

Major Findings from the 2018 Program:

Project component	Quintals expected to be certified & sold	% enrolled farmers who delivered seed	Estimated total next-season farmer beneficiaries	Estimated total impact (USD)	Estimated Impact per beneficiary	SROI
Basic teff seed, YD	218	67%	12,797	\$706,015	\$55	56.8
C1 teff seed, YD, multiplication alone	1,418	55%	11,023	\$669,858	\$60	18.4
C1 teff seed, YD + cleaning/bagging	1,418	55%	11,023	\$1,089,383	\$99	16.6
C1 teff seed, Dejen	777	70%	4,011	\$365,360	\$93	13.5

1. For teff, not all the seed that was produced on enrolled fields was collected and purchased by the PC partners. The major reasons for failure to deliver were:
 - a. Farmers did not pass quality certification (both Dejen and Yilmana Densa)
 - b. Payment date was not same as delivery or even announced and farmers didn't want to wait for payment (Yilmana Densa only)
 - c. OAF's partner refused to accept the seed for arbitrary reasons that OAF disagreed with, mostly because they had already reached their planned quota of seed to buy (Dejen only)
2. In order to project impact for farmers buying the produced C1 teff seed, we used:
 - a. **Yield impact:** 1.4 Qt/ha yield increase for Quncho seed over local seed, from a 2016 M&E harvest box survey with 909 fields
 - b. **Price impact:** 52 ETB/Qt of Quncho grain over local variety grain, from a 2017 M&E team survey of 705 farmers. Note that this is more conservative than the 199 ETB/Qt price bonus we found in a market price check in April 2019
3. Basic seed multiplication has by far the highest theoretical SROI because it is multiplied across 2 future years, with increasing number of farmers served for the same initial costs
 - a. Because of this, we would have liked to increase the portion of Basic seed multiplication if there was adequate suitable land for it and also clear demand for the resulting seed
 - b. However, there is a major shortage of suitable land since Quarantine is strict for this type of seed and will only accept land that did not have teff for previous 12 months. A shortage of such land led us to reduce the 40 ha plan to 29 ha in 2018, and this constraint will only get worse over time, unless we consider moving to a new geographic location
 - c. Also, we failed to sell any of the Dagem basic seed and only sold 68% of the Quncho basic seed in 2018, and that which was sold went directly to the program for 2019 for new basic > C1 fields. We had heard that there was a lot of competition for Basic seed, so this was surprising. It might have been a temporary coordination problem instead of a permanent constraint, but it doesn't give us confidence to significantly scale up the basic seed multiplication
 - d. For 2019 and the near future, we should try to limit basic seed production just to the seed we know OAF partners will want to use themselves directly for the next year of the program. If we know we will scale up C1 production to a new area the subsequent season we can plan in advance and try to scale up Basic multiplication the previous year
4. The SROI for the Yilmana Densa seed multiplication work is 18.4, but this was 7.2 for the "high touch" model and 42.6 for the "low touch" model, so in future we would like to use a model that is closer to the "low touch" version. In 2019 this entails:
 - a. Seed enrollment visits to calculate field area and cluster fields together for group contracting and shared work
 - b. Distribution of seed measured out for each farmer's land, combined with a general multiplication rules + planting + early management training
 - c. 1 Field visit per field during the first 2 months to check on planting rule compliance, catch and correct problems

- d. 1 Field visit per field during the next 2 months, and before harvest, to check on field management work, catch and correct problems, reject very problematic fields in advance
 - e. Oversight at harvest and threshing only of problematic fields
 - f. Leveraging cluster leads to check on the end of threshing and ensure farmers do not cheat and top-up with grain, inform OAF if this happens, coordinate with OAF and PC warehouse manager to share threshing date and total bags so numbers and be checked at the warehouse and rejected if cheating is evident
5. When we added in the additional layer of supporting in Yilmana Densa on seed cleaning and bagging, not just multiplication, the SROI decreases to 16.6 although the impact per beneficiary increases from \$60 to \$99. This is because the money OAF paid to set up the machine and bagging process was very high. If we support on seed cleaning and bagging in future years, like with Yetnora PC, we will find ways to do it more cheaply. In Dejen, for example, it is possible to rent out machines provided by other companies, and we could simply facilitate the PC partner to do this and cover most of the costs themselves.

