The Use of Feedback in M&E

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by

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Abstract:

This paper reflects on feedback in theory and practice to understand how feedback mechanisms can be better used in monitoring and evaluation. It also looks at how feedback information complements a variety of existing M&E tools. The paper concludes by setting out a series of steps and questions that can help evaluators collect and analyse feedback in a more systematic manner.
Biographies:

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**Glossary**

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<tr>
<td>ALINe</td>
<td>Agricultural Learning and Impacts Network</td>
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<td>AR4D</td>
<td>Agricultural Research for Development</td>
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<td>BMGF</td>
<td>Bill and Melinda Gates Foundation</td>
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<td>CDC</td>
<td>Cattle Development Centre</td>
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<td>CI</td>
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<td>Food Security Thematic Programme</td>
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<td>GFAR</td>
<td>Global Forum on Agricultural Research</td>
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Introduction

Feedback is information which allows an individual or organisation to understand their relationship to others within any given environment. Feedback can be useful for understanding the state of systems or relationships and for guiding actions taken to effect change. The ability of individuals or organisations to collect feedback, translate this information into action, and evaluate outcomes enables improvement in activities such as product development, service provision, etc.

However, there is no guarantee that feedback is collected, analysed, or used systematically or effectively. The specification of what sources are relevant, the selection of mechanisms to collect information, and the manner in which information is used all determine the effectiveness of feedback generated. They also determine the nature of blind-spots (e.g. information not collected or used). Subjecting mechanisms and blind-spots to a critical assessment of how they affect performance or produce externalities (i.e. unexpected outcomes) constitutes an important part of working with feedback. To improve feedback systems it is thus important to answer the following questions:

1. What determines if feedback is relevant for a given purpose?
2. How does the specification of what feedback is relevant create ‘blind-spots’?
3. How does the nature of a feedback system and blind-spots influence the usefulness of information gained?

Over the past three years, the Agricultural Learning and Impacts Network (ALINe) has partnered with many different organisations to improve monitoring, evaluation and learning systems. Through this work, ALINe is also making efforts to understand and improve the use of feedback. This paper presents an overview of some of ALINe’s experiences, and compares feedback in theory and practice to arrive at preliminary answers to the questions above. The paper intends to establish an agenda for further investigation, and the lessons learned through this examination are translated into practical steps that any M&E professional can apply to a feedback system.
Feedback in Theory

What sets feedback apart from other forms of information is that it is sourced from those who receive goods, outputs, treatments, or services (Jacobs 2010). Feedback is most commonly understood as perceptual data provided by beneficiaries or customers, but can take many different forms according to the context. This section briefly examines existing literature that support the subsequent reflection on ALINe’s experiences with using feedback.

Feedback in Systems Theory

Feedback features prominently in various aspects of systems theory, from cybernetics (Wiener, 1948; Bateson, 1979) to complex adaptive systems (see for example Juarrero, 2010). Maturana and Varella (1980) coined the term ‘autopoiesis’ to describe how living organisms can be understood as complex systems capable of reproducing themselves through the continuous collection of feedback about their environment and their internal state, thus effectively functioning as a form of biological cognition. Luhmann (1990) built on this concept to explore a variety of social actors and structures as autopoietic systems, in which communication operates as an organising principle.

According to theory, social actors (e.g. individuals, organisations or networks) are always oriented in particular ways with respect to their environment. This primes them to be receptive to certain aspects of their environment while ignoring others. It is through continuous probing that actors learn to make distinctions necessary for survival. In this conception, all information acquired by an actor constitutes feedback because it is always a response to a probing action. In the context of organisations, this probing can happen through both formal and informal channels, intentionally and unintentionally. Formal or intentional feedback refers to the systematisation of the manner in which feedback is elicited, stored, analysed and interpreted by an actor in more or less structured ways. Informal or unintentional feedback refers to mechanisms through which information is generated without consciously imposing an order on the way that this happens; unconscious processes through which an actor orients itself.

Formal feedback mechanisms can enable actors to intentionally and collectively select the kind of information they want to acquire in order to affect their overall orientation with respect to their environment. However, informal feedback still plays a significant role in shaping behaviour, and there is no guarantee that formal feedback alone will shift the way an actor orients itself. Moreover, there is a risk that all feedback systems contain critical blind-spots that may not be evident in advance. Informal mechanisms are also not immune to blind spots, but tend to produce their own forms of order/disorder based on distributed and fragmented sense-making. The dynamic interplay between formal and informal feedback mechanisms may
hold important lessons for understanding how M&E can contribute to learning and change.

