Best Practices For Organizing & Managing Fieldprint Projects

Field to Market®

1
Introduction

INTRODUCTION

This report is the product of an effort initiated by Resolve in March 2016 the purpose of which was to develop and provide information and guidance that will help Field to Market (FTM) members and their partners effectively organize and manage Fieldprint projects. Underlying the effort were two basic ideas:

- Fieldprint projects are efforts to help large, diffuse groups of people to document and change their farming and management practices. They require organizational skills in fostering and managing change that are just as critical as the technical skills necessary to implement new farming practices.
- Identifying and documenting the lessons learned by existing Fieldprint Projects and providing that knowledge in a coherent and systematic way can provide a value-added service to FTM members in carrying out projects that helps increase the unique value of FTM implementation efforts throughout the supply chain.

Organizational and management factors are especially relevant to supply chain projects in that they are intended to coordinate the needs and interests of multiple partners in achieving specific measurable results. Consequently, the introduction of new tools, such as the Fieldprint Calculator, and the overall adoption of sustainability programs by their very nature involve extensive coordination and management. The success of those efforts depends in large part on the ability to organize and manage partnerships that lead to the adoption of innovative practices.

This report describes the approach and methodology for the work in this project and the findings from that work. It also provides an overview of research that is relevant to the implementation of projects and offers a set of best management practices (BMPs) for organizing and managing projects. The BMPs provide a template for Fieldprint project leaders to succeed in creating and conducting effective Field to Market Fieldprint Projects.

2
APPROACH AND METHODS

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This project used extensive engagement with Field to Market members, committees and the staff of member organizations in order to gain as much practical knowledge about the Fieldprint projects as possible and to ensure the relevance of the inquiry. Following initial desk research using materials compiled from a number of the projects, the majority of the inquiry was carried out through in-depth interviews. The list of interviewees was provided by FTM staff and represented the wide range of partners involved in Fieldprint Projects – consumer product companies, manufacturers, suppliers, technology companies, NGOs, grower groups and government agencies. Some additional interviewees were added at the suggestion of the initial interviewees as the interviews progressed. A total of more than twenty people were interviewed and in several cases follow-up discussions were conducted to clarify specific issues raised in the interviews.

The interview instrument (copy attached) was developed in consultation with FTM's Information, Communication and Engagement (ICE) Workgroup and shared with each of the interviewees prior to the interviews, the majority of which were conducted by phone. While the instrument served as a guide for the interview and a means for ensuring all the relevant issues were covered there was ample room in the interview for open-ended discussion. The responses in the interviews were transcribed, reviewed and compiled in a grid that tracked each of the interview questions. Those results were summarized as a set of Initial Findings that were reviewed in a two hour roundtable of project leaders and discussed with the ICE Workgroup as well as being presented in a panel discussion at the Field to Market plenary session on June 22 in Chicago. Using the input from the roundtable discussion and the committee meeting, this report was presented in draft form for review by the newly convened Education and Outreach Committee meetings in September and November and the input from those discussions was used in completing this final report.

The methods used in this work were particularly effective in eliciting extensive input from people who were well-versed and had a stake in the success of Fieldprint Projects. The engagement of Field to Market members in the development and review of work products proved to be valuable in providing context for the effort and in grounding the work as it progressed. The in-depth approach provided an important opportunity to gain detailed insights from project leaders in addition to general information and observations. As a result, the findings reflect a rich diversity in perspective and experience along with a number of common themes that served as the basis for deriving the BMPs.

3
FINDINGS

FINDINGS

Diversity

Just as there was substantial diversity among the participants in the interview process there was also a wide range of diversity among the projects in several respects. As noted there was an array of supply chain participants in the projects ranging from grower groups, mills, input suppliers and chemical companies to processors, consumer product companies, NGOs and government agencies. Of that group, there was also a wide variety of organizations that served as the primary organizers for projects.

There were a number of different reasons that led to the establishment of projects that included:

- Developing a baseline of practices from the project.
- Supporting the successful development and use of the Fieldprint Calculator.
- Providing data to farmers on the sustainability of their practices data to farmers.
- Helping farmers adopt conservation measures that increased their sustainability.
- Meeting company sustainability and sourcing objectives.