2019 Seed Program Decisions

1. Program Elements & Scale:
 - a. Yilmana Densa
 - i. Continue Basic teff seed multiplication, at the maximum level possible given suitable land and available seed. Likely the same number of ha as in 2018, or slightly less, so around 70 people
 - ii. Continue C1 teff seed multiplication, at same or slightly expanded land area when compared to 2018, but with a few changes:
 1. OAF will not cover seed cost, Avola Goshiye will buy it themselves with revolving fund money, though we will help to check quality and ensure distribution of exact needed quantities
 2. OAF will provide a medium-low level of support (closer to low-touch than intensive model) for all the enrolled farmers, likely around 1,000 people
 - iii. For all teff seed, push Avola Goshiye to purchase the seed at grain price on the day of delivery and then provide the seed bonus after certification
 1. In 2018 they did not have adequate capital for this, but after seed sales in May 2019 they expect to earn \$70,000 in profits and can use this to help finance purchases earlier next year.
 2. OAF will not provide monetary support here, only do finance trainings and help set contract terms
 - b. Dejen
 - i. Continue C1 teff seed multiplication, but also change the model to be the medium-low level of support just like recommended in Yilmana Densa
 - ii. Work only in Yetnora and Tiq kebeles and partner with Emga PC based in Yetnora instead of Ghion Union.
 1. Increase the number of enrolled farmers and hectares in those kebeles, to 90 ha and 180 farmers from 41 ha and 87 farmers in 2018 (this would still be more than we had in 2018 total between all 4 kebeles)
 2. Use only 1 full Seed Agronomist for this work, but hire 1-3 low-level assistants at busy times of the year
 - iii. Drop the work in Shebshengo and Workhamba kebeles and end control for the Seed Agronomist working there.
 - iv. As part of the first-year partnership with Emga PC, to help them get set up for the first time as an independent seed producing cooperative, provide the following support:
 1. Continuing to fund a Seed Agronomist to work directly with them on field selection, training, some follow-up visits of fields, monitoring quality of collected seed, overseeing seed cleaning and bagging.
 2. Facilitating paperwork and coordination with Quarantine and BoA to get registered as an official Seed Producing Cooperative
 3. Financing and running the set-up and operation of a seed quality testing lab
 4. Cover the costs of seed bags and tags and sewing machines, while the PC covers the cost of renting a machine for seed cleaning and providing fuel and labor for operation
 5. We estimate that this will cost an additional \$4,000, based on the costs we spent on these things in Yilmana Densa for the 2018 project

- v. For the seed purchases, change the way farmers are paid:
 1. In 2018 Ghion Union paid the full amount (grain price + seed bonus) on the day of delivery, which incentivized farmers to cheat and turn in seed mixed with grain
 2. In 2019 we propose moving to a model that is halfway between the 2018 Dejen and Yilmana densa models—pay farmers the grain price on the day of and then pay them the seed bonus 1 month+ later, if and when the seed gets certified
 3. We will also try to work with Yetnora PC on the contract terms with farmers and get them a higher share of the margin on the seed (in 2018 farmer earned 400 ETB/Qt extra for seed and Ghion Union earned 600 ETB/Qt)

APPENDIX:

- I. For more information refer to the:
 - a. [Seed Decision Dashboard](#), which includes impact calculations and critical questions
 - b. [Folders with more detailed data and documents](#) that were used to generate findings in the dashboard
- II. Pros & Cons of different partners for our work in Dejen:

Potential Partner	Pros	Cons
Ghion Union-continue 2017 & 2018 partnership, likely support their multiplication work in same 4 kebeles	<ul style="list-style-type: none"> *Is large organization with a lot of financial resources, so can cover most costs themselves without OAF support, including seed cleaning and bagging (which they are already covering without help even in 2018 project) *Already has seed lab and experience working with Quarantine + own Seed Agronomist *Already have seed multiplication license *Has resources to cover seed cleaning and bagging *Claims to be very committed to doing better in 2019 with seed multiplication than in 2018, said that they would provide a designated truck and WH space and staff for that purpose 	<ul style="list-style-type: none"> * OAF offers very little value add... in 2018 they multiplied chickpea and wheat without OAF support, they will definitely do some multiplication in 2019 even if we drop working with them *Their profits mostly go to the big organization, not directly to farmers. They also make some decisions that are not good for farmers, like refusing to buy 100 Qt of seed which OAF and Quarantine said were good quality because they didn't want to exceed their 900 Qt goal *In 2018 we had a lot of problems communicating and coordinating with them (WH rental issue, transporting seed from PCs to central WH in a timely way, buying all qualified seed, making deadline clear, respecting risk level separation, etc.)... basically we think this is because they prefer the freedom to just do things their own way and don't care about OAF rules and training *Their top business is grain trading; in 2018 grain work competed with seed for WH space, money, agronomist time, and trucks; they say the problem will improve in 2019 but we cannot be sure, they have not proven very trustworthy
Work directly with Yetnora PC, in 2 kebeles only; help them to become an official Seed Producing Cooperative	<ul style="list-style-type: none"> *If supported to become an SPC could focus on that work, not be distracted by grain business *Have a 2,500 Qt WH that is new which they would be willing to devote largely to seed (versus 1,400 Qt projected supply) *Our best Seed Agronomist already lives and works in Yetnora *Would be more likely to work closely with OAF, following agreed-to protocols *Geographic concentration will make follow-up easier, cheaper *Closer to the farmers, can communicate with them efficiently and quickly, might make decisions more in their favor. Profits earned to them will benefit farmers more directly *Ghion Union has no problem with this, and the woreda government actually recommended it 	<ul style="list-style-type: none"> *OAF would need to provide more monetary support than with Ghion Union, to set up a laboratory, help with seed cleaning and bagging, etc. or they could not do the work *Would struggle more to get the cash to cover seed purchases; might need to take ACSI loan or delay payments to farmers *The PC doesn't have the capital like Ghion does to deal with risk, for example if they cannot find a seed buyer. OAF might need to provide extra support to them to mitigate these risks *Project Agreement with Region says that we will work with Ghion Union, so if we switch to working with Yetnora PC instead we will either need to maintain some light support of Ghion Union (inviting them to TOTs and helping find seed support is enough) or write an amendment to the Agreement