

Chapter 5: Supplementary Research

Introduction

As a non-profit organization with a five-county mandate and diverse membership, the Food System Economic Partnership is involved in a wide variety of research and program initiatives. With only one full time staff member to coordinate activities, much of the work is done by leadership team members who have volunteered to add to their primary job responsibilities. Each of FSEP's working groups have developed ambitious agenda's for the coming year – often extending well beyond the real capacity of the individuals involved directly.

In the initial meetings between FSEP representatives and the Master's project group, FSEP proposed an array of activities for the team to pursue as part of the year-long project. After discussing group and individual interests and capacity, we identified four primary components that would comprise our project, namely: a literature review, a multi-sector survey, a community food profile and an organizational assessment plan. The first three components, all related directly to assessing the demand, barriers and opportunities for an intentionally localized food system in southeastern Michigan, represented the bulk of our research and have comprised the foregoing chapters of this report. Two additional projects, an analysis of grain production opportunities in the five-county region and an organizational assessment and evaluation plan focused on FSEP itself as an organization, are also discussed in this chapter.

FSEP Grain Producer Survey

Overview

In the summer of 2006, several members of our Local Food Master's Project Team worked for FSEP to analyze survey data and generate reports on a survey that was created and administered by FSEP earlier in the year (Appendix 13). The grain producer survey was sent to grain producers within the southeastern Michigan region during the spring of 2006. Funded by a Project GREEN grant, the purpose of the survey was to gather information on grain production trends in the region with a particular emphasis on organic grain production and processing opportunities in the region.

The grain producer survey began as an independent FSEP initiative, however, since there were some areas of overlap, we chose to combine our Local Food Team's broader multi-sector surveys to gather more information and minimize duplication of efforts. FSEP was able to revise and expand

the scope of the Project GREEN grant proposal to support one large survey integrating questions about grain production, consumption and processing into the broader surveys about the local food economy¹⁸. Members of our Local Food Master's Project Team worked over the summer of 2006 to analyze the grain producer survey and report the findings while disseminating the multi-sector survey to collect more information from other producers, consumers, processors, distributors and retailers. Grain specific findings from the multi-sector survey were added to the producer survey findings to paint a more complete and complex picture of current and future grain production opportunities in the region.

Purpose

The purpose of the grain survey project was to gather information on grain production trends in southeastern Michigan. The grain producer survey assessed demographics, marketing, and trends in grain farming in the region, and also investigated the relationship between the farmers' current grain production practices and those that they desired to employ in the future. The survey also included questions to gather information about the barriers and possibilities for alternative markets and practices for grain production as well.

As requested by FSEP, the grain producer survey results and relevant findings from the multi-sector survey were compiled into a concise summary, presented primarily in bulleted form and circulated among the FSEP leadership team. This summary is included in Appendix 14. FSEP will use the information generated by the surveys to inform programs and recommend policy to support the development of grain production opportunities in southeastern Michigan. The findings will be made available to the public through the organization's website, leadership team communication with grain production stakeholders and other outreach methods to be identified.

Survey Development, Collection, Analysis, and Reporting

Our Local Food Project Team was not directly involved in the process of developing, implementing the grain producer survey. This aspect was conducted by FSEP director Mike Score in the spring of 2006. After developing the survey, it was distributed through the Michigan Farm Bureau and Organic Growers of Michigan who generated the mailing lists based on their producer databases. The survey was sent via U.S. Mail to 361 grain producers in southeastern Michigan. Of the 361

¹⁸ The methodology and findings of the multi-sector survey are presented and discussed in Chapters 3 and 4 of this report. A summary of findings from the entire project are included in Chapter 6.

surveys mailed, an approximately equal number were sent to grain producers in each of four counties: Lenawee, Monroe, Jackson and Washtenaw County. Seventy-two responses were received back, a response rate of 20 percent. Of the responses, nine were from Jackson County, 26 from Lenawee County, 14 from Monroe County, and 17 from Washtenaw County. Six survey respondents did not indicate their location.

