

**Farmers Market Promotion Program (FMPP)
Final Performance Report**

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FMPP staff may contact you to follow up for long-term success stories. Who may we contact?

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State the goals/objectives of your project as outlined in the grant narrative and/or approved by FMPP staff.

Project Background

In 2012, Governor Cuomo created a farm brewery license for breweries that purchase 20% of their hops and 20% of their other ingredients, including barley and other small grains, from New York State producers through 2018; the mandate escalates to a 90% domestic ingredient purchasing requirement by 2024. Likewise, a similar bill was passed for farm distilleries in 2008, establishing a 75% local procurement requirement for license holders. These two pieces of legislation have spurred rapid industry growth, catalyzing broad-based interest in developing domestic small grains agricultural production, and unveiling a unique and much needed opportunity for agricultural economic development for New York State farmers that demands a robust producer-to-consumer supply chain.

Since the Farm Brewery Bill was passed, New York State barley crops have quadrupled from 500 acres in 2012 to 2,000 acres in 2014, yielding 1,000 lbs. per acre and producing approximately \$700,000 worth of new crops for value-added processing by farm breweries and distilleries at a market value of \$700/ton. However, the market potential is in the millions, based on total demand of the craft beverage industry. To meet this demand, New York State requires sufficient outreach, capacity building resources and technical assistance to maintain a consistent growth trajectory. The focus of this project is increasing farmers' knowledge of small grains production and market access, as well as increasing craft beverage producers' capacity to communicate their demand to farmers.

The final outputs of the project were the Raw Grain Project—a community supported agriculture model that supports direct marketing of grain to brewers; and, a digital marketing and supply chain mapping platform to facilitate direct marketing, market access and supply chain analysis.

NOTE: General amendment to the project: across all project goals, where we were conducting outreach and education, we attempted to expand the target audience from Mohawk-Hudson Valley to farmers and craft beverage producers across New York State at-large. Where applicable, we included hop growers in our work as they also directly market their crops to the craft beverage sector.

Project Goals

Goal 1: Improve stakeholders quantitative and qualitative understanding of the small grain supply chain in the Mohawk-Hudson Valley for the farm crafted beverage industry, as well as projected supply needed to meet demand from brewers and distillers.

Progress Made: At the time of the grant proposal, it was known that the opening of farm breweries across New York State was creating a new market for locally grown small grains. However, there was uncertainty around supply and demand. The aim of this goal was to increase available information to help clarify and solidify the market opportunity, and document it in a way that would be useful to others. The following activities were completed:

- Cornell Cooperative Extension completed a New York State-wide beer supply chain analysis. The Helderberg Brewshed supported survey outreach and dissemination of findings through our stakeholder network.

- The Helderberg Brewshed developed future projections for small grain demand by craft brewers and distillers to demonstrate the market opportunity at-large, i.e. not just farm brewers and farm distillers, but all licensed beer and spirits manufacturers. These projections were published in a white paper and shared digitally through e-mail campaigns and our website.
- The Brewshed conducted a follow up analysis of the malt supply chain using Source NY, a supply chain mapping platform created during the project (called Source NY) using data from five New York State malt houses. The resulting map documented 77 market connections between farmers, malt houses and brewers, and highlighted two underserved regions in the state.

Impact on Community:

- The supply chain analysis affirmed that the new market for small grains existed and was growing. The analysis suggested that grain production at the time was sufficient for farm breweries to meet their 20% NYS grain requirement, however, when the minimum percentage increase to 60% in 2019, more grain will be needed to meet demand.
- The analysis also uncovered that farm breweries may be inclined to ‘jump ship’ from their farm brewery license to avoid the increasing NYS ingredient requirement by switching to a different type of beverage manufacturing license (e.g. microbrewery). This was published in the supply chain analysis and has become a source of concern for farmers considering their investment in the market.
- On the other hand, the Brewshed’s small grain projections demonstrated that there was still significant room for growth if all beverage producers, not just those who are required to use NYS grown grain, engage in local sourcing. New York State farmers provide less than 1% of total grain used by New York craft beverage producers. However, simply knowing about this opportunity was not enough to engage larger beverage producers in using local grain. More strategies were needed to target this segment of the industry.
- The above information was made widely available and has supported four known grant applications and the conceptual development of one infrastructure project—a grain hub in the upper-Hudson Valley region for production, storage and light processing of grains for direct sale to brewers and distillers and well as malt houses. The project recently leveraged funding from NYS Empire State Development—a highlight of the project’s impact.

