.7 percent to hubs (see note in table).

Table 6: Market outlets (% of sales by volume)

	Cowpea producer organizations	Millet hubs	Millet producer organizations
Millet hubs		0	2.7[6]
Wholesalers	9.1	52.8	83.2
Processors	0.5	43.4	9
Institutional buyers	87.7		
Retailers	0.1		5.2
Input dealers	0.3	3.8	
In the community	2.3		

Table 7 shows the transaction models used by the three organization types. Buying, storing and selling is the conventional model whereby the producer organization or hub purchases from their members and then sells to buyers. The majority of transactions by volume were conducted this way – 89 percent for cowpea producer organizations, 80 percent for millet hubs and 50 percent for millet producer organizations. Paying later is when the producer organization or hub pays part or all of the value of the production only after sale to the buyer. This was uncommonly used except for by millet producer organizations. In kind transactions is when cowpea or millet is used to pay back goods provided on credit, most likely inputs. This was most commonly used by millet hubs and accounted for 12 percent of their transactions by volume in the current season.

Table 7: Procurement model (% of volume)

	Cowpea producer organizations	Millet hubs	Millet producer organizations
Buying, storing and selling	89	80	50
Pay later	6	8	50
In kind	4	12	0

Finally, table 8 shows the share of producer organizations and hubs receiving training in the past year and the topics of trainings. Nearly 60 percent of cowpea and organizations received training last year. Five out of six millet hubs and 62 percent of millet producer organizations received training from sources other than CLUSA. For both cowpea and millet producer organizations, the most common trainings are in good agricultural practices. For millet producer organizations, the

[6] Note that this figure likely does not include in kind exchanges by which producer organizations repay hubs for inputs or finance provided during planting season. Hubs reported procuring 12 percent through this model, which would increase the share of transactions with hubs to 28 percent for producer organizations. Also, respondents may have in some cases referred to millet hubs as wholesalers so this number is likely higher.

next most common training was on storage and for cowpea producer organizations the next most common training was on processing. Only two out six hubs received training on record keeping, which appears to be a need.

Table 8: Trainings received in the past year (% of organizations)[7]

	Cowpea producer organizations	Millet hubs	Millet producer organizations
Received training last year	58.8	83.3	61.8
Topics			
Marketing	5.1	66.7	7.6
Record keeping	2.5	33.3	1.5
Good storage techniques	11.4	66.7	28.2
Management	7.6	83.3	9.9
Good agricultural practices	34.2	83.3	54.2
Processing	2.6	0	6.1
Composting	0	0	9.9
Malnutrition	0	0	6.1
Other	3.8	0	2.3

3.2 Qualitative results - Millet

Below are the key results on millet identified by the evaluation team through qualitative research.

Market segment misalignment - TACSS aims to complement CLUSA's ongoing work with millet producers by providing a sizable market – McGovern-Dole school feeding programs – and building capacity to fulfil this market's requirements. TACSS is envisioned to supply high quality variety, more nutritious, clean and sorted, well packaged and safe raw millet and processed millet products to schools, increasing incomes for millet producers and improving access to high quality food for school children.

Many millet hubs and producer organizations spoken with expressed dissatisfaction with market prices, and were storing product while they wait for prices to go up. Many are using the exporter-preferred Suna 3 seeds.[8] While producer organizations expressed satisfaction with these seeds, the added cost requires that they sell their product for higher prices to remain profitable. Additionally,

[7] Millet hubs and producer organizations were asked about trainings received from organizations other than CLUSA. However mistakenly cowpea organizations were not asked about trainings received from organizations other than partner CNIFN and therefore these results may have an upward bias.
[8] It is unclear if this is with the encouragement of the project

the high cost of finance – for inputs and for purchasing – necessitates higher sales prices to remain profitable. Value added opportunities would be welcomed by millet producers, organizations and hubs.

