

## **Educational Trainings on Sustainable Small-Scale Agriculture in San Juan Colorado, Oaxaca, Mexico: Local Realities and Constraints on Food Security and Nutrition**

**Glenn, Mary**; Candidate, Master of Development Practice, University of California, Berkeley, United States, [mglenn@berkeley.edu](mailto:mglenn@berkeley.edu)

This paper examines local realities and constraints on food security and nutrition for small-scale peasant farmers in San Juan Colorado, Oaxaca, Mexico. In partnership with the local grassroots organization Consejo de Desarrollo Sustentable (CDS), or the Council for Sustainable Development, the author will conduct qualitative research during Summer 2016 on the adoption of sustainable agriculture techniques by small-scale farmers following educational trainings, and the effects of these techniques' adoption on yields, biodiversity, and economic mobility. In addition, barriers to these techniques' adoption will be explored, addressing the question of, why is it that at the local level, educational trainings on sustainable agriculture may not be put into practice?

San Juan Colorado is a small, rural municipality of roughly 10,000 people, with the majority of livelihoods based around small-scale agriculture and ranching. Unsustainable agriculture practices such as slash-and-burn are widespread and contribute to the depletion of biodiversity and natural resources, thereby greatly affecting food security and nutrition. As a local grassroots organization, CDS has facilitated four years of sustainable agriculture trainings with over 60 campesinos, or small-scale peasant farmers. This is a clear example of practical solutions for achieving the SDGs at a local level. While grassroots organizations serve an important role in turning development theory into practice, however, they face notable challenges in that implementation - primarily due to the lack of manpower with which to collect data and analyze programmatic efforts, constraints, and opportunities for more impactful and scaled-up work. This paper will thus present material that will better explore how economic self-sufficiency, food security, and nutrition can be achieved in the local context of San Juan Colorado. In particular, the results of this research will serve as a catalyst for CDS's emerging escuelas de campo, or field schools: horizontal knowledge sharing exchanges among campesinos for increased collaboration and sustainable future harvests.

Because this is baseline data collection, the methodology will be qualitative research conducted through surveys, individual interviews, focus group discussions, and stakeholder meetings. These above techniques will address the limitations and adoption of sustainable agriculture techniques, and the resulting effects on crop diversity and yield, water management, grazing, labor supply, pests, erosion, and soil quality. Above all, emphasis will be placed on obtaining perspectives on local realities and learning how to best leverage education and trainings to concretely address issues of agriculture, food security and nutrition at the local level. It is only when both constraints and opportunities can be understood at the grassroots level that putting the SDGs into practice becomes a reality.

San Juan Colorado is a small, rural municipality of roughly 10,000 people, with the majority of livelihoods based around small-scale agriculture and ranching. Unsustainable agriculture practices such as slash-and-burn are widespread and contribute to the depletion of biodiversity and natural resources, thereby greatly affecting food security and nutrition. As a local grassroots organization, CDS has facilitated four years of sustainable agriculture trainings with over 60 campesinos, or small-scale peasant farmers. This is a clear example of practical solutions for achieving the SDGs at a local level. While grassroots organizations serve an important role in turning development theory into practice, however, they face notable challenges in that implementation - primarily due to the lack of manpower with which to collect data and analyze programmatic efforts, constraints, and opportunities for more impactful and scaled-up work. This paper will thus present material that will better explore how economic self-sufficiency, food security, and nutrition can be achieved in the local context of San Juan Colorado. In particular, the results of this research will serve as a catalyst for CDS's emerging escuelas de campo, or field schools: horizontal knowledge sharing exchanges among campesinos for increased collaboration and sustainable future harvests.

Because this is baseline data collection, the methodology will be qualitative research conducted through surveys, individual interviews, focus group discussions, and stakeholder meetings. These above techniques will address the limitations and adoption of sustainable agriculture techniques, and the resulting effects on crop diversity and yield, water management, grazing, labor supply, pests, erosion, and soil quality. Above all, emphasis will be placed on obtaining perspectives on local realities and learning how to best leverage education and trainings to concretely address issues of agriculture, food security and nutrition at the local level. It is only when both constraints and opportunities can be understood at the grassroots level that putting the SDGs into practice becomes a reality.