Data analysis, led by members of our Local Food Project Team, began upon receipt of the 72 responses in June of 2006. We compiled all of the survey responses into a Microsoft Excel spreadsheet in a format compatible with the Statistical Package for Social Science Research (SPSS) program which was used for analysis. After uploading the data into SPSS, we first ran a basic series of frequency and descriptive data analyses. This included using the software to generate means, modes, medians, ranges, standard deviations, and frequency numbers and percentages for each question.

With the help of the statistical consultation services available to University of Michigan students (CSCAR), we ran several more in-depth tests to identify significant statistics, correlations and associations. The various in-depth tests were chosen according to the structure of the questions being analyzed. The most useful test for the grain producer data set was the Wilcoxon Signed Ranks Test. This is a T-test for non-parametric data for the case of two related samples or repeated measurements on a single sample. We also used the Chi-square test to determine association between two categorical variables. For assessing whether or not associations existed between two continuous variables, we employed the Spearman's correlation test. We employed the Spearman correlation over the Pearson correlation based on the assumption that our data was non-parametric. Analysis between one continuous variable and categorical variables was measured using T-tests and ANOVA tests, including the Wilcoxon Signed Ranks Test.

After analyzing the data, we generated a concise summary of the findings for FSEP (Appendix 14). In addition to this internal briefing, we contributed to the final report of the GREEN Project (Appendix 15), which was furnished to the funding organization. This report included information on how the GREEN grant money was spent, a brief overview of the surveys' purpose, the findings from the surveys, and recommendations based on the information garnered in the surveys.

Since the results of the grain producer survey are highly relevant and related to our Master's Project research for the creation of an intentionally localized food system in southeastern Michigan, these results from the grain producer survey and discussion will be presented in-depth in the following pages.

Survey Results

Grain Production in the Region - An Overview

The grain producer survey asked respondents to report the type of grain that they produced, the amount of acreage dedicated to grain, the production methods employed (conventional or organic), and whether or not the grain production was profitable. We found that the primary grain crops grown were corn, soybeans, and wheat. Oats were the next most typically grown grain. Respondents' farm size ranged from 24 to 5,200 acres, and the average overall farm size was 645 acres. The largely agricultural counties Lenawee and Monroe had an average farm size of approximately 800 acres. The average farm size in Jackson and Washtenaw counties were 332 and 472 acres respectively. Over 96 percent of farmers responded that they did not market grains labeled as "organic" while 4 percent did. Financially, 68 percent of farmers reported that the grain production was profitable. Twenty-two percent reported that they broke even, and ten percent stated that they lost money.

Grain Marketing Methods: Actual and Desired

The survey asked farmers to identify how they brought their grain crops to market. Currently, about 74 percent sell their grain through a grain elevator. Slightly less than 10 percent reported selling grain directly to a processor. Meanwhile, less than 3 percent of survey respondents reported selling grain directly to consumers (Figure 71). When asked which grains they would "ideally" grow and by what method they would bring these to market, farmers largely concluded that they would prefer an alternative or multiple alternatives to the grain elevator. Over half of the farmers who currently use the elevator to sell their grain said that they would prefer not to be using it. The main alternative of choice was to sell their grains directly to processors. Fifty-one percent of potential corn farmers, 37 percent of soybean farmers and 32 percent of wheat farmers indicated a desire to sell their product direct to processors. Meanwhile, about 10 percent wanted to sell directly to consumers (Figure 72).