There is a stark contrast between this price-increasing value addition envisioned on the production side and the reality of school's limited resources for school feeding. School feeding programs are far from self-sufficient financially. The 2018 final evaluation of McGovern-Dole showed that school feeding programs were able to cover about one quarter of USDA meal schedule through community canteens, government funding and a school farm. That is less than two meals per week out of the recommended seven meals per week. Furthermore rice, which is the native staple for Saint Louis, is commonly available in the market in Saint Louis.

Finance – Millet producer organizations and hubs rely on finance for both purchasing inputs for planting season and for purchasing millet for trading. Hubs report accessing 9-month loans for between 7 and 8 percent interest over this period, mostly from Caisse Nationale de Crédit Agricole du Sénégal (CNCAS). Interest rates are significantly lower for hubs than for producer organizations accessing finance directly.

Access to finance to make purchases was cited by many as the primary constraint to meeting a hypothetical 25 percent increase in demand. It appears that the quantity of finance available is limited, especially for purchasing harvest from members. Though the evaluation team was unable to determine the exact cause of the impediment, one possibility is that having outstanding balances from loans taken at planting causes lenders to limit availability of finance for purchase.

Not only is finance limited, but its cost adds to the cost of production that must be passed on to consumers (McGovern-Dole schools). One hub reported financing purchase through 60 percent finance and 40 percent through membership fees. Increasing the share of finance would, all else equal, add to the cost of millet.

Another issue reported with finance is the time frame of the loan. Loan repayment periods are 9 months. Purchases are mostly made after harvest in September or October, which means that repayment will be due June or July when prices are reaching their peak. This forces premature sales and gives buyers an advantage if they know that hubs need to sell as soon as possible to repay credit. Planting loans are taken in June and must be repaid even earlier in March or April, necessitating even earlier sales for repayment.

Contracts – Some millet producer organizations and hubs have had contracts with buyers, which specify a quantity to be purchased within a month or so. However, millet POs and hubs reported that contracts sometimes are not respected, with buyers agreeing to purchase a certain quantity and then not showing up. Some also reported that they would like to have advanced contracts, especially for larger orders.

3.3 Qualitative results – Cowpea

Below are the key results on cowpea identified by the evaluation team through qualitative research.

Processing and market segment misalignment – As with millet, PAFA is focusing on value addition for cowpea, especially through processing and packaging. As discussed in the millet subsection, schools have extremely limited resources and will need to stretch them as much as possible through procurement of low-cost but nutritious commodities. Value added cowpea products such as cereal and couscous then do not seem to be a fit for this market. This may be especially true since the one thing school feeding programs generally have enough of is volunteer cooks for food preparation. Just like with millet, reconciling the high-value impetus on the production side with schools needs for cost effectiveness will be key for project success.

Cowpea producer groups spoken with are very enthusiastic about processing. Some received training on processing and were anxious to process but lacked processing equipment as well as knowledge of possible markets for processed products.

Finance – Whereas finance at harvest for producer organization and hub purchase from members appeared to be the major constraint for millet, for cowpea the primary financial constraint appears to be for seed purchase during planting. Indeed, procuring an adequate supply of seeds was the most common response when producer organizations were asked what would be the challenge in meeting a hypothetical 25 percent increase in demand.

Contracts – Purchase contracts negotiated and executed with PAFA assistance appear to work and generally be respected by both parties. Some cowpea producer organizations reported getting contracts with several months lead time at market price with a 50 XOF bonus per kilogram for better quality. Several producer organizations said they had relationships with the same buyer over multiple years. It is not clear however what will happen to this contracting system once PAFA ends in June 2020.

Storage – Farmers often store cowpea at home before sale. Cowpeas can only be stored for four to six weeks at home with traditional storage methods before the quality starts to deteriorate. Several producer organizations that did not yet have access to PAFA storage reported that members lost significant production while storing at home. When storage facilities are completed, it is not yet clear how members will utilize them. Will producer organizations not currently purchasing from members begin to purchase to utilize storage in bulk? Will individual producers utilize the storage using a warehouse receipt system? In either case, capacity building will be required. Effective utilization of PAFA storage facilities should be addressed through TACSS.

