Addressing Food Insecurity in Long Beach, CA via Vacant Space Urban Agriculture
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Specific Aims
- Analyze how **urban agriculture** supported by multiple NGO and governmental systems **can alleviate the issue of food insecurity**
- Establish a **city-wide community garden program** for Long Beach to address food insecurity

Problem
Food insecurity is a major problem in the U.S., as many current options (ex. convenience stores) do not address nutritional and cultural needs. Many cities also contain large amounts of unused vacant land. We conducted a study of Long Beach to propose how **community gardens in vacant land plots could address food insecurity in ways that aid present alternatives**.

Relevant Data
- **15%** of Long Beach land is vacant
- **15.4%** of Long Beach's population is in poverty (**3.8%** more than 2021 national poverty average)
- The gap between poverty rate, median household income, and property value is increasing (**2.54 times** the national average)
- In Long Beach, there tends to be more vacant land in areas of higher unemployment
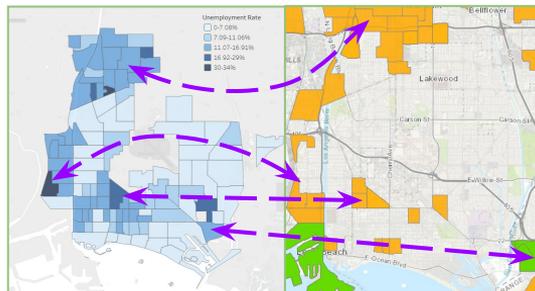
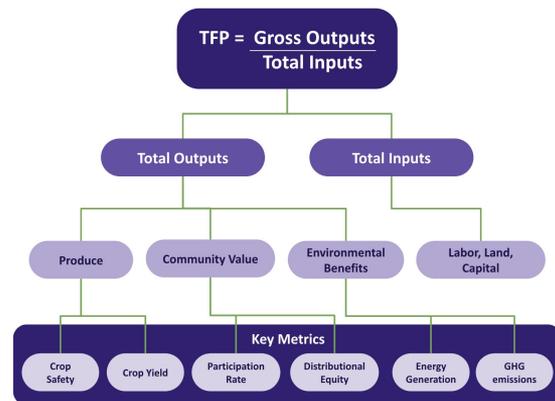Map of Unemployment compared to map of Low Income and Low Food Access[1,2]

Approach
- **Proposed Solutions**
  - Integrating city community gardens
  - **$25 million** budget for city-wide implementation
- **Feasibility Considerations**
  - Existing support for eco-friendly food networks (Long Beach Grows & Long Beach Farms)
  - Avoiding missteps of government efforts (UAIZ)
  - Much more sustainable than industrial farms
- **Payment Mechanisms**
  - Sustainability committees (UAIP, CHCC)
  - Community subscription plan (CSAs)
  - USDA and community-oriented corporation grants

Cost-Benefit Analysis

$$TFP = \frac{Gross\ Outputs}{Total\ Inputs}$$

- **Total Factor Productivity**: gross output/total input
- Short-term investment → Long-term benefit

Conclusion
- Urban agriculture provides the **safe space**, **healthy food**, **community benefits**, and **options for cultural/nutritional diets**
- Long Beach would **greatly benefit** from a governmental community garden program, given **land availability** and population **needs**
- The effectiveness of urban agriculture applies to both Long Beach and **across the U.S.**

Literature Cited:
1. Sickle, E. (2018) *Addressing Unemployment Inequality in the City of Long Beach*. Neighborhood Data for Social Change. Retrieved May 30, 2023, from https://la.myneighborhooddata.org/2019/02/employment-inequality-across-long-beach-city/
2. USDA. (2015). *Food Access Research Atlas*. Retrieved May 30, 2023, from https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas/