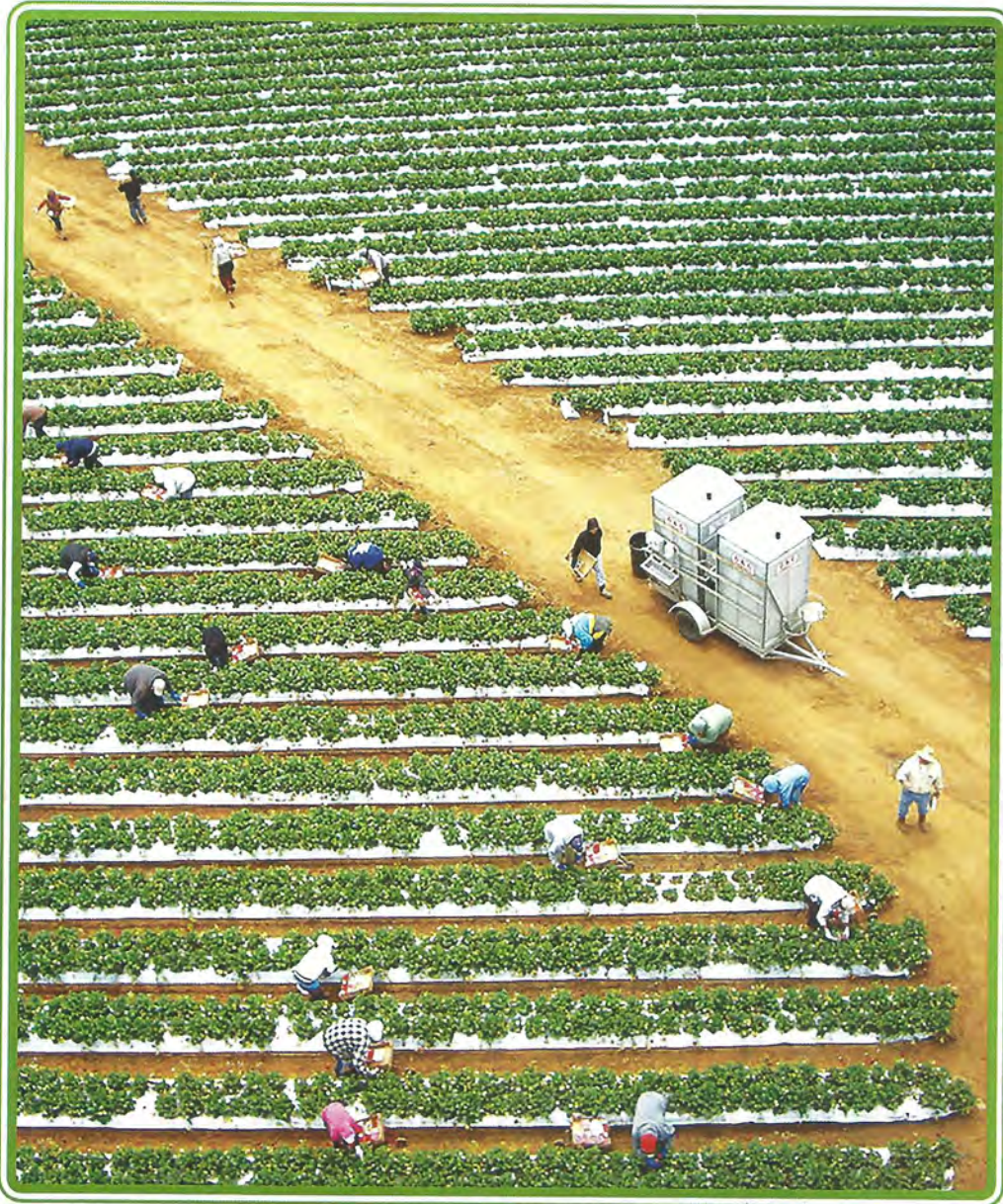




Environmental Changes & Their Effects on Workers of the Pajaro Valley

WITH POLICY RECOMMENDATIONS SUPPORTED BY LOCAL RESIDENTS



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How is the Pajaro Valley Experiencing Changes in the Environment?

INTRODUCTION

Located in the Pajaro Valley, just south of the San Francisco Bay Area in Santa Cruz County, Watsonville is one of its agricultural powerhouses. Unfortunately, many of the workers who contribute to the city's rich agriculture fall into the low-income bracket. This disadvantaged community is disproportionately impacted by climate change, even though it contributes less overall to its cause. *The 2015 Census estimated that 81.5% of the 52,543 population (in 2015) was of Latino descent, a large part of which survive on low incomes. Less access to material resources reduces residents' options to respond and adapt quickly to changes, leaving them more vulnerable to the effects of climate change impacts such as extreme heat, floods, and other natural disasters.* The following is a study of such effects on the farmworkers of the Pajaro Valley.