3.4 Qualitative results – Millet and cowpea producer and hub capacity

Millet hubs and producer organizations appear to be more business oriented than cowpea producer organizations which are more reliant on the project (PAFA) to directly assist with marketing. In general, organizations of all three types are weak in accounting and financial management and planning. This result is self-reported but also evidenced by their inability to articulate plans to make needed or desired productivity investments. For example, several cowpea organizations wanted equipment for processing but were unable to communicate a plan to acquire this equipment through a mixture of savings and loans and simply appeared to be waiting for the equipment to be given to them.

4. Recommendations

4.1 Programmatic recommendations

TACSS senior leadership and partners should come together to take a sober look at how to overcome the fundamental challenge facing TACSS: how to reconcile a production side initiative focusing on quality, value addition and higher prices with a demand side initiative (McGovern-Dole school feeding) that needs to stretch its scarce resources as far as possible. Without solving this fundamental challenge, it is not clear how the project can succeed.

The key question to answer is how can TACSS facilitate transactions that benefit both producer organizations and school feeding programs. Based on the above results, below are several recommendations for TACSS' work with millet hubs and cowpea producer organizations.

Reducing costs – Offering wholesale prices through bulk purchases appears to be the project's key strategy to make project commodities affordable for school feeding programs. However, this will likely not be enough to offset the value addition the project plans. Credit is a significant part of costs of production with some hubs and producer organizations financing both input purchase and procurement of harvest through credit. Credit repayment could add as much as 15 percent to the cost. If school feeding programs could finance purchases in advance (at time of planting and/or harvest) they could reduce the need for finance and in return get access to reduced-cost commodities. This pre-financing would of course need to be accompanied by a contract specifying the terms of delivery.

Forward contracts from school feeding programs might also allow producer organizations and hubs to access additional finance at lower cost from other financial service providers. And it would give producer organizations and hubs the security they are looking for, allowing them to invest in inputs to expand member production.

There would of course however be the significant risk of producer organizations and hubs not delivering the promised production to schools. Some monitoring and enforcement mechanism would be needed to ensure that producer organizations and hubs delivered to schools as per the terms of their contract. One possibility is to involve local government but this obviously introduces a new host of challenges.

Contracts – Millet producer hubs complained about weak contracts and unreliable buyers whereas cowpea producer organizations spoken with were generally happy with their relationships with buyers. For cowpea producer organizations, these relationships had been nurtured by PAFA, providing a possible model for TACSS' work with millet hubs and McGovern schools. However, both cowpea producer group and millet hub capacity should be built to negotiate and manage these contracts themselves, and project support to manage these contracts should be weaned out over time to enhance prospects for sustainability.

Capacity building – TACSS should develop a curriculum to build the capacity of producer groups and hubs in accounting and financial management. In addition to tracking orders by McGovern-Dole schools (and other buyers), a focus should be how organizations can financially plan for and achieve reasonable goals to improve profitability such procuring more seed for members.

Saint Louis school feeding commodities market study - TACSS should carry out a study to assess price and availability of grains and pulses in major Saint Louis markets such as Saint Louis, Richard Toll, Dagana and Podor. This study will give a target for the prices that TACSS affiliated production needs to compete with to be economically viable for school feeding programs. It is worth also considering that managing procurement of commodities in bulk from Central Senegal may be less preferable for school management committees that getting them from local markets that people are familiar with. The price of TACSS commodities should be lower than is available on the local market to make buying them a worthwhile proposition for school feeding programs.

Identifying alternative markets for processed millet and cowpea production – Both millet and cowpea TACSS partner projects seek to improve incomes for producers by giving them access to higher value markets, including through processing. It was beyond the scope of this baseline study to assess how strong this market actually is. If this market study for the products promoted through TACSS partner projects have not been carried out, they should be. Community funded school feeding programs should not be the primary target market for relatively costly processed agricultural products.