Figure 71: Current Method of Selling Grain

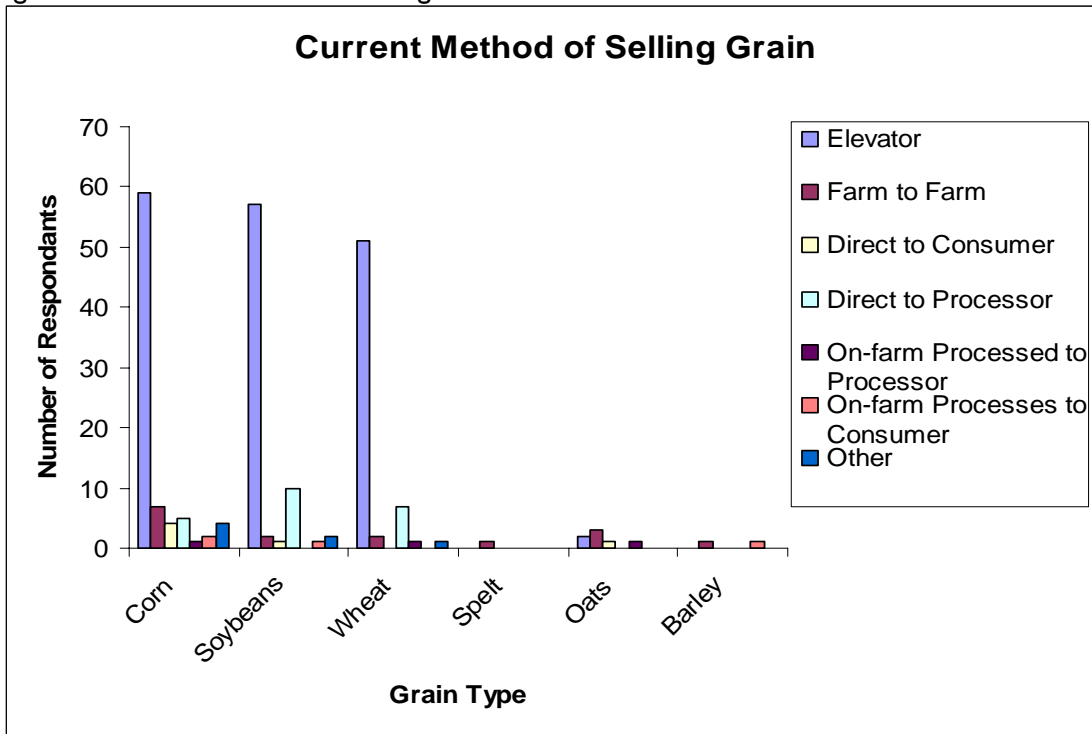
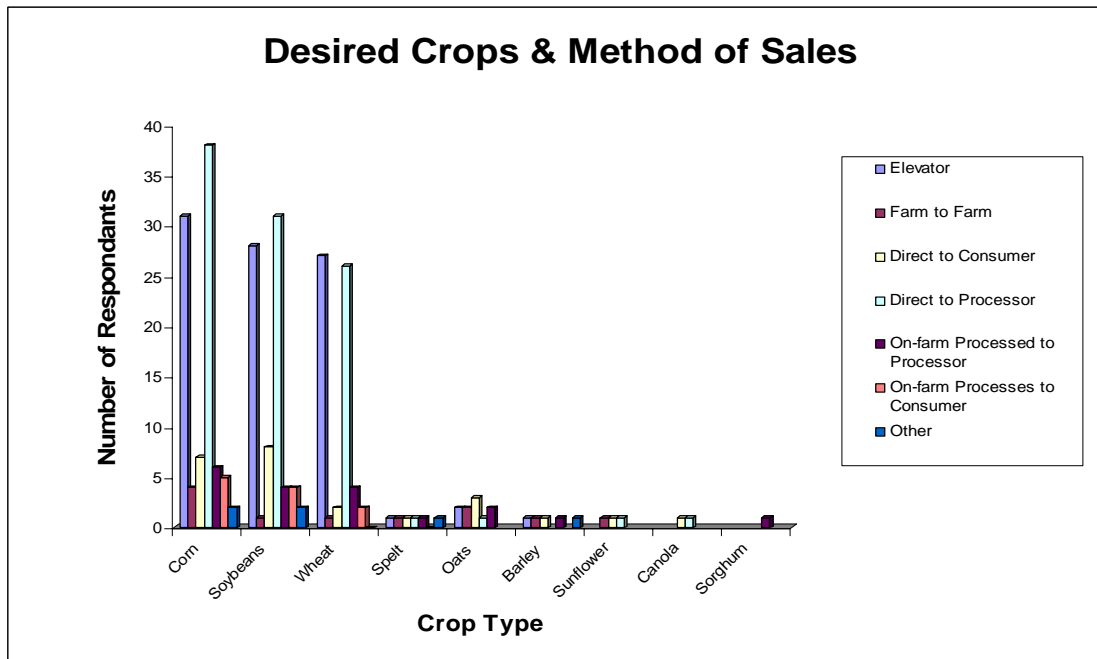