SURVEY METHODS

In 2017-18 Regeneración developed a survey under the guidance of Dr. Shishir Mathur¹ to understand how the people of Pájaro Valley are being affected by pollution and changes in the environment, and to assess the community's overall need for interest in climate action. A total of 324 people participated in the survey in person (186) and on-line (138). The results were analyzed by Dr. Mathur and then further analyzed by the CSU Monterey Bay ENSTU 350 Research Methods class in the Fall 2018. These students compared the responses of agricultural (AG) and non-agricultural (NAG) workers and by response of ethnicity. Each student then completed a single in-depth analysis, including responses of people who speak an indigenous language at home², responses by home-ownership, age, or gender.

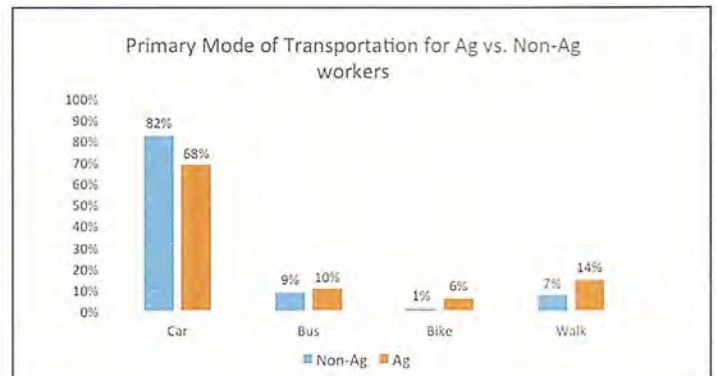
In the analysis presented here, responses were sorted by type of work AG or NAG. Participants who did not answer this question were excluded from this comparison. This brought the total sample analyzed to 220 (69, 31% AG and 151, 69% NAG). Because there are so many more NAG than AG workers, data are presented as percentages within their respective group (% AG or % NAG) rather than raw numbers of responses for each group. This helps to show the priorities of the AG workers or language-groups more clearly.

Current Experiences of the Environment

The general experiences of the community included:

- Primarily relying on car transportation, but **more than 30% of AG workers reliant on foot, bike or bus, compared to 18% of NAG workers**
- More than 60% of all groups concerned about pesticides and litter
- 38% of community members experiencing increased heat
- **AG workers experiencing heat symptoms and unpredictable work conditions** (as high as 75% for AG workers who speak an Indigenous language)

Of the 220 responses, both AG and NAG workers rely most heavily on cars for transportation (68% and 82%, respectively). More than 30% of AG workers rely on alternative transportation: walking (14%), bus (10%), and biking (6%). Indigenous language speakers were most reliant on alternative transportation, especially walking.



The way both groups experience pollution in their community was fairly consistent, with litter and pesticide exposure being the highest concerns (62% or higher for each). AG workers showed a higher concern for car exhaust than NAG, and both groups had a similar level of concern about water contamination.

When asked how they were experiencing environmental changes associated with climate change, responses were consistent among groups. The two most common responses were related to increased temperatures and heat waves (around 38% for each group). One field worker told us:

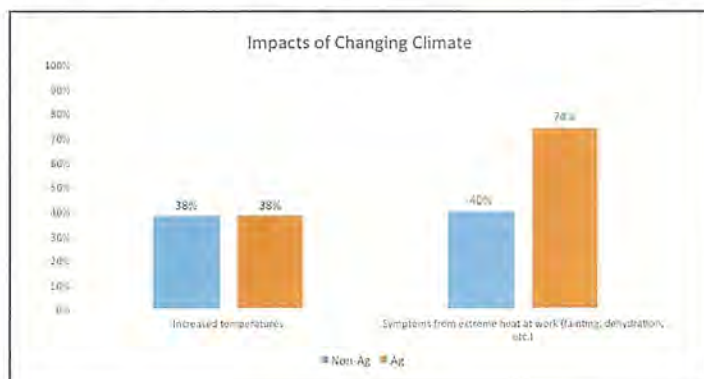
"Trabajo más pronto para evitar el calor." ("I start work earlier to avoid the heat.")

A bike messenger mentioned nearing heat stroke while he rides his bike, and an environmental advocate reported:

"I saw people working in the fields during the extreme heat we had over the late summer of 2017, and they were lying in ditches. It must be so incredibly challenging to survive in the heat."

When asked to talk more about the environmental changes they noticed, **74% of AG workers said they have experienced extreme heat conditions at the workplace (i.e., dehydration, fainting, etc.), and 46% said they had experienced unpredictability in the length of the growing season at their workplace.** Both groups identified unsafe drinking water in the home as an issue (32% NAG, and 38% AG workers).

An additional analysis of this question broken down by language spoken in the home revealed that those who spoke an Indigenous language expressed most vulnerability, with 75% of them experiencing extreme heat conditions and 50% experiencing an unpredictability in the growing season/work. This compares to 67% of bilingual speakers experiencing extreme heat conditions at work, and 17% experiencing unpredictability of work.



Priorities for Action

Across groups community members were fairly consistent in their interests, although AG workers and Indigenous language and Spanish language speakers in the home were most supportive of alternative transportation improvements.