If there is not sufficient market for these products other than the possibility of McGovern-Dole school feeding programs, this strategy of premium quality and processing should be reconsidered. Instead the focus should be on increasing productivity, reducing costs of finance and improving marketing.

4.2 Evaluation recommendations

Rolling baseline – Since new producer organizations will likely join TACSS, their baseline status should be assessed. New members can be issued the same questionnaire that was used for this baseline survey and their data compiled separately for use with the final evaluation. This will require that TACSS be aware of new member entry and issue the questionnaire as soon as possible after they do enter.

Assess the extent of processing – The extent of processing done by producer organizations was not assessed through this baseline. Nevertheless, it should be assessed by the final evaluation as it is an important dimension of the project.

5. Annex – Data Collection Tools

Questionnaire[9] - Questions

Question label	English	French
noteinfo	You have been selected to participate in a survey as part of the Transition d'Alimentation dans les Cantines Scolaires au Senegal (TACCS) project. The information you provide will be used to understand how much progress the project is making in helping your organization do more business. Your participation in this study is entirely voluntary. You are under no obligation to participate. You have the right to refuse to answer questions and to withdraw from the study at any time. All your answers are strictly confidential.	Vous avez été sélectionné pour participer à une enquête dans le cadre du projet TACCS (Transition d'Alimentation dans les Cantines Scolaires au Sénégal). Les informations que vous fournirez seront utilisées pour comprendre les progrès réalisés par le projet pour aider votre organisation à plus d'affaires. Votre participation à cette étude est entièrement volontaire. Vous n'êtes pas obligé de participer. Vous avez le droit de refuser de répondre aux questions et de vous retirer de l'étude à tout moment. Toutes vos réponses sont strictement confidentielles.
consent	Ask for the respondents consent. If the person agrees, continue the interview.	Demander le consentement des répondants. Si vous obtenez le consentement de la cible, continuez l'entretien.
lrp	LRP Baseline Study	LRP Baseline Study
interviewer_name	Please select the interviewer name from the list below	Veuillez sélectionner le nom de l'intervieweur dans la liste ci-dessous.
q1	Is this is a millet or cowpea producer organization?	S'agit-il d'une organisation de producteurs de mil ou de niébé?
producer_hub	Is the a producer organization or a hub?	Est-ce une organisation de producteurs ou un hub?
producer_replacement	Is this a replacement producer organization?	Est-ce une organisation de producteurs de remplacement?
region	region	Région
commune	commune	commune
organization	Name of producer organization	Nom de l'organisation de producteurs
q2	Is the respondent the manager/leader of the producer organization?	Le répondant est-il le responsable / dirigeant de l'organisation de producteurs?
q2.1	What is the title or position of the respondent?	Quel est le titre ou la position du répondant?
q3	What is the gender of the manager/leader?	Quel est le sexe du manager / leader?
noteinfo	#training	#entraînement

[9] Modified from original ODK version for presentation.