Figure 72: Desired Crops and Method of Sales



Using Wilcoxon Signed Ranks Tests, we found that the shifts in actual versus desired marketing methods were found to be all highly significant statistical findings for usage of the grain elevator,

direct to processor method, and direct to consumer method ($p=.000$ in all cases). This indicates there is a strong desire among grain farmers to shift their method of sales to a more local, direct method, such as selling directly to a processor or consumer in the region.

Opportunities and Barriers in Alternative Grain Production

The grain producer survey assessed the barriers and opportunities for alternative markets, practices, and grain production. Where only four percent of farmers currently grow grains other than corn, soybeans and wheat, slightly over ten percent of producers reported a desire to grow alternative grains. The most noted alternatives to these commodity grains were oats, spelt, barley, and canola. This survey result indicates that there is a desire among some farmers of the region to grow alternative grains.

Farmers were asked to report which barriers limit the production of alternative grains (grains other than the commodity crops of corn, wheat, and soybeans). The survey included 15 potential barriers and asked farmers to rank them on a 1 to 5 scale where 1 indicated a “low barrier” and 5 a “high barrier.” The top three barriers indicated were “the cost of production inputs” (mean=3.62, std. dev.=1.14), “the lack of near-by facilities for delivering harvested grains” (mean=3.32, std. dev.=1.43), and “the recent price trends for other grains” (mean=3.09, std. dev.=1.08). These results suggest that the most significant barriers to participation in the alternative grain market are the lack of infrastructure and the price of commodity grains. When considered with the level of interest in alternative grain production and marketing, these findings point to opportunities within the region to develop new grain processing facilities and local markets.

Farmers were also asked to rate factors that limit organic grain production. Seven potential barriers were given and the farmers were asked to rank them on a 1 to 5 scale where 1 was a “low factor” and 5 was a “high factor.” The top three barriers indicated were “the management options for controlling weeds in organic grain production” (mean=4.28, std. dev.=.94), “management options for controlling insects in organic grain production” (mean=4.02, std. dev.=1.01), and the “management options for controlling diseases in organic grain production” (mean=3.83, std. dev.=1.03). These results strongly point to opportunities in the region to promote organic production through education about organic management practices. The lowest rated barrier was “consumer demand for products made from organic grain” (mean=2.83, std. dev.=1.24), indicating that farmers were aware of a substantial consumer demand for organic grain products.

Next, farmers were asked to report their expectations for grain markets over the next ten years given four scenarios. On a 1 to 5 scale where 1 indicated an “unlikely change” and 5 indicated a “very likely change.” Responding to four scenarios given, farmers believed federal policies will change in a way that lowers price supports for commodity grains (mean=3.93, std. dev.=1.20). On the other hand, they expect that new businesses will develop in southeastern Michigan that will increase conversion of commodity grains into consumer goods (mean=3.37, std. dev.=.99) Despite the expected reduction in subsidies, farmers were optimistic about new opportunities emerging locally to convert raw grain to consumer-ready, value added goods. Clearly grain farmers are aware of the potential, alternative markets for their grain. These results suggest a need to for new infrastructure to support new business development and develop networks to connect local grain producers with new processing and value-added facilities.