**Participatory Monitoring and Evaluation (PM&E)**

PM&E emerged as a way of addressing limitations of traditional M&E approaches, often characterised as overly ‘extractive’. Extractive approaches involve the collection of data from respondents who have no say in what data is collected, or how it is analysed and used. PM&E has driven the proliferation of a range of methods, tools and techniques that enable participants (rather than ‘beneficiaries’) to define indicators and gather, analyse and use data themselves, while being conscious of power relations (Jacobs et al. 2010: p39). Amongst methods used in PM&E are various techniques for listing, prioritising and scoring, which lend themselves to the generation of community-validated feedback. However, methods in PM&E often go beyond this to capture changes which are difficult to measure, such as empowerment or organisational learning (Estrella 2000). As such, PM&E typically requires ongoing relationships between development agencies and participants, through which they jointly make sense of information used to achieve desired outcomes.

The **Feedback Systems approach** can be considered a subfield within PM&E. It is distinguished from other approaches by its focus on using ‘customer-oriented’ data (Jacobs 2010; Jacobs et al. 2010). The perceived benefit of a feedback system approach is its ability to link managers and implementers more directly with partners (or service users). Feedback system approaches rely heavily on perceptual data, often qualitative. However, this perceptual data can be aggregated and quantified to measure changes over time (Jupp and Ibn Ali 2010). In 2010, ALINE identified 6 good practice principles for using Feedback Systems: 1) Adapt systems to the context; 2) Develop assessment criteria with respondents; 3) Generate quantitative feedback data; 4) Report and publish comparative data; 5) Discuss findings with respondents and identify actions; and 6) Repeat the process.

Theories of participation often identify levels or degrees of participation, such as consultative, collaborative or collegiate (Arnstein 1969; Biggs 1989). A particularly useful framework for categorising feedback system is White’s (2001), which distinguishes between nominal (lip-service), instrumental (efficiency-oriented), representative (concerned with sustainability and ownership) and transformative (political or empowerment-oriented) forms of participation. Feedback systems can correspond to any type of participation, though the bias is usually toward instrumental and representative forms.
New Product Development

New product development theory focuses on explaining the process through which an idea is made into a product. NPD processes usually involve some combination of the following steps: 1) specification of an idea, concept, or design; 2) detailed design, engineering, or prototyping; 3) concept evaluation and testing; and 4) product launch (Enkel et al. 2005; Füller et al. 2006; Kaulio 1998; Veryzer Jr 1998). Within NPD, users or customers play many different roles: a) resources for identifying innovations; b) co-creators of new products; or c) users which test and support the NPD process (Nambisan 2002). Users can also be grouped into ‘lead users’, who require a product earlier than most others, and ‘typical users’, who represent a larger majority of consumers (von Hippel 1986). The value of feedback to the NPD process is strongly attached to the nature of product being developed (Danneels 2003). If a product is very new (e.g. disruptive or radical innovations), the inclusion of feedback early-on in the NPD process can stifle innovation. Thus, the appropriate level of feedback depends on the nature of the product and stage of development (Gales and Mansour-Cole 1991). Finally, past research has found that the process by which feedback is incorporated is often unsystematic, with many companies are uncertain what to do with the feedback collected, which reflects the overall need for greater understanding of feedback usage (Fundin and Bergman 2003; Goodman et al. 1996).

Lessons from feedback theory

Each theoretical school highlights aspects about feedback which play an important role in defining what information is sought from whom, and how it is used. Some lessons that are relevant to feedback in M&E include:

1. The systematised collection of feedback takes place within an existing information exosystem, characterised by assumptions about what is important. These assumptions need to be questioned to avoid problematic blind-spots.
2. The selection of sources of feedback and mechanisms can reflect and/or alter relationships between levels of participating actors, and with customers, users, beneficiaries, etc.
3. The selection and use of measurement tools and data are critical processes, reflecting power relationships between actors within the feedback system.
4. The appropriateness of a given measurement tool is determined by its ability to depict change in a meaningful manner, which could be quantitative, qualitative, or any combination.
5. The inclusion of feedback into a specific stage of development, research, or planning will shape the nature of thinking and innovation that takes place.
6. The usefulness of feedback to understanding or improving performance depends on the selection of sources, methods of collection, and timing of inclusion.
Feedback in Practice: ALINe’s experience with feedback in M&E