Projects also had a variety of specific goals for their efforts that included protecting watersheds, increasing adoption of conservation practices, meeting particular purchaser requirements, and meeting corporate objectives. As is often the case with partnership efforts there were multiple, though complementary, goals among the participating partners within a single project. The projects used different approaches for organizing from focusing on a specific watershed, on the farmers delivering to a specific mill or on a particular grower, supplier organization or network. There was also a wide range of funding sources for the projects: grower group funding, EPA Section 319, company funding, USDA/NRCS Regional Conservation Partnership Program (RCPP), Mississippi River Basin Initiative (MRBI) and Environmental Quality Incentives Program (EQIP) funding as well as grants from other sources. In addition to the array of funding sources the projects incorporated different incentives for farmer participation including direct financial support, access to technology for conservation activities, increased ranking for EQIP financial assistance, and price premiums.

Common Elements

While the diversity of specific circumstances reflects the range of partners, cropping systems and landscapes involved in Fieldprint projects, there are a number of common elements in organizing and managing projects that became apparent during the interview process. As the interview results were reviewed it was possible to group those common factors using the same basic categories used in the interview format: Organizing, Managing, Communicating, Evaluating, and Takeaways.

Organizing: Each of the projects, given that they all involved multiple partners, necessitated deliberate attention to planning, organizing, and coordination. Interviewees pointed to several key factors involved in putting their projects together:

- Leadership and management of the participating companies and organizations were involved in supporting and guiding project development.
- Dedicated company/organization staff were committed to work on the project.
- Growers and supply chain partners were involved early and consistently in process of organizing the projects.
- Focusing on a specific area – a watershed, a specific mill, an existing network – enabled the project to be more manageable and to have an obvious cohesive structure.
- By embedding or connecting the Fieldprint Projects with existing projects, such as watershed, RCPP, or state cost-share programs, they were able to achieve synergies and economies that made their projects more effective.

Managing: The most widely noted factors for the projects were 1) the need for a specific project leader, manager, or coordinator to oversee and be responsible of the operation of the project; and 2) key people on the ground (e.g., merchandisers, field staff), who have existing relationships to identify, recruit, and work directly with producers. In addition, several other elements were common to the projects:

- There was an emphasis on building and strengthening working relationships with producers and among partners in the supply chain and/or watershed.
- All of the projects devoted staff time in working with growers to enter data into Fieldprint Calculator. The training provided to them in using the Calculator by partners of FTM was extremely helpful. Some staff working with farmers managed the data entry by identifying the key data or data subsets to collect that had strategic and immediate value to producers.
- Projects were able to manage the project-generated data by adapting and using existing company information systems.
- Project leaders became aware that the Fieldprint Calculator could serve differing purposes – as an engagement, evaluation, or management tool depending on the project situation - and adapted their use of it to their specific circumstances.

Communicating: Communication was important to the projects in at least two ways – providing a means to keep supply chain partners engaged and informed and providing a means to communicate with and among the farmers involved in the project.

- Companies provided a regular staff presence interacting with suppliers and farmers to learn and communicate with projects.
- Growers were given an opportunity to see their results in comparison to results of others.
- Farmers were given the opportunity at meetings to interact, share stories and experiences.
- Companies communicated outwards toward consumers using grower experiences.

Evaluating: While many of the projects are in the relatively early stages, all of them have identified key indicators in assessing progress. The specific results on which the projects focus vary with the projects' purposes and include increased use of conservation practices in comparison with state or national averages; increased water efficiency; improvements in applicability of the Fieldprint Calculator; continued engagement of farmers and project partners in the project; and increased sustainability in the supply chain.

The methods used in the evaluation process also varied, but interviewees identified several key factors that influenced the effectiveness and usefulness of their assessment activities. They regularly pointed to the importance of having people dedicated to compiling and managing the data for the project to minimize work for the farmers, to ensure efficiency, and to ensure data quality. In each of the projects, data was shared individually with farmers so that they could assess their current performance in key areas. When presented publicly, the data was aggregated to show results in the project area while still protecting confidentiality which was a significant and serious concern of farmers. The aggregated data allowed the projects to arrange farm data in such a way that farmers could identify how their operations compared with other farmers. That comparison was regularly cited in the interviews as an important assessment tool that farmers found compelling.

In addition to quantitative results, the projects also conducted feedback surveys to get qualitative information from farmers on the projects. This enabled them to determine farmers' attitudes to the projects, to identify the benefits and challenges the farmers perceived, and to engage the farmers in helping to think through the project and its activities.

Takeaways: In the course of the interviews and follow-up discussions, interviewees also identified the key lessons or takeaways from their project work.

- These projects are labor intensive.
    - Sustainability staff in partner organizations dedicated to active project involvement is critical.
    - Dedicated staff is necessary to lead and manage the project at the local level.
    - Staff to work directly with growers is essential for project effectiveness.