Opportunities for Grain Products

When asked to rate interest in potential grain-based products, farmers rated all 17 given options highly. The mean scores for the 17 products listed ranged from 3.00 to 4.57 on a 1 (low interest) to 5 (high interest) scale. Overall, the responses indicated a desire among grain producers for more outlets or markets for their crops. Figure 73 lists the number of responses, minimum and maximum scores given, and the means and standard deviation for each product listed.

Figure 73: Interest in Grain Based Products for Grain Survey

	N	Minimum	Maximum	Mean	Std. Deviation
Fuel for home heating	68	1	5	4.44	.780
Fuel for industrial processes	69	1	5	4.28	.968
Fuel for engines	70	1	5	4.57	.791
Cereal bars	69	1	5	3.48	1.171
Flour products	69	1	5	3.57	1.078
Edible chips	69	1	5	3.52	1.208
Biodegradable plastics	69	1	5	4.14	1.033
Cooking oils	69	1	5	4.17	.999
Household/Industrial lubricants	69	1	5	3.93	1.155
Livestock feed	68	1	5	4.07	1.124
Ingredients for ethnic food menus	67	1	5	3.45	1.294
Craft materials	67	1	5	3.13	1.290
Alcoholic beverages	68	1	5	3.00	1.425
Household/industrial cleaning products	68	1	5	3.57	1.250

Cosmetics/Skin care products	68	1	5	3.51	1.228
Lawn Fertilizer	68	1	5	3.72	1.244
Bread/Baked goods	69	1	5	3.75	1.181

Conclusion

The grain producer survey collected valuable information from 72 grain producers in southeastern Michigan. The survey was designed to gauge current grain production trends and identify opportunities for future development in grain production and processing. The data returned many significant findings, showing, in general, that farmers were not fully satisfied with the current market for grain. Farmers were eagerly receptive to more alternative opportunities for marketing their crops. The four primary opportunities for local grain production, processing, and marketing that emerged were:

- Promote increase in organic production through education about organic management practices
- Increase direct marketing opportunities for local grain
- Develop new grain processing facilities
- Develop new value-added products that use locally-grown grain

Through their rich network of food system stakeholders and innovators, the Food System Economic Partnership is in position to translate these findings into action in the coming years. There are many exciting opportunities for new business development in the region focused on local grain production. The new processing and marketing opportunities that have the potential to bolster grain producer profits, convert more farmland to organic methods to meet consumer demands, and localize the consumption of more locally-grown grain.

FSEP Annual Organizational Review

A Proposed Plan

Overview

As a complex and rather unprecedented non-profit organization, the Food System Economic Partnership (FSEP) aims to catalyze change in the regional food system through research, education and business development in order to foster more sustainable, healthy local economies and

communities. Through this work, FSEP has the potential to become a model for organizations throughout the country working to create change in their food systems. In order to most effectively achieve its goals, it is important that FSEP document and periodically assess its processes, successes and challenges through reflection and evaluation.

To this end, FSEP leaders identified a need to develop a *formative* evaluation plan that will lend structure and predictability to the documentation process and help integrate an ethos of evaluation into the organization. Formative evaluation is designed to supply information that will be useful in improving organizational function and products and planning for the future. As the FSEP Leadership Team members have numerous demands on their time, it is critical that the evaluation is as effective, efficient and “low-cost” as possible. Taking these demands in heed, we have designed an evaluation plan that combines interviews, brief surveys and document review which will be conducted in partnership with an external evaluator and will maximize the participants’ input while minimizing the time put in.