ALINe has worked with a number of partners to develop feedback mechanisms, typically as part of broader M&E support. Some pertinent examples of ongoing work include: 1) a pilot project to create financially self-sustaining dairy development centres in India; 2) a project on strengthening public extension in Ethiopia; and 3) a network of African universities seeking to improve the quality of research and training so that it better responds to local agricultural development needs. Each of these projects can be characterised by the existence of a relatively well-defined service provider, providing long-term and continuous support to relatively well-defined clients or stakeholders. The particular network of actors involved in a given project and the roles they have with respect to each other (i.e. service provider and service user), provide the basic framework for thinking through the design and implementation of feedback systems. Feedback is collected from service users to provide information that can help establish a ‘better’ (i.e. appropriate, relevant, etc.) service or product. Typically, service providers are organised into hierarchical organisational structures, such that those at higher/more senior levels can also be understood as service providers for those at more junior/lower levels.

Dairy Development Centres in India

In the Indian dairy project, the front-line service-provider, Centre In-charge (CI), is responsible for running a Cattle Development Centre (CDC) that provides a variety of services, at cost, to farmers in the surrounding area. Services include artificial inseminations and related check-up and support services, the provision of nutritional supplements, organising farmers into Dairy Interest Groups (DIGs), and facilitating monthly meetings. ALINe, together with its partner, has taken a gradual approach to building up feedback systems, focusing to-date on gathering feedback from dairy farmers about the services provided by the CIs. Relevant indicators for assessing dairy farmers’ satisfaction with services were identified through consultation with farmers, CIs and staff from the implementing organisation. An iterative approach to testing and refining the tools in the field was used to arrive at a final set of questions, covering farmer satisfaction with the full spectrum of services received from CIs as well as general comments. The data is supposed to be collected by the dairy farmers themselves during DIG meetings using simple formats and scoring techniques, and then submitted to the implementing organisation where it can be stored, analysed/interpreted and acted upon. In practice, however, most DIGs are not yet able to capture the data themselves and organisational staff are, at present, actively involved in this process.

Farmer feedback data is presented alongside other data in the form of a CDC scorecard (see figure 1 below) with six performance dimensions (financial performance, quality control, farmer
satisfaction, DIG strength, inclusion of women, coverage of the poor).

**Figure 1: A scorecard comparing 4 CDCs**

![Scorecard](image)

The performance dimensions on the scorecard are composed of data from a variety of different sources (see figure 2 below, data is shown in blue while actors are in orange/red), including CI assessments of the DIGs and quantitative data about the services provided (primarily artificial inseminations) and other technical information related to services (conception rates, calving rates, etc.). This permits a nuanced diagnosis of six dimensions of performance at the CDC level that can help program staff to improve support provided.

**Figure 2: Actors, sources of data and composition of CDC scorecard**

![Diagram](image)
Public extension in Ethiopia

In the Ethiopian public extension project, the front-line service provider is the Development Agent (DA), who, in a team of 3, is responsible for running the Kebele-level Pastoralist/Farmer Training Centre (P/FTC). These P/FTCs serve as demonstration and training sites where local farmers can be exposed to new technologies (including varieties, inputs, and techniques). DAs are also responsible for helping farmers make their annual production plans, solving various agriculture related issues (e.g. related to pests), and linking them with various input and output markets.

In order to assess the extent to which services provided by the DAs are responsive to farmers’ needs and of appropriate quality, a mechanism for systematically acquiring perceptual feedback from farmers has been developed. This uses a combination of structured group discussion and individual (private) scoring to generate qualitative and quantified perceptual data about services provided, including: (i) the quality/relevance of the services; (ii) the relationship with the DA; and (iii) perceptions of changes resulting from the support of the DA and P/FTC. The feedback system extends to include other actors at the Kebele level, such as DAs and the P/FTC Management Committees, and government officers at higher levels, such as Subject Matter Specialists (SMS). Thus, while farmers provide feedback on the P/FTC and the services they receive from DAs, the DAs and SMSs provide feedback on the quality of ‘services’ (i.e. material, financial, technical, etc. support) they receive from the extension system. This constitutes a network of feedback loops through which the different actors communicate with each other in a structured manner to assess and diagnose the performance of the extension system, incorporating other data about outcomes and activities into the analysis.