- These projects require a long-term view and patience.
    - It takes time to build the necessary relationships.
    - Commitment of adequate time and resources is necessary for those relationships to be built and yield results.
    - Collection of data over time is required to make recommendations, engender change, and make supportable claims.
- Projects should be organized in the context of existing programs and relationships.
    - Having and relying on existing staff, relationships and tools is incredibly effective.
    - Integrating Fieldprint Projects into existing and/or related efforts helps provide a context and platform for sustainability efforts.
- Incentives work.
    - Incentives increase perceived value of projects and encourage participation by farmers.
    - Incentives encourage early involvement by farmers.
- Adaptability enables projects to engage farmers and respond to local needs.
    - Establish priorities for collecting the data most important to farmers and thereby streamline the process.
    - Focusing on key indicators to engage and help farmers make changes can be more practical than addressing whole farm or all resource issues and more effective in getting farmers to participate.

Roundtable Discussion and Review of Findings

A roundtable discussion with project and company leaders was held in conjunction with the June 2016 Field to Market meeting in Chicago. The discussion was candid and provided an in-depth, interactive and insightful review of the findings. Participants were gratified to see the findings captured project efforts in a positive light. The major takeaway participants noted that was missing from the initial findings was the need to emphasize the importance of managing expectations within Fieldprint Projects. They also observed that the Fieldprint Calculator should be communicated as an analytic tool (that may need to be further adapted) for evaluating the sustainability of on-farm practices and engaging farmers in sustainability efforts, rather than as a management solution for making farms more sustainable.

Critical Components of Successful Fieldprint Projects

- Participants reiterated that Fieldprint Projects are labor and time intensive. Therefore:
    - Having a designated project leader to manage the projects is essential to maintain momentum and to fit all the pieces together.
    - Having a designated data collector to work with farmers is very important. However, this creates a dependency on this middleman for collecting the data.
    - Relationship building across the supply chain and with farmers on the ground is essential to stimulate buy-in. This includes explaining to farmers and others in the supply chain the purpose for gathering the information needed to input into the Fieldprint Calculator and the benefit of doing so.
    - It is important to respect the farmer's time by figuring out ways to collect the information efficiently and effectively (i.e. working with co-ops, district managers, extension offices, etc. to fill out as much of the information as possible before contacting the farmer).
    - Providing incentives, such as crop premiums, cost-share incentives, and incentives from government programs, can be helpful for attracting farmers to participate.
- Participants emphasized the importance of developing a feedback loop or trainings for farmers, so that Fieldprint results can be discussed and translated to develop a prioritized sustainability plan of improved farm management practices that is tailored to the specific farm. To do this:
    - Data should be analyzed and shared with farmers to identify best practices. However, additional work is needed to enable proprietary data systems to easily integrate with the Fieldprint Platform to ensure seamless data transfer and analysis. This will help avoid redundant data entry and eliminate a key barrier to participation.
    - Knowledgeable experts should be identified to consult with farmers and help them make decisions about improving farm practices. Farmers currently do not know who can provide them with this advice.
        - Agronomists could be trained to help farmers interpret their Fieldprint reports and implement sustainability into their farm management practices.
        - Extension programs could be a good fit for providing this kind of service (University of Nebraska is already exploring how to do this).
- Participants also emphasized the importance of determining how to use the Fieldprint Calculator to scale-up best management practices for integrating sustainability into agricultural supply chains.
    - Participants suggested that the Fieldprint Calculator could be used to document meaningful practices in the supply chain for specific conservation purposes over-time and then these practices could inform the design of projects.
    - Once Fieldprint Projects are developed, farmers could then be incentivized to participate in these projects and share data using conservation credits and regulatory authorities. As examples, Arkansas provides a state income tax credit for sustainable groundwater uses; conservation districts in Nebraska require farmers to share data with the districts and others; and Minnesota provides regulatory exemptions for high-performing farms.

- Participants also reiterated the importance of determining the value proposition for participating in Fieldprint Projects. Projects have not yet been integrated into the management practices of a farm and so it costs additional money to run these projects. Therefore, in its current form, it is important to have funding available to continue these projects from within the supply chain as well outside sources.
- Participants suggested it would be useful to create more opportunities for different farmers, companies, organizations, etc. to come together and discuss the benefits, challenges, and next steps for scaling-up the Fieldprint Calculator and successfully translating its findings into best management practices.
- A participant also suggested that, as a next step, Field to Market could develop a bibliography of the science behind the Fieldprint Calculator sustainability measures and bring in a third-party science review team to identify the gaps in the information that is still needed.

