Barriers to compost implementation

Lessons from small-scale Latina/e/o farmers in California's Central Coast

Overview

From 2022-2024, the Resource Conservation District of Monterey County (RCDMC) carried out a Western SARE-funded project (ID: WRGR22-007) to support compost implementation and education about compost-induced disease suppression among small-scale Latina/e/o (Latine) farmers in California's Central Coast. As part of this project, we examined the compost implementation process through use of surveys throughout educational activities and by creating memos of each participating producer's experience with practice implementation. We asked farmers: what challenges do you experience with regard to implementing compost and accessing relevant information? In our memos, we noted farmers' feedback as well as our own experiences attempting to support them with compost implementation and education. This report synthesizes major insights documented in those memos and in survey responses.

Key Insights

Financial incentives for compost are necessary, especially those with advance payment options:

During this project period, we witnessed firsthand how access to financial capital shifts compost implementation. In the first year of this project, we worked with a compost vendor to develop a voucher system so that we could provide farmers with compost vouchers pre-approved by the vendor, and the vendor would bill us directly. This meant that the farmers did not have to make any up-front payment for the compost. In 2023, there was a change in leadership at the compost company and we were unable to continue with the voucher system, so we transitioned to providing farmers with payment on a reimbursement basis. Some farmers in our network lacked the up-front capital needed to apply compost, even with the reassurance that they would be reimbursed. This is important to note given that many conservation incentives programs – like the Natural Resource Conservation Service's (NRCS's) Environmental Quality Incentives Program (EQIP) and the California Department of Food and Agriculture's (CDFA's) Healthy Soils Program – pay for compost on a reimbursement basis. Some conservation incentives programs offer advance payments to low-income farmers; our experience suggests that such mechanisms will be important for ensuring that farmers with limited access to capital are able to apply compost. That said, several farmers in our network who had the up-front capital found it difficult to make time for compost application because they are juggling multiple jobs and various ongoing crises associated with being a low-income and non-English speaking farmer (e.g., unreliable labor and equipment, inability to market produce, insecure land tenure). In such cases, the most effective way of getting compost on the ground required our own enthusiasm and close contact with the farmer, including regular communications by phone and text.

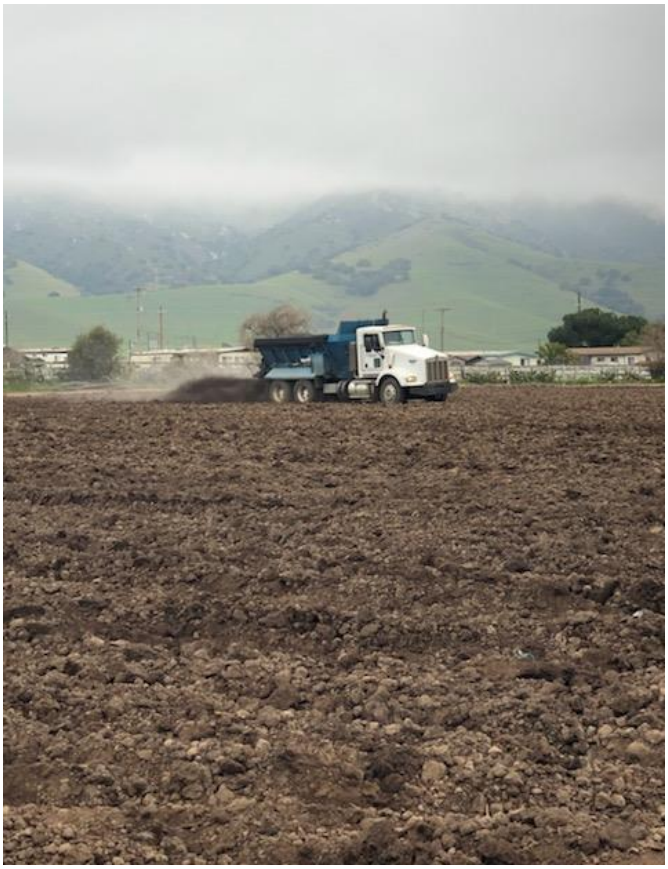

Figure 1. Compost successfully applied on a farm that received a financial incentive through this project.