After conducting semi-structured interviews with a subset of Leadership Team members and working group leaders as well as reviewing documents representing the past year’s work and conducting a brief survey of the Leadership Team and outside stakeholders, the evaluator will create a report summarizing the qualitative results. The report may be used for planning, communication and fundraising.

Evaluation Design

This proposed evaluation plan was developed by the Local Food Project Team of University of Michigan Master’s degree candidates in partnership with representatives from the FSEP Leadership Team. The approach and methods were chosen based on observations of FSEP meetings and activities since January 2006 and on a series of semi-structured interviews with representatives from the Leadership Team¹⁹. During these conversations, FSEP members were asked to share their views on the primary goals of the organization and the primary objectives of the evaluation, identify key evaluation questions, identify ideal methods of information collection, and propose an evaluation timeline. We also consulted several program evaluation resources including *Measuring Progress: An Evaluation Guide for Ecosystem and Community-Based Projects* produced by the Ecosystem Management

¹⁹ Interviewees were: Michael DiRamio, FSEP Deputy Director; Mike Score, FSEP Director and Susan Schmidt, FSEP Board Chair

Initiative at the University of Michigan and *Community Food System Evaluation Handbook and Toolkit* published by the Community Food Security Coalition. (Additional resources listed below.)

We circulated an initial draft of the evaluation plan among our team and with the three interviewed FSEP leaders in early August 2006. After a comment period, we revised the draft plan to reflect the feedback and suggestions. We added a few additional elements to the plan including an open comment period and adjusted some of the survey questions for clarity.

We presented the following plan to the FSEP Leadership team at their monthly meeting in October 2006. Dedicated to developing a plan that the entire leadership team supports and is willing to participate in, we solicited comments or suggestions on the plan and provided a draft with contact information to each leadership team member present. The draft was also sent electronically to the group to reach all that were not in attendance at the meeting.

To date, we have not received any additional feedback. Currently, the plan is in the hands of FSEP leaders who intend to solicit an external evaluator to facilitate the process beginning next spring.

Evaluation Plan

Purpose

There are four primary purposes of the proposed annual FSEP Organizational Assessment. First, to evaluate on an annual basis the extent to which FSEP is achieving its goals as an organization. Second, to document the organization's progress, successes and challenges. Third, to inform FSEP's strategic and program planning processes. And, fourth, to support FSEP's fundraising efforts by regularly compiling information commonly requested by funders.

To provide sufficient breadth and depth of information to achieve these goals, the evaluation employs a variety of methods to gather feedback from within FSEP as well as from external observers and clients. These methods are outlined below.

Internal Review Methods

To make most effective use of Leadership Team members' limited time, the evaluation will employ a brief survey of all Leadership Team members and interviews with a subset of members to gather feedback and opinions on the individual and working group levels. Individual interviews will focus

primarily on process evaluation, whereas working group interviews will collect outcome and output information at the working group level.

Document Review: The Leadership Team and each working group will provide the evaluator with pertinent documents representing the work of the previous year to date. Unless desired by the working groups, this will not require the creation of any additional documents. Relevant documents include meeting agendas and minutes, attendance records, strategic planning documents and financial statements. The evaluator should also review outside documents such as newspaper articles or sector publications that refer to FSEP projects or work.

Leadership Team Survey: To gather some more quantifiable feedback from the entire group and add another dimension to the evaluation, a very brief survey will be given to Leadership Team members in February or March. The survey will give all FSEP Leadership Team members an opportunity to participate in the annual review. It is designed to assess the degree to which FSEP leaders feel that FSEP is achieving its goals as an organization and living up to its values. These goals and values were identified and articulated through the strategic planning process that took place in the winter of 2005-2006. The survey includes several Likert scale questions regarding overall effectiveness of Leadership Team meetings, effectiveness of meeting format, working group meetings, outside/social activities, etc. The survey may be distributed on paper or via an Internet survey tool depending on the preferences of the organization. The proposed survey format is available in Appendix 16.