q4	How many current members do you have?	Combien de membres avez-vous actuellement?
q5	Has your organization received any training from government or any other organization besides CLUSA in the last 12 months?	Votre organisation a-t-elle reçu une formation du gouvernement ou d'une autre organisation en dehors de CLUSA au cours des 12 derniers mois?
q6	What was the name of the organization or government department that provided you the most training in the past 12 months?	Quel est le nom de l'organisation ou du ministère qui vous a fourni le plus de formation au cours des 12 derniers mois?
q7	What were the topics? (mark all that apply)	Quels étaient les sujets? (cochez toutes les réponses qui s'appliquent)
q7.1	Other (specify)	Autre précisez)
q8	How useful was the ${q7.1} training?	Quelle a été l'utilité de la formation ${q7.1}?
q8.1	How useful was the marketing training?	Quelle a été l'utilité de la formation marketing?
q8.2	How useful was the Record keeping training?	Quelle a été l'utilité de la formation Tenue de registres ?
q8.3	How useful was the Good storage techniques training?	Quelle a été l'utilité de la formation Bonnes techniques de stockage?
q8.4	How useful was the management training?	Quelle a été l'utilité de la formation gestion?
q8.5	How useful was the good agricultural practices training?	Quelle a été l'utilité de la formation Bonnes pratiques agricoles ?
q9	From how many members did you buy this past season?	De combien de membres avez-vous acheté cette saison?
q10	How much ${q1} did you aquire from your members this past season? (Tonnes)	Combien de ${q1} avez-vous acquis de vos membres la saison dernière? (Tonnes)
q10.5	Approximately how much did you purchase directly from members (Tonnes)	Combien avez-vous acheté approximativement ${q1} directement des membres (tonnes)?
q11	What was the average price you paid your members? (CFA/Tonne)	Quel est le prix moyen que vous avez payé à vos membres? (CFA/KG)
q11.2	Approximately how much did you market for your members? (tonne)	Environ combien avez-vous commercialisé pour vos membres? (tonne)
q11.1	What fee did you charge your members?	Quels frais avez-vous facturé à vos membres?
unit	Specify the unit	Spécifiez l'unité
q11.3	Approximately how much was in kind? (Tonnes)	Environ combien était en nature? (Tonnes)
q12	Approximately what percent of your members production do you think you bought this season?	Environ quel pourcentage de la production de vos membres pensez-vous avoir acheté cette saison?

q13	Approximately what percent of their production do they sell to other buyers?	Environ quel pourcentage de leur production vendent-ils à d'autres acheteurs?
q14	Did you buy from non-members also this season?	Avez-vous acheté à des non-membres également la saison dernière?
q15	How much ${q1} did you buy from non-members this past season? (Tonness)	Combien de ${q1} avez-vous acheté à des non-membres la saison dernière? (Tonness)
q16	What was the average price you paid non-members? (CFA/KG)	Quel était le prix moyen que vous avez payé aux non-membres? (CFA/KG)
q17	How much of this ${q1} you purchased since this past harvest season have you sold so far? (Tonness)	Combien de ce ${q1} que vous avez acheté depuis la dernière saison de récolte avez-vous vendu jusqu'à présent? (Tonness)
q18	How much total revenue (CFA) did you get from these sales of {q1}?	Combien de revenus totaux (CFA) avez-vous tirés de ces ventes de ${q1} ?
q19	How many buyers have you had this season?	Combien d'acheteurs avez-vous eu cette saison?
q20	What type of buyer has made the #1 largest purchase this season? ${q1}	Quel type d'acheteur a effectué le plus gros achat cette saison? De ${q1}
q20_other	Other (specify)	Autre précisez)
q20.1	In which month did they make this purchase?	Au cours de quel mois ont-ils effectué cet achat?
q20.2	How much did they purchase (Tonnes)?	Combien ont-ils acheté (Tonnes)?
q20.3	What was the price? (CFA/KG)	Quel était le prix? (CFA/KG)
q21	What type of buyer has made the #2 largest purchase this season? of ${q1}	Quel type d'acheteur a effectué le deuxième achat le plus important cette saison? de ${q1}
q21_other	Other (specify)	Autre précisez)
q21.1	In which month did they make this purchase?	Au cours de quel mois ont-ils effectué cet achat?
q21.2	How much did they purchase (Tonnes)?	Combien ont-ils acheté (Tonnes)?
q21.3	What was the price? (CFA/KG)	Quel était le prix? (CFA/KG)
q22	What type of buyer has made the #3 largest purchase this season? of ${q1}	Quel type d'acheteur a effectué le troisième achat le plus important cette saison? de ${q1}
q22_other	Other (specify)	Autre précisez)
q22.1	In which month did they make this purchase?	Au cours de quel mois ont-ils effectué cet achat?
q22.2	How much did they purchase (Tonnes)?	Combien ont-ils acheté (Tonnes)?
q22.3	What was the price? (CFA/KG)	Quel était le prix? (CFA/KG)
q23	What type of buyer has made thefourth largest purchase this season? of ${q1}	Quel type d'acheteur a effectué le quatrième achat en importance cette saison? de ${q1}