Goal/Objective 2: Improve quantitative and qualitative understanding of farm-to-glass grain transactions taking place between agricultural producers and brewers and distillers in New York State

Progress Made: While this goal is similar to Goal 1, Brewshed staff were interested in learning more about the actual exchanges taking place between farmers and craft beverage producers and how farmers can improve their direct marketing to beverage producers:

- We chose to conduct a survey, two focus groups and several one-on-one interviews focusing specifically on farm distillers across New York State, who are required to use 75% NYS grain in all their products. Additionally, farm distillers, who are required to use 75% of their raw materials from NYS, source up to 90% of their grain directly from farmers, unlike brewers, who generally require grain that has been malted. Hence, distillers offer a better opportunity for farmers to develop direct marketing relationships.
- The results of the survey suggested that respondents already source at least 80% of their grains from NYS source; with some using 90 to 100% NYS grain. All respondents anticipated an increased need for NYS grain from 2015 to 2016 due to increase production; two-thirds of

respondents indicated they would like to work directly with farmers to increase their access to NYS grains.

- The focus groups revealed several useful qualitative results that informed the project:
 - i. Not all distillers work directly with farmers to source grain; they purchase grain from mills or feed grain dealers, and they were not always able to trace the origin of their grain back to a NYS farmer.
 - ii. Several respondents and focus group participants were not willing to share their farmer contacts for fear of losing their supplier to a competing beverage producer
 - iii. There was a clear interest among distillers in establishing or improving direct relationships with farmers, e.g. a contractual agreement or some other form of commitment that the farmer will grow the grain and the distiller will buy it

Impact on Community:

- Qualitative survey results provided the Brewshed staff with valuable knowledge on grain transactions between farmers and distillers, which directly supported our work in Goals 3 and 4, below.
- The focus group resulted in two new direct marketing connections between farmers and distillers in the Hudson-Mohawk region.

Goal 3: Improve Hudson-Mohawk farmers’ knowledge and capacity to produce small grains and meet demand from farm crafted beverage producers.

Amendment: We included hops production and procurement as a workshop topic because hops are subject to NYS procurement requirements under the farm brewery bill (farm breweries must use 20% of hops from NYS), there are over 25 hop growers in the target region, and it is a crop that farmers can market directly to brewers.

Progress Made: For this goal, we focused on hosting workshops, increasing access to educational materials and supporting networking between farmers and beverage producers

- 6 workshops were hosted over the 18-month project period, covering small grains production, small grains market development, malt sensory evaluation, and hops production and marketing. We worked with CCE and Hartwick College to host the workshops.
- A digital library on Best Practices for Small Grains Production and Marketing was developed and published on our website.
- A Direct Marketing Best Practices tip sheet was developed, published and disseminated via E-mail and website.

Impact on Community:

- We reached over 150 farmers through the workshop series
- Workshop exit surveys and a year-end survey indicate workshops were successful in increasing farmers’ knowledge of growing small grains and hops.
 - 95% of respondents reported an increase in knowledge of the topic after the workshop
 - 27% of respondents reported an increase in crop production at the end of 2016.
- At the beginning of the project, there was an estimated 2,000 acres of malting barley in production. In 2016, an estimated 4,000 acres of grain were in production across New York State.

Goal 4: Increase the farm beverage industry's access to and consumption of New York State grown small grains through producer-to-consumer direct marketing.

Progress Made: The activities completed under this Goal were directly informed by what we learned from the first three goals.