Conclusions: The process of interviewing project leaders and discussing the findings with a subset of them yielded substantial information and a set of common elements and takeaways that can serve as the basis for developing a set of best management practices for Fieldprint Projects. Having looked in depth at the key factors for organizing and managing effective sustainability projects, it is important to recognize that other studies of the adoption of new practices by farmers have also sought to identify the elements that are critical to success in comparable efforts. A review of those studies can help broaden our understanding of how changes take place, provide insights into the key factors that are widely recognized as important and can help corroborate the findings from the Field to Market inquiry.

4
RELEVANT STUDIES ON THE ADOPTION OF INNOVATION AND NEW PRACTICES IN AGRICULTURE

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There have been a number of studies on the adoption of new practices by farmers, the most notable being the work of Everett Rogers in his book *Diffusion of Innovations*. In recent years, several studies have also been undertaken to understand how best to organize and manage watershed scale projects. Though not identical to Fieldprint Projects, watershed projects are similar in that they seek to involve a number of farmers dispersed over a wide geography in the adoption of new or innovative practices to achieve a common set of outcomes. As a consequence many of the findings of those studies, along with Rogers's insights, can be useful in confirming and further informing the results of the Field to Market interviews.

Research into the adoption of corn hybrid varieties served as a key foundation for Everett Rogers book. A rural sociologist, Everett Rogers's work was first published in 1962 and his theory of the process by which innovations are adopted continues to be the seminal work in the field. Rogers explains four basic ideas related to the adoption process: 1) that the innovation itself has characteristics that influence the pace and extent of adoption; 2) that potential adopters can be characterized by the pace at which they will embrace an innovation; 3) that the decision process for adopting an innovation has discernible steps; and 4) that the adoption takes place within a social system. Each of these factors influences how extensively and quickly an innovation is adopted.

Rogers identifies five characteristics of innovations that affect its likely adoption:

- Relative Advantage How and to what extent does the innovation offer an improvement to the adopter over the current situation?
- Complexity How easy will it be to adopt the change? How complex will it be for the person adopting the innovation?
- Compatibility How easily can the change be "folded into" existing practices?
- Trialability Will the person who must adopt the change be able to try it out on a limited basis at first?
- Observability Will the person adopting the change be able to see and assess the results of the change?

To the extent an innovation offers a clear advantage over existing practices or technology, is easy to adopt, fits well with existing processes, can be easily tested and that result scan be readily seen the more likely it is that an innovation will be adopted. These characteristics allow proponents to assess the likelihood and pace of adoption for a new practice. They also provide a means to diagnose the likelihood and to adjust the way in the adoption is supported for example by providing technical support to overcome complexity or revise a technology so that it is more compatible.

Rogers also maintains that there is a spectrum of adopters from innovators and early adopters to middle and late adopters and then laggards. In noting that people adopt new practices at varying rates he posits characteristics that are typical of each group. Understanding the distinctions can be useful in developing strategies for working with each group. For example, innovators are the most likely to be influenced by publications and other media to adopt new practices. By contrast the other potential adopters are most and almost exclusively influenced by one on one interaction with skilled people they trust.

Another key contribution of Rogers work is his articulation of the basic decision making process by which innovations are adopted. The steps move from knowledge, persuasion, decision, implementation, and confirmation. Recognizing that those steps exist and that people considering adoption go through those stages provides a way of targeting different types of interaction with likely adopters depending where they are in the decision process. In addition, understanding that this process takes place over time helps provide a realistic expectation of the time needed for adoption to take place. Furthermore, the inclusion of the confirmation step reinforces the need to see results as a key part to fully adopting a new practice.

Finally, Rogers points out that innovations are adopted with in a social context that influences adoption. He points out the role that opinion leaders can have on further adoption, the extent to which people perceived as having shared characteristics can influence adoption and the extent to which joint problem solving can take place.

Taken together these observations provide a basic framework that can help guide the organization and management of Fieldprint Projects. At the same time, there are clear parallels with a number of the key findings from the interviews with Fieldprint Project leaders. Additional concrete evidence of the key factors in organizing and managing projects can be found in a review of studies on the effectiveness of watershed projects.