q23_other	Other (specify)	Autre précisez)
q23.1	In which month did they make this purchase?	Au cours de quel mois ont-ils effectué cet achat?
q23.2	How much did they purchase (Tonnes)?	Combien ont-ils acheté (Tonnes)?
q23.3	What was the price? (CFA/KG)	Quel était le prix? (CFA/KG)
q24	What type of buyer has made the #5 largest purchase this season? of ${q1}	Quel type d'acheteur a effectué le plus gros achat cette saison? de ${q1}
q24_other	Other (specify)	Autre précisez)
q24.1	In which month did they make this purchase?	Au cours de quel mois ont-ils effectué cet achat?
q24.2	How much did they purchase (Tonnes)?	Combien ont-ils acheté (Tonnes)?
q24.3	What was the price? (CFA/KG)	Quel était le prix? (CFA/KG)
q24.4	Besides the 5 you told me, how many other buyers have you sold to this season?	Outre les 5 que vous m'avez dit, combien d'autres acheteurs avez-vous vendu à cette saison?
q25	Do you still have ${q1} in storage from this season's harvest?	Avez-vous toujours ${q1} en réserve de la récolte de cette saison?
future_sales		
q26	In which months are expecting to sell most of the rest of your harvest from this season? (multiple choice)	Au cours de quels mois compte-t-il vendre la majeure partie du reste de votre récolte de cette saison? (choix multiple)
q27	What price do you expect to get? (CFA/KG)	Quel prix comptez-vous obtenir? (CFA/KG)
thanks	Thank the respondent for their time and end the interview	Remerciez le répondant pour son temps et terminez l'interview

Questionnaire - Response choices

Question label	English answer choice	French answer choice
consent	Yes	Oui
consent	No	non
q1	Millet	millet
q1	Cowpea	niébé
producer_replacement	Yes	Oui
producer_replacement	No	non
producer_hub	producer organization	organisation de producteurs
producer_hub	hub	hub
q2	Yes	Oui
q2	No	non
q3	male	mâle
q3	female	femelle
q5	Yes	Oui
q5	No	non
q7	1. Marketing	1. marketing
q7	2. Record keeping	2. Tenue de registres
q7	3. Good storage techniques	3. Bonnes techniques de stockage
q7	4. Management	4. gestion
q7	5. Good agricultural practices	5. Bonnes pratiques agricoles
q7	6. Other (specify)	6. Autre (précisez)
q8	1. Very useful	1. très utile
q8	2. Somewhat useful	2. Un peu utile
q8	3. Not very useful	3. Pas très utile
q8	4. Useless	4. inutile
q8.1	1. Very useful	1. très utile
q8.1	2. Somewhat useful	2. Un peu utile
q8.1	3. Not very useful	3. Pas très utile
q8.1	4. Useless	4. inutile
q8.2	1. Very useful	1. très utile
q8.2	2. Somewhat useful	2. Un peu utile
q8.2	3. Not very useful	3. Pas très utile
q8.2	4. Useless	4. inutile
q8.3	1. Very useful	1. très utile
q8.3	2. Somewhat useful	2. Un peu utile
q8.3	3. Not very useful	3. Pas très utile
q8.3	4. Useless	4. inutile

q8.4	1. Very useful	1. très utile
q8.4	2. Somewhat useful	2. Un peu utile
q8.4	3. Not very useful	3. Pas très utile
q8.4	4. Useless	4. inutile
q8.5	1. Very useful	1. très utile
q8.5	2. Somewhat useful	2. Un peu utile
q8.5	3. Not very useful	3. Pas très utile
q8.5	4. Useless	4. inutile
unit	%	%
unit	CFA/KG	CFA/KG
q14	Yes	Oui
q14	No	non
q20	1. Millet hub	1. Moyeu de millet
q20	2. Wholesaler	2. Grossiste
q20	3. Processor	3. transformateur
q20	4. Institutional buyer	4. Acheteur institutionnel
q20	5. Retailer	5. détaillant
q20	6. Other (specify)	6. Autre (précisez)
q20.1	September (2018)	septembre (2018)
q20.1	October (2018)	octobre (2018)
q20.1	November (2018)	novembre (2018)
q20.1	December (2018)	décembre (2018)
q20.1	January (2019)	janvier (2019)
q20.1	February (2019)	février (2019)
q20.1	March (2019)	Mars (2019)
q20.1	April (2019)	avril (2019)
q20.1	May (2019)	Mae (2019)
q21	1. Millet hub	1. Moyeu de millet
q21	2. Wholesaler	2. Grossiste
q21	3. Processor	3. transformateur
q21	4. Institutional buyer	4. Acheteur institutionnel
q21	5. Retailer	5. détaillant
q21	6. Other (specify)	6. Autre (précisez)
q21	7. Only one buyer	7. Un seul acheteur
q21.1	September (2018)	septembre (2018)
q21.1	October (2018)	octobre (2018)
q21.1	November (2018)	novembre (2018)
q21.1	December (2018)	décembre (2018)
q21.1	January (2019)	janvier (2019)
q21.1	February (2019)	février (2019)
q21.1	March (2019)	Mars (2019)
q21.1	April (2019)	avril (2019)

q21.1	May (2019)	Mae (2019)
q22	1. Millet hub	1. Moyeu de millet
q22	2. Wholesaler	2. Grossiste
q22	3. Processor	3. transformateur
q22	4. Institutional buyer	4. Acheteur institutionnel
q22	5. Retailer	5. détaillant
q22	6. Other (specify)	6. Autre (précisez)
q22	7. Only two buyers	7. Seulement deux acheteurs
q22.1	September (2018)	septembre (2018)
q22.1	October (2018)	octobre (2018)
q22.1	November (2018)	novembre (2018)
q22.1	December (2018)	décembre (2018)
q22.1	January (2019)	janvier (2019)
q22.1	February (2019)	février (2019)
q22.1	March (2019)	Mars (2019)
q22.1	April (2019)	avril (2019)
q22.1	May (2019)	Mae (2019)
q23	1. Millet hub	1. Moyeu de millet
q23	2. Wholesaler	2. Grossiste
q23	3. Processor	3. transformateur
q23	4. Institutional buyer	4. Acheteur institutionnel
q23	5. Retailer	5. détaillant
q23	6. Other (specify)	6. Autre (précisez)
q23	7. Only three buyers	7. Seulement trois acheteurs
q23.1	September (2018)	septembre (2018)
q23.1	October (2018)	octobre (2018)
q23.1	November (2018)	novembre (2018)
q23.1	December (2018)	décembre (2018)
q23.1	January (2019)	janvier (2019)
q23.1	February (2019)	février (2019)
q23.1	March (2019)	Mars (2019)
q23.1	April (2019)	avril (2019)
q23.1	May (2019)	Mae (2019)
q24	1. Millet hub	1. Moyeu de millet
q24	2. Wholesaler	2. Grossiste
q24	3. Processor	3. transformateur
q24	4. Institutional buyer	4. Acheteur institutionnel
q24	5. Retailer	5. détaillant
q24	6. Other (specify)	6. Autre (précisez)
q24	7. Only four buyers	7. Seulement quatre acheteurs
q24.1	September (2018)	septembre (2018)
q24.1	October (2018)	octobre (2018)

q24.1	November (2018)	novembre (2018)
q24.1	December (2018)	décembre (2018)
q24.1	January (2019)	janvier (2019)
q24.1	February (2019)	février (2019)
q24.1	March (2019)	Mars (2019)
q24.1	April (2019)	avril (2019)
q24.1	May (2019)	Mae (2019)
q25	Yes	Oui
q25	No	non
q26	May (2019)	Mai (2019)
q26	June (2019)	Juin (2019)
q26	July (2019)	Juillet (2019)
q26	August (2019)	Août (2019)
q26	September (2019)	Septembre (2019)
q26	October (2019)	Octobre (2019)

Question checklist for Millet and Cowpea producer organizations

Background

- Region
- Name of producer group
- Is it a millet or cowpea producer organization?
- How many members do they have?