Individual Interviews: The FSEP Leadership Team is comprised of about 40 individuals that represent every facet of the regional food system. With such diverse involvement, it is important that the annual review includes an array of individual perspectives on the progress of the organization. About one third of the Leadership Team members will be randomly selected each year. This group of 10 to 15 team members will meet individually with an outside evaluator to answer a short set of open-ended questions. The interviews will be approximately 30 minutes in length. The proposed Leadership Team Individual interview questions are available in Appendix 17.

Working Group Interviews: Because working groups form the core of FSEP's work, it is important to give each group the opportunity to evaluate their progress with respect to the specific goals and action plans the group has articulated for itself. Each working group will decide whether to

participate as a group or have an individual represent the group. The evaluator will either conduct an individual interview with a working group leader or facilitate a small group interview with working group members. The proposed Working Group interview questions are available in Appendix 18.

External Review Methods

While the emphasis of the annual review will be on the activities, process and organizational culture of FSEP itself, feedback from “clients” and external partners can add another critical dimension to the assessment process, which may prove helpful in identifying successes and areas of progress and planning for the future. External components that might be integrated into the assessment include a client survey and interviews with key outside observers.

Client/Stakeholder Survey: As an organization that aims to provide services to “clients” who are stakeholders in the local food system, FSEP should not pass up the opportunity to learn from these clients. For the first year, FSEP should identify a list of clients by January to whom the survey should be mailed. Surveys should be mailed in early February along with a letter explaining the review purpose and process and requesting participation. A follow-up phone call a week later will improve the response rate. Like the internal survey, this might also be offered through an on-line Internet survey engine. In the future, FSEP might choose to distribute the client survey throughout the year, perhaps after a particular “job” has been completed. The proposed survey format is available in Appendix 19.

Interviews with outside observers/stakeholders: While the FSEP Leadership Team includes a wide array of players and representatives from all sectors of the regional food system, there are many individuals not officially affiliated with FSEP who play an important role in local food system change. The annual review provides an opportunity to add another dimension to the assessment process and solicit feedback from these outside observers adding another dimension to the assessment process. Given the constraints of time and resources and the developmental state of FSEP, we suggest involving two to four outside “experts” in the review process. The FSEP leaders will identify individuals to interview and the evaluator may identify individuals based on document review and internal interviews. The proposed interview questions are available in Appendix 20.

Open Comment Period

While the interviews and surveys provide the structured framework for the evaluation, FSEP leaders have also requested that the evaluation allow for a voluntary, open-ended comment period. FSEP Leadership Team members will have the opportunity to submit additional documents addressing any topic(s) they feel will contribute meaningfully to the evaluation process. These can be submitted in one of two primary ways: the FSEP wiki site can make space for public posting; and the evaluator can collect anonymous submissions in printed form. Outside observers, stakeholders and clients will also be invited to submit written documents.

These documents will provide rich qualitative information that will be incorporated into the analysis and report. The issues discussed will also help revise the evaluation in coming years by highlighting any additional key issues that were not brought out through the other methods.

Analysis

The evaluator will collect and analyze the qualitative feedback and quantitative data collected. S/he will compile quantitative survey data into a database and run basic statistical tests. S/he will compile and analyze feedback, form conclusions and prepare a discussion of the rich qualitative information collected through interviews and document review.

Report

The results of the interviews, surveys and document review will be written in a concise report. The report will include: an Executive Summary of the key findings for FSEP as a whole; a summary of findings on each working group; a summary and discussion of findings from the external review; and derived conclusions and recommendations.

Process

The Board will issue an RFP for the evaluator in December and hire the individual by mid-January. The evaluator will commence work by the end of January and conduct document review and interviews through mid-March. Once the report is completed by mid-April it will be produced to the Board for review. The Board will be responsible for presenting the report to the Leadership Team (possibly during an Annual Meeting?). The findings of the report will be used for strategic planning, fundraising and publicity.