Two substantial studies of watershed scale projects have identified the key organizational and management factors in effective watershed projects. *The Evaluation of the Experimental Rural Clean Water Program* (1993) and *How to Build Better Agricultural Programs to Protect Water Quality* (2012), both conducted in-depth reviews of watershed projects that were funded, respectively through the Rural Clean Water Program (RCWP) and the National Institute for Food and Agriculture-Conservation Effects Assessment Program (NIFA-CEAP). Though the studies were carried out several years apart they identified many of the same key factors and both emphasized how important effective design and management were to achieving objectives at the watershed scale. Several observations were made in the course of the studies that were relevant to project organization and management:

- Project goals and objectives need to be well-defined and developed with the engagement of key participants and stakeholders.
- A dedicated project manager and adequate staff to coordinate, manage and conduct the project are essential.
- An advisory committee for the project creates engagement and shared ownership of the project.
- Understanding the impact of project activities and seeing the results is critical to farmers' participation and adoption of practices.
- Outreach activities are most effective when conducted by people familiar with farming in the area and who have existing working relationships and trust.
- Ease of use and implementation of conservation practices influences the willingness of farmers to adopt them.
- Flexibility in choosing and adapting practices to farmers' situations and needs increases the likelihood of adoption.
- One on one interaction with farmers is fundamental to farmer adoption.

Another more recent study done for USDA/NRCS, *The Way Things Work: How Effective Watershed Projects Are Organized and What We Can Do to Improve Public and Private Sector Watershed Programs* (2015) corroborates and elaborates on the key findings in the previous studies. The intensive study of successful watershed-scale projects yielded comparable findings:

- Creating a collaboratively developed implementation plan helps create and reinforce the partnerships that are integral to success.
- The capacity to coordinate and manage project activities, adequate capacity and skill to organize and manage a project; an anchor organization; project coordinator & adequate staffing are critical to effective projects.
- There is no substitute for the direct interaction with a farmer and the trust formed by strong working relationships through one on one engagement with farmers and landowners.
- Flexibility to respond to site specific conditions on a farm and engender adoption of practices that might not otherwise have been installed.
- Project planning, creating a shared strategy for implementation, assembling credible data, and developing the trusted relationships require time frames that extends over multiple years.

Finally, a recent study done by Linda Prokopy and Sarah Church from Purdue University looked at the Indian Creek (IL) Watershed project to understand its process, intentions and achievements. The project is managed by the Conservation Technology Information Center (CTIC) which has also incorporated use of the Fieldprint Calculator as an engagement tool for the project. From their interviews with project participants the Purdue researchers were able to identify several findings and recommendations about effective watershed projects. Among those related to organizing and managing project they noted:

- Dedicated leadership and staffing are key factor to successfully operating a watershed project.
- A steering committee provides important input, involvement and shared commitment that increases the effectiveness of a project.
- Incorporating issues that are important to the ag and local community is effective in engendering participation in and support for the project.

These studies confirm and add weight to the validity of the interview findings by demonstrating that there are basic factors at work in the process for adoption of new practices and in large scale implementation projects. People organizing and managing projects included in the various studies, whether to achieve sustainability or water quality objectives, encounter similar challenges and succeed with similar measures. The studies all point to the value of deliberate and conscious attention to the way projects are organized and managed. Furthermore, Rogers articulates in a fundamental way the characteristics of the adoption process that further confirm and corroborate the findings of the watershed studies and the Field to Market inquiry. As a result there is strong theoretical and practical basis for developing a methodology or set of BMPs to help guide the Field to Market Fieldprint Projects.

5
PROJECT METHODOLOGY/BEST MANAGEMENT PRACTICES

PROJECT METHODOLOGY/BEST MANAGEMENT PRACTICES

The interviews with Fieldprint Project leaders and the studies cited point out several basic organizing and managing factors that are important to the success of Fieldprint Projects: Collaborative engagement and involvement of project and supply chain partners, one on one interaction with farmers, relying and building on good working relationships and trust with farmers; commitment of staff time for coordination and management of the project; patience and clear expectations; sharing of information among farmers and partners. This section takes the observations from Fieldprint Project leaders and other studies and offers a practical guide of best management practices for organizing and managing Fieldprint Projects. These BMPs are intended to provide useful guidance for project developers in the organization and management steps that can easily get lost in the technical work of furthering sustainable farming systems. Applying these practices consistently has been shown to increase the effectiveness of project managers and the success of implementation projects.

The BMPs are arranged in the form of a work plan template that builds on the structure of the Field to Market interview results, incorporating the key findings and lessons from those and other inquiries. Assuming that projects are initiated by one or more supply chain partners who would use the template in creating a project it lays out the basic areas they would use as the objectives of the work plan: Organization, Implementation, Evaluation and Communication. Outreach and education are included as part of the implementation process since they are intended to help achieve that objective. Treating outreach and education in this way reinforces the fact they are tools and their function is to achieve specific project purposes, rather than separate objectives of their own.