Purchases

- How much millet/cowpea has the organization purchased this season?
    - Were you able to get enough to meet your buyers requirement?
- Do they buy all of their members millet/cowpea sales?
    - If not, is there any difference in quality between what they buy and what other buyers buy?
    - How much do members typically consume?
- How do you finance purchases?
    - Any constraints?

Buyers and transactions

- In the past few seasons, have you been able to find enough buyers?
- Are you able to meet your buyers quality requirements?
- Who have been their largest buyers the past few seasons?
    - How large were the orders?
- Did they have any challenges meeting any of these buyers' requirements?
    - Volume
    - Timing
    - Quality
    - Logistics
    - Contracts

Organizational capacity

- How is the organization structured?
- What services do they offer?
- What organizational capacity needs do you have? (e.g. financial management, record keeping)
    - How do you intend to address these gaps?

Conclusion

- If next season buyers wanted to buy 25 percent more than this year, would you be able to meet this increased demand?
    - What would be the biggest challenge?

6. Annex – Performance Indicator Baseline Values

Table 9: Performance indicator baseline values for Activity: *Create Market Linkages with Food Producers to Supply Food to Schools*[10]

Indicator	Baseline	Target for 2019	Target for 2020	Target for 2021
Quantity of commodity procured (MT) as a result of USDA assistance (LRP 7)[11] - Senegal Total	1,007	196.05	587.8	587.8
LRP 7 - Millet	715	139.3	417.8	417.8
LRP 7 -Cowpea	292	56.75	170	170
Cost of commodity procured as a result of USDA assistance (LRP 8)[12] – Senegal Total	$551,841	$89.748.54	$258,173.16	$258,173.16
LRP 8 - Millet	$241,803.40	$45,673.53	$130,249.16	$130,249.16
LRP 8 - Cowpea	$310,037.60	$44,075.01	$127,924	$127,924

[10] This table only presents baseline values for the two performance indicators requiring baseline values.
[11] This indicator is the same as "Value of annual sales of farms and firms receiving USDA assistance (USDA LRP 7)" on page 7 and in Table 2. Note that the targets are changes compared to the baseline and not totals
[12] This indicator is the same as "Volume of commodities sold by farms and firms receiving USDA assistance (USDA LRP 8) on page 7 and in Table 3. XOF are converted into USD using an exchange rate of 585 XOF to 1 USD.

Table 10: Baseline list of millet and cowpea represent producer groups contributing to the project's value and volume of sales

Producer/Firm	Type	Local product concerned	Number of Producer's organizations	Male	female	15-29 years old	+ 30 years old	Number of producers
Producer	Smallholder	millet	56	1907	527	114		2434
Producer	Smallholder	Cowpea	260	5210	5207	2705	7712	10417
Producer	nonsmallholder	millet	11	29	0	0	29	29
Producer	nonsmallholder	Cowpea	4	897	519	113	1303	1416
Firm	microenterprises employ <10 people,	Millet	0	0	0	0	0	0
Firm	small enterprises employ 10-49 people	Millet	2	78	712	171	639	810
Firm	medium enterprises employ 50-249 individuals)	Millet	0	0	0	0	0	0

Firm	microenterprises employ <10 people,	Cowpea	0	0	0	0	0	0
Firm	small enterprises employ 10-49 people	Cowpea	0	0	0	0	0	0
Firm	medium enterprises employ 50-249 individuals)	Cowpea	0	0	0	0	0	0