A network of African universities

For the network of 29 (Central and East) African higher education institutes seeking to improve the quality of agricultural research and training, the primary service provider is the network Secretariat. The Secretariat provides grants, technical support, networking support and associated services to member universities/faculties (and key individuals based there), through which it aims to support agricultural faculties produce ‘better’ research and graduates. Given that the Secretariat is external to the universities, it relies on its own (explicit and implicit) theories of change in order to design interventions.

In order to understand the extent to which support provided is appropriate and effective, the Secretariat has been working with ALINe to develop mechanisms for gathering feedback from

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1 Kebele is the lowest administrative level
the various actors supported directly (e.g. Primary Investigators and Deans) or indirectly (e.g. students, national governments, etc.). The feedback system will use structured mechanisms to collect perceptual data from actors about specific services or activities. The objective is to generate a rich picture of the landscape the Secretariat operates in, and increase its understanding of how to provide better services. At the same time, the Secretariat organises regular networking events with its members through which it holds discussions on strategic issues, typically by eliciting face-to-face feedback on its proposed strategies or work completed. Thus, in addition to generating quantified perceptual data about the quality of services, it also intentionally generates more granular feedback.

Overall, ALINe’s experience with feedback mechanisms upholds the principles developed in 2010. However, some critical areas of insight concern:

1. **Creating an understanding of the value of perceptual data.** Perceptual data is often considered less reliable or less ‘scientific’. However, it is important to recognise that perceptual feedback data enriches and complements other data, is more communicative in nature, and can create enabling relationships between actors, particularly when the knowledge and preferences of participants is taken seriously.

2. **Learning to work with perceptual data.** Because of its more ‘subjective’ quality, perceptual data requires a different set of competencies in order to be used effectively, especially when collecting, analysing and handling data generated. In particular, perceptual data can be most informative when it is triangulated with other (non-perceptual) forms of data, implying that a certain degree of interpretation is also required. Consequently, it is critical that the interpretation is validated in some sense through interaction with those who provide data. In the context of long-term service provision this can take the form of institutionalising discussions between service providers and users on feedback results.

3. **Ensuring feedback systems are sensitive to power relationships.** As feedback typically touches on sensitive organisational and social matters, power relationships become a significant factor. Thus, care should be taken to protect or ensure anonymity of respondents without undermining utility (so that it is still possible to assess specific issues faced in specific contexts). Appropriate mechanisms for dealing with problems that emerge (such as poor performance of a front-line service provider), may entail addressing issues of organisational culture.

4. **Making the feedback mechanism sustainable.** There is a well documented tendency in the development sector to treat M&E as a side activity, distinct from implementation. However, feedback systems, based on regular user interactions and follow-up must be integrated into core implementation processes to become effective. This requires investing time, energy and resources into building the required capacities of both users and service-providers.
Feedback Research: “Strengthening User Feedback within Large-Scale AR4D”

In 2012, ALINe engaged in a research project titled “Strengthening User Feedback within Large-Scale AR4D: A Research Framework”, which was led by Dr. James Sumberg at the Institute of Development Studies (IDS), and funded by the European Initiative for Agricultural Research for Development (EIARD) Food Security Thematic Programme (FSTP) through the Global Forum on Agricultural Research (GFAR). The project examined the Global Rice Science Partnership (GRiSP) to better understand how feedback loops are used in rice research. Research on the use of feedback loops was carried out in Ghana and at the AfricaRice research centre in Cotonou, Benin.

A unique aspect of GRiSP is that conceives of rice research outputs as ‘products’. This opened the door for a more in-depth reflection on how New Product Development theory can explain and improve ‘feedback loops’ in agricultural research. The concept of a Feedback Loop was derived from the main questions posed by NPD theory, and conceptualised as having core elements.