Best Management Practices for Field to Market Fieldprint Projects

First Steps

- Assemble supply chain partners to design and oversee project.
    - *This group serves as a management team and involves the appropriate level of leadership from the organization or company that has a stake in the project.*
- Engage growers and their advisors (e.g., independent consultants, co-ops, ag retailers, local extension agents).
    - *Growers and their advisors should be involved as full and founding members of projects – as members of the management team and/or as an "advisory" committee. The idea is to get early and regular engagement to identify challenges and solutions, ground-truth ideas and secure early buy-in.*
- Identify the project scope or area of activity on a scale that is both meaningful and manageable.
    - *The project area may be organized around a particular watershed, an area in which commodities are sourced for a particular product, a specific mill shed, or the customers of a particular supplier. Organizing the project on a scale that matches the resources available and around the capabilities or relationships makes initial success more likely and provides a viable foundation expansion of the project scale.*
- Identify any existing projects that can be used as a platform for Fieldprint project implementation.
    - *Adding the use of the Fieldprint Calculator as an additional component can provide the opportunity to use existing relationships and organization for the implementation effort. There are also a number of ways to leverage existing resources, for example state cost share programs, to further support Field to Market implementation efforts.*
- In preparation for developing a work plan articulate project purpose, intended action and anticipated outcomes.
    - *These one-sentence statements are really helpful in indicating why the project is taking place, what will be done and where and what it will accomplish. Drafting these statements offers the opportunity to clarify expectations from the beginning of the project.*

Elements of a Work Plan

Work plans come in various forms – often they are simply included in a funding request or drafted at the beginning of an effort and then referred at the end in the final report. For Field to Market projects, a work plan can serve more central and useful purposes 1) as a means for carefully thinking through what really needs to be done and how to best accomplish it; and 2) as a management tool and mechanism for project leaders, participants and funders to track progress. Whatever format project leaders use, the key elements necessary for a project to be effective are included for each objective.

Objective 1) – Organization: Since Fieldprint Projects bring together diverse supply chain partners, attention to the process of organizing the projects is integral to their success. In addition to the logistics and financial management for a project, these are key elements that are essential to the success of an implementation project.

Key elements:

- Ensure that a project manager is identified or hired who has responsibility for coordination of project activities and oversight of project work.
- Establish a regular mechanism for communication with and among the management team.
- Establish a mechanism for regular feedback from farmers and their advisors either through the management team or an advisory group.
- Engage the support by the management of supply chain partners in the project.
- Recognize and anticipate the need for adequate staffing to work with farmers, collect and manage data, and provide feedback.

Objective 2) – Implementation: The primary intention of most Field to Market projects is to increase the implementation of sustainability practices and use of the Fieldprint Calculator. With the lessons learned from other projects there are useful steps that can help in designing the implementation effort and in ensuring that it is well-supported.

Key elements: Designing the implementation work – There are, to paraphrase Rogers, three basic factors that influence the willingness and ability of farmers to adopt new practices – relative advantage, complexity and compatibility, trialability and observability. The extent to which a project deals with these areas effectively is the extent to which it succeeds in helping farmers adopt new practices such as the Fieldprint Calculator. Conducting a diagnosis of a new practice and devising ways to maximize its positive features and overcome the challenges it presents is a really useful step in developing an implementation project.

› Create or identify relative advantage – If we assess the new practice from the farmer's point of view what advantages can adopting it provide that will give it value over existing practices. From a sustainability perspective what is the "value proposition" for the farm operator? If there no or limited intrinsic advantages the project can help create that advantage in at least two ways:
    - Internal – Identify improvements in areas of importance to the farmers – (*e.g.*, productivity, efficiency of input use, soil health, reduced costs, net return). This would typically involve the farmers and the service provider(s) for an operation.
    - External – Incentives provided to the farmers from supply chain partners [price premiums, technology] or through other programs [ranking in conservation programs (LA), access to state cost share (IA), tax credits (AR).

› Minimize complexity/Maximize compatibility – Adoption of new practices takes place more readily if they are made easier (less complex) to use and if they fit well with existing on farm practices (more compatible).
    - Use existing advisors and service relationships to work with farmers in the adoption of the new practice.
    - Focus adoption of the new practice(s) on issues that are important to farmers that the new practice can address – efficiency, productivity, or external issues such as regulatory concerns.

- Look for opportunities to adapt or incorporate the practices to fit the farm operation's circumstances. For example, scale the information gathered initially for the Fieldprint Calculator to a specific set of information highly relevant to the farmer's daily needs.
- Provide training on the Fieldprint Calculator or another new practice as needed so that adequate knowledge is available to ensure it can readily and easily used by farmers and their advisors.
- Where available, provide an opportunity for farmers to use existing data collection systems from official Field to Market data partners (e.g., technology company, agribusiness systems) to collect and compile information from farmers through the Fieldprint Platform.
- Addressing confidentiality concerns is paramount to farmer participation.