Need for more widespread compost application equipment:

Both delivery and spreading of compost are essential services for small-scale farmers who do not have their own delivery and spreading equipment. In our search for compost vendors for this project, although there are many compost companies in our area (we work in a very intensive agricultural region), we only found one provider that offers delivery and spreading of compost on a small-scale. This points to the need for greater access to transportation and spreading equipment. The issue of access could be solved by private companies or by a public "agricultural equipment library" to benefit small-scale farmers in our region such that farmers would be able to borrow delivery and spreading equipment and work with a wider variety of compost providers. We will continue to develop this idea in collaboration with local partner organizations.

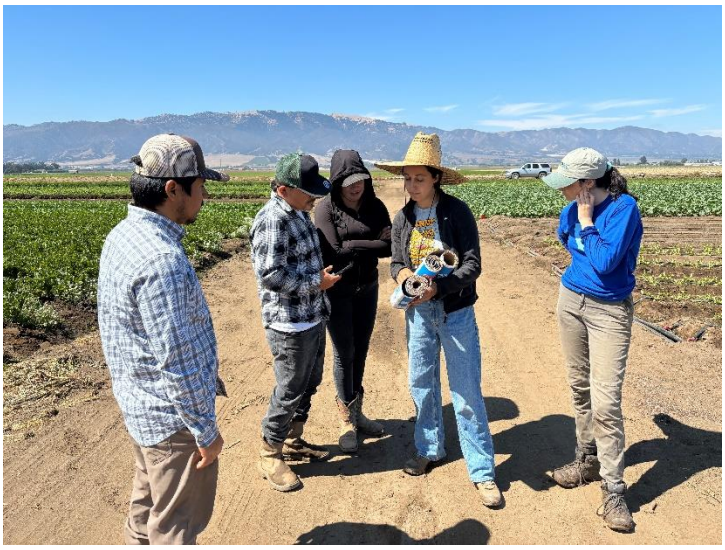

Figure 2. RCDMC staff typically have the best outcomes working with farmers one-on-one or in small groups.

Importance of one-on-one, relationship-based education:

Farmers expressed a lot of interest in the disease suppressive capacities of compost and the principles of microbiology that we discuss with them. Although most of these farmers lack the time needed to attend group workshops and courses, and although most relevant online educational materials are only available in English, the one-on-one technical assistance that we provide is well-received and, it appears, much needed. Farmers asked many more questions in one-on-one, in-person settings than in group and/or remote settings, which we interpret as a desire for learning that is rooted in close relationships between farmers and agricultural educators/extensionists. We plan to this type of close work with farmers to support education on compost uses and soil disease suppression.

Limitations of field-level education amidst insecure land tenure:

Despite our focus on discussing information about soil ecology with farmers, these farmers often lacked the secure land tenure required to build up soil organic matter and receive associated benefits. In fact, multiple of the farmers we are supporting with compost implementation moved to new parcels during this two-year project period, and several others indicated that they may need to leave their parcels within the next 12 months. Unfortunately, the issue of land tenure is largely outside of the focus of our organization's work and is often beyond the scope of work for agricultural educators and extensionists. Further collaboration with partner organizations will be required to address the broader issue of land tenure that limits the ability of regional small-scale Latine farmers to achieve soil health goals. In general, efforts to build soil health with small-scale farmers of color should pay close attention to the intersections of field-level challenges with land access and racial/economic inequality.

Conclusions

Despite many public efforts to provide incentives for compost implementation, small-scale Latine farmers encounter a variety of field-level and structural barriers to implementation. Furthermore, despite extensive research on compost among agricultural scientists, much of this information is not accessible to the Spanish-speaking, small-scale farming community. Addressing barriers to implementation and education will require multi-scalar collaboration among public and private organizations to shift funding mechanisms, support the build-out of compost infrastructure, develop culturally relevant education and extension materials, and tackle the deeply entrenched problem of unequal land access. If you or your organization are interested in working with us to support farmers and build soil health, please reach out!

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