- We built an online marketplace and supply chain mapping tool, called Source NY. Source NY is an ad board, a directory map of farmers and beverage producers, and an industry supply chain mapping tool to document connections between farmers and beverage producers across the state. The platform is currently undergoing updates to improve functionality, but can be viewed here: www.source-ny.org
- A Community Supported Agricultural model-the Raw Grain Project-was developed and tested. Typically, brewers rely on malt houses to source brewers malt. However, brewers can also use raw grain. We designed and piloted a Raw Grain "CSA" whereby brewers would sign up to brew a raw grain beer, the Brewshed would help the brewers source the grain directly from farmers, brewers would brew their beer and document their experience using Source NY's supply chain mapping tool. We successfully tested this model in our own brewery and with four other local breweries.
- We conducted a marketing campaign targeting farmers, farm brewers and farm distillers to raise awareness of and participation in Source NY.
- We hosted a Supply Chain Awareness Campaign in September 2017.

Impact on Community:

- Overall, the project was successful in supporting increased market access, and establishing and strengthening direct marketing connections between farmers, brewers and distillers. Through its directory map, Source NY provides craft beverage producers with access to small grain growers and malt houses across New York State. Additionally, Source NY recorded over 150 marketing connections between farmers, processors and beverage producers.
- The Raw Grain Project (CSA Model) established a new way for farmers to market grain directly to brewers. The CSA model took longer than expect to develop, but four farmers and four brewers have signed up to participate to date. The full impact of the project will be assessed in 2018.
- We awarded "Certified Source NY" Certificates to 37 farmers and beverage producers who participated in "September is Supply Chain Awareness Month"

Quantify the overall impact of the project on the intended beneficiaries, if applicable, from the baseline date (the start of the award performance period, September 30, 2015). Include further explanation if necessary.

- Number of direct jobs created: One new direct job was created through the project-a position to support the Raw Grain Project.
- Number of jobs retained: The project supported retention of 150 on-farm jobs, and, by contributing to development of small grains supply chain, indirectly supports job retention of over 180 farm breweries and 115 farm distillery operations.
- Number of indirect jobs created: We identified one new indirect job created in the region's small grain sector-the small grains hub in the upper-Hudson Valley
- Number of markets expanded or established: The Helderberg Brewshed project aimed to expand NYS farmers' share of the \$21M small grains market by facilitating direct-to-consumer market transactions between agricultural producers and consuming farm-crafted breweries and

distilleries. Since 2012, New York State barley crops have quadrupled from 500 acres to an estimated 4,000 acres in 2017. This is a 700% increase in estimated acres and estimated 60% increase potential market share (\$1.12M at 1,000 lbs. per acre yield at \$.28 per lb)

- Number of farmers/producers that have benefited from the project: We set a target of reaching 50 farmers through the project. We reached a total of 150 through our workshops and
 - Percent Increase: 200% increase in farmers who directly benefited from the project.

Did you expand your customer base by reaching new populations such as new ethnic groups, additional low income/low access populations, new businesses, etc.? If so, how?

A unique aspect of the craft beverage sector is that there are now over 180 start-up farm breweries and over 100 farm distillers that opened within the last five years, operating across New York State. We were able to outreach to these new businesses via e-mail and at industry events to share with them information about the Brewshed, Source NY and how to work with local farmers to procure grain.

Discuss your community partnerships.

Our community partners included Cornell Cooperative Extension (CCE) offices of New York's Capital Region and Ulster County/Hudson Valley, Hartwick College Center for Craft Food & Beverage, GrowNYC Greenmarket's Regional Grain Project.

We partnered with CCE and Hartwick on the small grains educational workshop series. Their participation was key to providing farmers with access to expert knowledge on small grains production and analysis.

Going forward, we will continue to collaborate with CCE on workshops. We will also continue to share the result of our supply chain and market analyses from Source NY with our regional CCE representatives.

Are you using contractors to conduct the work?