Figure 3. Elements of a Feedback Loop (Sumberg et. al. 2012)

In order to ensure that a Feedback Loop provides information that is useable, researchers were asked to identify already used feedback mechanisms and answer each question associated with the feedback elements. The research found that the most widely used feedback mechanisms in African rice research are surveys, field visits, and forms of participatory varietal selection (PVS). It was also found that researchers are more confident in answering the ‘from whom’ and ‘to whom’, then ‘how analysed’ or ‘how used’ elements of the Feedback Loop. Overall, 72% of researchers indicated that at least one element of the feedback mechanism used was weak.
The “Strengthening User Feedback within Large-Scale AR4D” project highlights several key lessons that may be useful for Feedback Loops more generally:

1. The collection of feedback without a defined purpose can result in under-utilised information. This can be seen in the many cases where interactions between researchers and users take place in an informal manner, but little or no thought is given to the purpose or use of information gained.

2. The effectiveness of a feedback loop appears to be only as strong as its elements. In many cases researchers seek information from users without planning the form of information or the manner in which it is analysed and used, thus reducing its use.

3. Feedback can be time consuming and expensive, which means understanding its usefulness is important. Many researchers express interest in using more or different feedback mechanisms, but the costs involved in conducting surveys or field visits can be prohibitive. The most widely used mechanisms are those which already have established track records within practice and research.

Conclusions: Improving the use of Feedback in M&E

It is apparent from this brief reflection on theory and practice that feedback is readily available, contains valuable information, and is often under-utilized. The reasons that prevent individuals or organisations from maximising its use are diverse and complex. Some of the core constraints appear to be:

1. Inadequate planning around the purpose and use of feedback information
2. A narrow understanding of the potential for feedback information in M&E
3. Limited incentive, time and/or resources given to improving the use of feedback

How can one determine whether feedback is relevant for a given purpose?

In order to improve feedback is it important to identify the purpose of collecting the desired information. When reflecting on the purpose of feedback it is helpful to ask the following questions:

1. Will the feedback be used for accountability or learning purposes?
2. Is the feedback to be used for improving existing products, services, or programmes?
3. Is the feedback intended to provide input into a radically new or different product, service, or programme?

The answers to these three questions will be helpful when moving forward in specifying which data sources and what feedback mechanisms are most appropriate for a given feedback
system. If the feedback is to be used for performance monitoring and accountability, then it will be important that the mechanism is fully understood by those who provide feedback, and that there are adequate incentives to provide unbiased and timely information. On the other hand, if the feedback will be used for learning, it will be important to design a mechanism that offers enough perspective on the existing or potential of past activities, and different reactions to intended changes. Finally, if the feedback will be used for a radically new product, service, or programme, the mechanism should probably focus on understanding the experiences and challenges within a system for which the future output is intended.

**How does the specification of what feedback is relevant create ‘blind spots’?**

After the purpose of the feedback has been decided, it will then be possible to select the feedback mechanism, data sources, and use of the information. The following questions which are derived from the elements of a feedback loop are helpful for guiding this exercise:

1. Theme: What is the information about?
2. Source: Who is the information to be collected from?
3. Form: In what form will the information be collected?
4. Analysis: How will the information be analysed?
5. Audience: To whom will this information be provided?
6. Use: How will the information be used?

The manner in which each question is answered will also determine what blind spots are created. For example, the choice of Theme and Form will limit the information to a specific quantitative or qualitative value, and the identification of the Source will also allow determine who is not included. Thus, being systematic makes it easier to understand both the potential value of the data collected and blind spots. A deep understanding of the context within which the feedback system is developed is vital, as is ensuring mechanisms are modified to compensate for critical blind-spots.

**How does the nature of a feedback system and blind-spots influence the usefulness of information gained?**

After the feedback purpose and mechanism has been determined, tested, and implemented, it is important to conduct a periodic evaluation of the feedback mechanism and M&E systems they feed into. The evaluation questions at this stages should focus on:

1. Do feedback mechanisms provide information which is useful, to whom?
2. Which feedback sources have been included and excluded, and why?
3. How does the inclusion/exclusion of feedback sources or types of data affect the feedback system, mechanism, or loop?
In conclusion, feedback can provide information from customers, beneficiaries, or users that is valuable to improving the performance or effectiveness of many different initiatives. The extent to which the information is useful will depend on the purpose, mechanisms, and sources, as well as the way in which it is subsequently analysed or used. There are many possible reasons why feedback is not collected in an effective or useful manner, and critical reflection on feedback systems may help identify ‘blind spots’ and opportunities that can be overcome.

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