Introduction

For more than a decade, Main Street Project has been working to create new possibilities for the growing numbers of rural Latino immigrants stranded in low-wage farming and food industry jobs with no benefits and no future. We tried developing training programs for specialized and advanced skills which, in theory, could help these workers leverage new job opportunities and increase their incomes.

In practice, however, we discovered that our “modern” industrial food system was built largely on a foundation of low-wage labour, public subsidy and externalized environmental costs, and no amount of training was going to fundamentally change that. We didn’t just need a new approach, we needed a new system.

A new food and agriculture system

In 2010, Main Street Project set out to create a new regional food system that was fair, equitable and regenerative by design. We wanted to harness the entrepreneurial energy, traditional knowledge and experiences of agricultural workers in our region. We knew that having livestock was essential for building healthy soil. The model had to be financially accessible to aspiring immigrant and young farmers with limited financial resources. And we wanted the model to work globally, adapting to different ecological, social and economic conditions.

Based on these criteria, we chose poultry as our entry point and began designing a new system of free-range production that integrated perennial crops (e.g. hazelnuts and elderberries) and other native tree species (e.g. oak and maple) for biological diversity. We called the new system “poultry-centered regenerative agriculture”.

We built prototype training/production units on three farms near Northfield, Minnesota. And we developed bi-lingual (Spanish-English) training curricula and technical support programs focused on our model of poultry production, perennial and annual cropping systems, and farm business planning.

Since 2011, the prototype farms have combined to produce more than 40,000 chickens and 60,000 eggs, provided hands-on training for dozens of aspiring Latino farmers, and generated the data needed for continuous improvement. With six years of rigorous field testing under our belt, we’re confident that our model has the potential to scale up and change how food is produced in our region and around the world.

Description of the agroecology model

At the heart of our model is free-range meat and egg poultry raised in well-managed 1.5 acre/.61 hectare paddocks. Paddocks are planted with a combination of perennials, cover crops, and small grains that maximize the system’s productive capacity and efficiency by providing natural habitat,
nutrition and shelter for the chickens, and additional cash value to the farmers. The chickens, in turn, provide manure to fertilize not only the paddocks that shade and protect them, but also other vegetables and perennial cash crops in areas outside of the paddocks. These positive natural feedback loops allow for direct, robust expansion into a system of interconnected enterprises, including increased production of hazelnuts, berries and other perennials, alley-cropped vegetables, and grains.

Our focus on poultry is purposeful—chickens are uniquely qualified to power our regenerative agriculture system. They require less space, less water, less feed, and less processing infrastructure than other farm animals, reducing both the amount of inputs necessary and the impact on the ecosystem. They have a short turnaround or life cycle and provide a positive revenue stream at a low cost of entry (whether raised for meat or eggs), and most immigrants are already familiar with poultry production from life in their countries of origin.

Our symbiotic, integrated system of chickens, perennials, and annual crops generates results that can clear a path to economic stability, wealth creation, and empowerment for aspiring immigrant farmers. At the same time, local communities benefit from the increased access to healthy food, and the economic boost of thriving local markets.

**Demonstration and field training**
Adapting our model to different economic, ecological, and social conditions has helped us develop best practices, principles and criteria that can be applied to subsequent ventures. To date we have launched a sister system in San Miguel de Allende, Guanajuato, Mexico; are nearing completion of a demonstration/training center in partnership with Thunder Valley CDC in Porcupine, South Dakota, nestled within the 2 million acres of the Pine Ridge Indigenous reservation; and recently completed a blueprint for a new system in the tropical rainforest of Northern Guatemala—designed for implementation by regional farmer cooperatives.

**Main Street research farm**
Our 100-acre research farm in Minnesota is at the heart of Main Street Project’s work to build a poultry-centered regenerative agriculture system that will change the way food is produced and transform conventional landscapes. The farm will act as a catalyst for regional expansion, offering system demonstration and field training for both new and established farmers who are committed to more restorative practices. It will provide new opportunities for basic and applied agroecology research, and establish the baseline economic and ecological data we need to improve the sustainability and scalability of our system over time.

We’re building the infrastructure for comprehensive poultry operations on the farm. Perennial plants such as hazelnuts and elderberries cover significant acreage, and annual vegetable production opens up additional enterprise opportunities. The farm demonstrates what is possible: a biodiverse system of symbiotically connected livestock and perennials, with no chemical inputs, that creates the potential to build soil, retain and clean water, and deliver economic benefits to the community.
Outcomes of the practices

Bringing the model to scale
Main Street Project continues to leverage its investments in R&D, prototyping, incubation and modelling towards on-farm replication and regional growth. We’re anchoring the first cluster of poultry-centered, regenerative farms that will begin growing demand for organic grains, farm support services and investments in related industries (e.g. processing and distribution).

We’re helping farmers in the region with access to land, access to financing and ongoing technical support. And we’re partnering with Regeneration Farms, LLC, the first for-profit venture dedicated to our regenerative model, to build a market presence for certified products. We believe our system has the potential of catalyzing large-scale, paradigm-shifting change.

Training
Our training program supports our triple bottom line of ecological, economic and social benefits. We don’t just refrain from worker exploitation; our system precludes it by making the workers the decision-makers. With its low initial investment, poultry-centered farming serves a familiar and viable economic entry point for Latino immigrants who have farming experience and knowledge, and have felt first-hand the inequity of the current food system. Training opens the door to the opportunity for them to develop new farm facilities with strong management and maintenance practices and achieve social and economic stability.

Research & Development
One of the farm’s primary purposes is to promote research and development of Main Street Project’s poultry-centered regenerative agriculture model. Learn more about our research and development fieldwork and priorities through this link: http://mainstreetproject.org/what-we-do/research-development/fieldwork/. On the farm, we’re focused on research that ensures that our system is centered on three factors:

- **Social research** is centered on the well-being of food system participants, including farmers, farm workers, consumers, and members of surrounding communities.

- **Economic research** quantifies the transfer and growth of economic resources among people, such as fair wages for workers, fair pricing for consumers, profitability for farmers, and the economic ripple effect of our system design.

- **Ecological research** examines the biological, physical and chemical processes on which energy transformation depends, with special emphasis on the cycling of nutrients through air, soil, water, plants and animals, and keeping these cycles in balance.

Our farm supports new training programs for established farmers looking to diversify their operations. It provides a living laboratory for basic and applied systems research. And it establishes the baseline economic and ecological modeling and data we need to improve the sustainability and scalability of our system over time.

Benefits of the practices
At scale, our regenerative model will directly and positively affect issues of carbon sequestration, water quality, and soil erosion, a direct result of reintroducing perennial crops into the productivity of these landscapes. Once poultry production starts, it will trigger an economic chain reaction from producers to consumers that creates wealth and drives demand for related enterprises like value-
added processing, marketing, and distribution. As perennial crops begin to produce and system outputs are maximized, a new era of regenerative economic development begins.

Figure 3. Corn, hazelnuts, and sunflowers provide shade and protection for the chickens, who weed and fertilize the soil

**Message from farmer to farmers**

"I have worked on an industrial farm before. This is different. It is good to learn a more natural way to raise the chickens. Being involved gives me a way to give my children the experience of the farm and teach them the value of good food. It has been so good for them to be involved. We've found our way to a good future."

— Message from Javier, a Mexican immigrant and landscape worker who has gone through the training program and raised several flocks independently over the past 2 years