› Provide for trialability and observability – It is important that farmers have a chance to try out any new practice on part of their operations before going to the expense and time of using it over an entire operation. It is just as important that they see the results so that farmers – and their advisors - can make the new practice part of their ongoing operations.

- Scale initial adoption to a manageable part of the operation, for example, to specific field(s) and/or crop(s).
- Provide feedback and data to the farmer on the most relevant decision points.
- Ensure that there is adequate staffing to collect and manage data effectively and to interact with the farmer in collecting information, setting a baseline, and reviewing results.

Objective 3) - Evaluation: Given the multiple partners involved in Fieldprint Projects and their individual purposes, evaluation activities in the work plan should to be designed to meet each of their needs. For each of the partner groups in the projects, the project needs to establish 1) explicit indicators; 2) a process for collecting compiling and analyzing data; and 3) and a clear baseline.

› Farmer and advisors - Experience has shown that direct feedback to farmers on their practices and their use of the Fieldprint Calculator is an essential part of the adoption process. In most cases advisors are the people who are most effective in facilitating that evaluation. In Fieldprint Projects it is also important to give farmers an opportunity to see their results in the context of the work and results of other farmers. Seeing those results in context and having a chance to compare notes with other farmers has been shown to be of substantial value to farmer participants.

› Supply chain partners – Evaluation for supply chain partners is best when it is a two way process. There will need to be an aggregation of data that meets supply chain partner needs and includes the indicators that are of importance to them. This should be viewed as part of the reporting process for major supply chain companies. Just as important is the feedback from management and leadership of supply chain partners back to farmers about the value of their work and how it is being used is exceptionally useful.

› Project organizers, leaders, and participants – In addition to collecting quantitative information on projects results, projects will find substantial benefit in soliciting qualitative information on the project and its effectiveness that can be used to improve the work of the project and inform subsequent project efforts. Roundtable discussions with project participants each year should be held by project

leaders to find out what is and is not working from the perspective of participants. A similar structured discussion should be held for the management team and project partners to determine the level of satisfaction with the project and the way it is operating. If well-organized these can be of real value in keeping a project on track – having an outside facilitator can increase the effectiveness of the discussions. Surveys, while valuable in very limited circumstances, are difficult to do well and often yield unreliable results and/or fail to yield the richness of information that can be derived from a well conducted roundtable discussion.

Objective 4) – Communication: Communication as a separate objective is specifically intended to further Fieldprint Project implementation goals. Although there are other purposes that communications can serve such as general publicity and the internal coordination that is necessary for running project, this objective is aimed at 1) reinforcing the usefulness of participation in Fieldprint Projects by creating a positive social context in which to encourage and sustain adoption; and 2) involving other farmers, leaders and participants to scale up Fieldprint Projects.

- Creating a supportive social context for adoption. Since farmers operate in the context of social relationships, the adoption of a new practice is understood, reinforced, supported and seen as valuable. Communicating about the work of Fieldprint Projects can further that support by reaching out to audiences in the farm community, in the supply chain and the community.
    - The farm community - Speaking at grower meetings and communicating through grower publications, especially when the message is carried by farmers and their advisors, about the value of participating in Fieldprint Projects helps them to be seen as a legitimate part of the farm community.
    - Project partners – Communicating about the value of Fieldprint Projects can be done, for example, by providing information to project partners that they can use to inform their management and leadership and providing briefings or field tours for supply chain managers so that they can see first-hand the work of the project and see the value of their support and involvement.
    - The general public - Communication targeted to the communities in which projects are being conducted can be used to recognize, reinforce and support adoption of sustainable practices in the project and the intended sustainability benefits beyond the farm. This can be done with public recognition of farmers' efforts and direct interaction with community organizations, and targeted local media.
    - Consumers – Consumer facing companies use their communication channels to engage the broader public on the conservation and stewardship efforts of participating farmers.

Scaling up expansion of Fieldprint Projects – As the area or scope is expanded there are important communication actions that can be taken by an existing project to prepare for scaling up adoption efforts. The audiences are the next circle of adopters and partners who could be involved in an expansion of the project's scale. Communication with those audiences is most effective through direct interaction with potential partners and participants early in the existing project.

- Project leaders - to demonstrate how the project is developed and operated and so that any specific needs in expanding the project can be understood and eventually addressed.

- Farmers and their advisors - to engage early adopters who will participate in expansion of adoption; to provide the knowledge necessary to adoption to take place.

Conclusion: The lessons learned by experienced project managers have shown that organizing and managing projects effectively is the key to achieving results. Applying those lessons as expressed in these BMPs gives Fieldprint Project leaders a sound basis for designing and conducting their own projects. As the BMPs are used it is hoped that knowledge from those subsequent projects can be used to adapt these BMPS and increase the capacity to carry out Fieldprint Projects.

Please note: For any communication that involves making participation, measurement or impact claims related to a Fieldprint Project, prior review and approval is required from Field to Market. Please refer to the Communications Toolkit and Claims Protocol for more information.

Fieldprint Projects: Words to Live By

- Fieldprint projects are fundamentally sustainability efforts that also incorporate conservation practices, the Fieldprint Calculator, and other tools to help farmers create more sustainable operations.
- The projects are require intentionality and hard work:
  - Helping farmers adopt a new practice requires strong working relationships and one on one interaction.
  - Effective coordination of a large-scale partnership effort requires skilled and deliberation attention.
- These projects take time and they require patience and realistic expectations and sustained, substantive support among all of the supply chain partners.
- Experience has shown that well-organized and managed projects can provide genuine results for both the supply chain and conservation outcomes by meeting the needs of farmers in a way that demonstrates the value of their participation, while documenting and demonstrating continuous improvement at the field and landscape level.

Next Steps:

There are three next steps, all of them rather obvious, that will significantly improve the prospects for project success and dramatically increase the ability to scale efforts beyond their current scope. The last one, to establish a forum for project leaders to interact, is the most doable and the most appropriate to this report.

- APIs – Application Programming Interfaces will greatly facilitate the adoption of the Fieldprint Calculator by making it more compatible, less complex and by reducing the time and cost involved in using it.
- Value Proposition – Developing a clear value proposition for the farmers and those who advise them will greatly facilitate adoption in Fieldprint Projects. For most supply chain partners this will involve identifying the costs and benefits of participating in Fieldprint Projects and creating or sharing the economic benefits through incentives, quantification of improvements, and/or new business models.
- Regular substantive interaction among project managers and leaders – There is a real need for project managers and leaders to have a chance to share experiences and shorten the learning curve for new projects. Creating an opportunity for substantive discussion among those leaders is achievable in the near term and can have genuine benefits for Fieldprint Projects individually and collectively.

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Field to Market – Fieldprint Project Questions

Date: Name: Company: Email: Phone: Background:	
What was the primary reason or impetus for the project?	
What funding and support was provided to carry out the project?	
• Was outside funding sought for the project? Secured? If so, from where?	
Notes:	
Planning and Organizing	
How did you go about planning and organizing the project?	
• Who led the planning? Who was involved? Did you develop a work plan?	
• What was particularly important or critical to your planning process?	
• How useful was the planning to actually carrying out the project?	
What did you learn about the planning process you would pass on to others?	
Notes:	
Managing	
How did you manage and coordinate the project?	
• Was there a lead organization and someone who led or coordinated the project? with what support and/or resources?	

Field to Market – Fieldprint Project Questions

• How did you communicate internally within the project? externally?	
• How were participants recruited or selected?	
o What were the perceived benefits or incentives for farmers to participate?	
• How much time was spent working 1on1 with farmers?	
• How was continuous improvement incorporated or addressed in the project activities?	
• What challenges did you encounter in managing the project?	
• What things did you do that were particularly useful to running the project?	
What recommendations do you have for other groups or companies in managing their projects?	
Notes:	
Evaluating	
How did you evaluate the project's effectiveness?	
• What tools did you use to assess progress as the project was carried out?	
• What did you do to make sure the project was on track?	
• What specific methods did you use to assess participant satisfaction? partner satisfaction?	
• How did you deal with confidentiality and/or privacy issues and concerns?	

Field to Market – Fieldprint Project Questions

• What kind of information was collected by the project? How was it provided as feedback to farmers?	
○ Was it developed to be shared with other audiences?	
Were the perceived benefits to the farmers achieved? How did you measure this?	
What were the most important considerations for effective project evaluation?	
Notes:	
Observations, takeaways, lessons, caveats, recommendations	
Did the project achieve what it was intended to accomplish?	
What was the most important factor in the project's success? shortcoming?	
What was its most important asset? challenge?	
What do you know now that you wish you had known when you started?	
• What one thing did you do that was most important or useful?	
• What one thing would you want to be sure to avoid?	
Was there a particular defining event or example that characterizes the success of your project?	
Would you undertake another project in the future? What would you do differently?	
What are you doing next?	
Notes:	

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