- The overall highest priority was to increase access to local organic agriculture (mean of 4.5 out of 5*)
- More sidewalks and protected bike lanes (especially for many Indigenous-language and Spanish-speaking community members who rely on this for their primary mode of transportation, who ranked this between 4.5 and 5*)
- Both Indigenous language and English/Spanish speakers also rated employer-sponsored carpools as a high priority (4.3* and 4.8*, respectively)
- Local government providing solar power (4.6* or higher)
- Businesses paying taxes in proportion to their negative environmental impacts (4.4* or higher)

In response to the question of who should be responsible for a variety of actions, the two highest responses (by AG/NAG employment, ethnicity, and language) were that local governments should provide solar power (means of 4.6* or higher), and that businesses and corporations should pay taxes proportional to their negative environmental impacts (4.4* or higher).

As individuals, community members from all work sectors were most interested in:

- Making their own businesses green (4.4*)

Priorities for individual action differed by AG and NAG for the other options. For AG workers, the second two highest priorities were:

- Training for green jobs (4.3*)
- Having resource fairs (4.29*)

For NAG workers, the second two highest priorities were:

- Eating more plant-based foods (mean of 4.1*)
- Planting trees (mean of 4.1*)

One person expressed gratitude in the study being conducted, and summarized the problems of the Pajaro Valley workers in regards to their ability to take climate action:

"I appreciate the efforts of this survey to create a space for underrepresented groups to have a voice in the conversation. If we want to radically address the issues at hand, we need to go beyond thinking what the primary responses to issues can be and really consider the structural changes that need to happen so that people CAN meaningfully participate in creating solutions. People just won't take action on climate change if they are worried about paying rent this month. I don't go beyond incidental action on climate issues because I work so much that I don't have time to think. The solution cannot be another thing to do when we can barely handle what we have to contend with just to make it through another billing cycle (increasing rent, insurmountable debt, rising price of quality food, etc.)"

NEW POLICY RECOMMENDATIONS

We now highlight four recommendations for policy changes. While we have included priorities for action that were highest among the AG worker sector, they also were strongly supported by NAG workers. Our community appears aligned behind many initiatives to reduce emissions that will also provide direct benefit to individuals.

1. Incentivize production and distribution of local organic foods.
2. Expand public transportation and improve safety for bicyclists and pedestrians, and form partnerships with employers to provide group transportation. This aligns with Vision Zero and affirms what other groups have been advocating for.³ Given that over 50% of Santa Cruz County emissions are from the transportation sector, this is key action for reducing climate impacts.⁴
3. Expand programs to provide solar power to homeowners, renters, businesses, and nonprofits.
4. Promote Green Business programs and develop legislation/ordinances for businesses to pay taxes proportional to their negative environmental impact.

AG workers in our community are like the proverbial canary in a coal mine - they are on the frontlines of climate change, with their bodies exposed to harmful changes of a warming world and their precarious economic situation leaving them especially vulnerable to rapid and unexpected changes. They will directly benefit by all actions taken to reduce emissions, and provide services and opportunities that result in economic savings, improved health outcomes for themselves and their family members. We believe farmworkers, as some of the most vulnerable members of our community should be at the center of legislative response to the climate emergency.

¹ Dr. Shishir Mathur is the Associate Dean of Research for the College of Social Sciences and a Professor in the Urban & Regional Planning Department at San Jose State University.

² Indigenous languages spoken at home include Mixtec and Zapotec, and were generally self-reported as "dialecto."

³ Vision Zero, affirmed January 2018 by Watsonville City Council, aims to "eliminate all traffic fatalities and severe injuries, while increasing safe, healthy and equitable mobility for all." (City of Watsonville website)

⁴ 2009, cited in County of Santa Cruz Climate Action Strategy, <http://www.sccoplaning.com/Portals/2/County/Planning/policy/Climate%20Action%20Strategy/3.0.pdf?ver=2013-09-19-145136-327>

* Numbers presented out of a scale of 1 to 5, with 1 being the lowest priority and 5 being the highest priority.

Together we can reach our vision: a community that has achieved climate justice so all people in the Pajaro Valley can live in harmony with the natural world.

Acknowledgements

We extend our heartfelt appreciation to everyone involved in this project.

Regeneración is grateful for the Community Foundation for Monterey County's support of our partnership with the California State University of Monterey Bay.

The 2017-18 grassroots survey was developed by Regeneración in consultation with Dr. Shishir Mathur. The survey was carried out by 25 volunteers from the community.

Dr. Mathur performed initial analysis of the data, which was presented at a community event entitled Climate of Hope on May 3, 2018.

Students in the Environmental Studies Research Methods course at the California State University of Monterey Bay conducted additional analysis in Fall 2018 under the direction of Professor Victoria Derr.

Image credits:

Nelson, Glenn. "Strawberry Fields Forever 10." Flickr. June 9 2009. https://www.flickr.com/photos/glenn_n/3615565952/in/album-1498746/

Rooks, Edward. "Ripe strawberries harvested in a field off Kirby Rd. and Elkhorn Rd. Watsonville." Flickr. June 5 2015. <https://www.flickr.com/photos/edwardrooks/17883547874/in/album-72157654071839072/>



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