We worked with one contractor, Topsy Media, LLC, a marketing firm based in the Hudson Valley Region of New York State. They helped us design the messaging and marketing collateral for our Source NY outreach campaign. The campaign included three unique elements to target farmers, brewers and distillers, which we used to conduct statewide outreach. They also helped us create a "Certified Source NY" campaign, whereby we awarded 37 farmers and beverage producers with certification for their commitment to building a local, farm-to-glass supply chain grow statewide awareness of our project.

Have you publicized any results yet?

The results and outputs of our project (marketing collateral, best practices resources, Source NY platform) were published via E-mail, on our website, our e-newsletter and through industry agencies (NYS Brewers Association, NY Farm Bureau, Cornell Cooperative Extension)

We targeted farmers and beverage producers on our own outreach lists totaling 150 farm breweries, 115 farm distilleries and 100 farmers as well as the NY Farm Bureau membership, Northeast Hops Alliance membership and NYS Brewers Association membership.

Have you collected any feedback from your community and additional stakeholders about your work?

Yes, we collected feedback through digital and in-person surveys about the workshops (what people want to learn more about) and the Source NY Platform. A sample of comments are below:

More on hops. Eastern NY is such a desert for hops education between the Finger Lakes and UVM that anything offered is better than nothing

Hops testing

working with local farmers, working with local government, marketing, collaboration

I don't have the resources to attend programs, so emails are the most helpful source of info.

Analyzing and utilizing locally grown hops. Best late hop addition practices.

I do have an interest in women farmers and their efforts to survive in this business.

Malting barley

Quality assurance of finished crop

Hops quality education across the board; oversaturation of market

Brewing better beer (or similar topics) How to develop your own brewing recipes

More conferences on Hops and growing them and building the grower network

Source NY follow up

General Networking

Budget Summary:

- i. As part of the FMPP closeout procedures, you are required to submit the SF-425 (Final Federal Financial Report). Check here if you have completed the SF-425 and are submitting it with this report:
- ii. Did the project generate any income? No.

Lessons Learned:

- Workshops that bring together farmers, brewers and distillers in the same room are effective in spurring direct marketing relationships. While it might seem counterintuitive to organize workshops this way (e.g. brewers and farmers want to learn about different topics), the interaction of the two groups has proven to result in increased marketing relationships that have lasting effects outside of the workshop.
- The development of the Raw Grain Project as the basis for the CSA was a highlight of the project. It packages the goal of direct farmer-consumer marketing as an opportunity for brewers to do something new and different in their operation—a driving theme of the craft beverage sector. The idea of a CSA did not generally excite brewers, so we had to get creative about how to engage them. It took us longer than expected to arrive at the raw grain concept, otherwise we would have spent significantly more time on recruiting small grain farmers and connecting them with willing brewers.
- Supply chain mapping and supply chain transparency were two themes underlying our direct marketing process. Discussions with beverage producers about these two topics were both positive and negative. The process of documenting their grain supply back to a farmer proved to be both a point of pride and concern. On one hand, they were hesitant to disclose the farmers they work with for fear of losing a supplier to a competitor, or they did not know who grew the grain. On the other hand, some producers were proud to highlight the farmers they worked as a representation of their brand.

- The interest in local grain crystallized with the passage of the farm brewery bill, however, engaging larger beverage producers who are not required to use NYS grain is a must for the market to succeed.

If goals or outcome measures were not achieved, identify and share the lessons learned to help others expedite problem-solving:

- Overall, we were successful in achieving all four project goals, however the community impact did not unfold as intended in all cases. For example, in goals one and two, we successfully increased available information about the supply chain and direct marketing linkages, however, this knowledge proved to be more beneficial to the project staff and partners, improving our understanding of the supply chain, and strategies for increasing market access and linkages. The impact on the community was more indirect: by us being more knowledgeable about the supply chain, we were better able to connect farmers, brewers and distillers through informal outreach and assistance, e.g. e-mail or phone introductions
- We attempted to consolidate and revise educational materials to make them easier for farmers to access, e.g. turning a five-page written document into a three-fold brochure. We found this to be a time consuming and inefficient activity for a few reasons: the existing information was regularly changing; the information did not necessarily apply uniformly across the state (e.g. grain agronomy from the western part of the state may not be best suited for farmers in the eastern part of the state) and our expertise in not in crop development or agronomy, and, our community partners (CCE) were not particularly supportive of us revising their educational materials.
- The development of the online resource library was a useful activity for us as it gave us the opportunity to compile, read and review an array of content, but the usefulness of the final product was questionable--there has been little increase in traffic since our initial publication of the site.
- The goal of increasing the number of farmers growing small grains became more nuanced than we expected. We reached our target of impacting at least 50 farmers, and there are more acres of grains in production and new farmers growing grains who were not before the project. But as we learned, the process of entering small grains production is a multi-year process of failures and successes. Simply getting more farmers growing small grain is not the best strategy. Rather, we would recommend working more closely with a few farmers who already grown grains for feed or food, and facilitate connections to the craft beverage market for them.

Describe any lessons learned in the administration of the project that might be helpful for others who would want to implement a similar project:

- Looking back now, the project goals were not specific, realistic or distinct enough from each other. While they set the stage for a successful work plan, the goals could have been consolidated from four down to two or three.
- The farm-to-glass market is new with lots of players; things change quickly but progress is slow! Our intended impact was tempered by this reality. I suspect this is true in other states and regions where the craft beverage sector is growing quickly.
- Any digital platform must be easy to use otherwise users will not be inclined to use it. The Beta version of Source NY was difficult to navigate, and this impacted its use in the long run. We are now in the process of relaunching the platform to make it more user-friendly.

- While farmers are notoriously hard to connect with, brewers and distillers are notoriously 'busy.' The extra effort to make direct contact through an in-person visit or phone call is worth it.

Future Work: How will you continue the work of this project beyond the performance period? In other words, how will you parlay the results of your project's work to benefit future community goals and initiatives? Include information about community impact and outreach, anticipated increases in markets and/or sales, estimated number of jobs retained/created, and any other information you'd like to share about the future of your project.

- We have rebranded the "Helderberg Brewshed" as "Source NY" to improve brand recognition
- We have already integrated Source NY's "Raw Grain Project" into our program activities for 2018, whereby we source raw grain directly from regional growers, brew beer in our own farm brewery and document the result to share with other brewers. We will then offer technical assistance and marketing support to farmers and brewers who want to participate in the Raw Grain Project.
- We also plan to host a Raw Grain workshop and beer festival to promote direct farmer-brewer marketing and the unique beers produced from raw grain.
- We will also continue to maintain and improve the Source NY platform as both a digital ad board for farmer to market their crops directly to beverage producers and a supply chain mapping tool to document and assess supply chain linkages across the state. We are currently improving platform functionality to make it easier to collect, analyze and share market data with the community
- We hope to conduct a statewide launch of Source NY and the Raw Grain project, specifically focusing on direct outreach to farmers and beverage producers in northern and western New York. This will initially take the form of E-mail marketing campaigns with follow up outreach.
- Our measurable targets for 2018 are:
 - to reach 400 farmers and beverage producer through Source NY workshop and marketing platform in 2018
 - to engage 10 new farmers and 30 new farm brewers in the Raw Grain Project with a target sales value of \$15,000 in year 1. We still need to set a goal for engaging larger brewers in the Raw Grain Project.
 - establish direct marketing connections between five upstate hop growers and at least 10 larger breweries based in NYC.
 - to identify the farm breweries and farm distillers who are not regularly purchasing NYS grain, malt or hops, and facilitate at least one new marketing connection between them and a NYS farmers.

Do you have any recommendations for future activities and, if applicable, an outline of next steps or additional research that might advance the project goals?

- More information is needed on how best to engage larger brewers and their tolerance for using NYS grain and hops. We would recommend a survey to assess this specific audience.
- Craft beverage producers are consumer-driven. If consumers demand more 'locally grown' beer, brewers will be more inclined to produce it. More information is needed about consumer perceptions of craft beer and how to motivate them to think beyond the beer and more about the farm-to-glass supply chain. A consumer focus group would be a useful research activity.