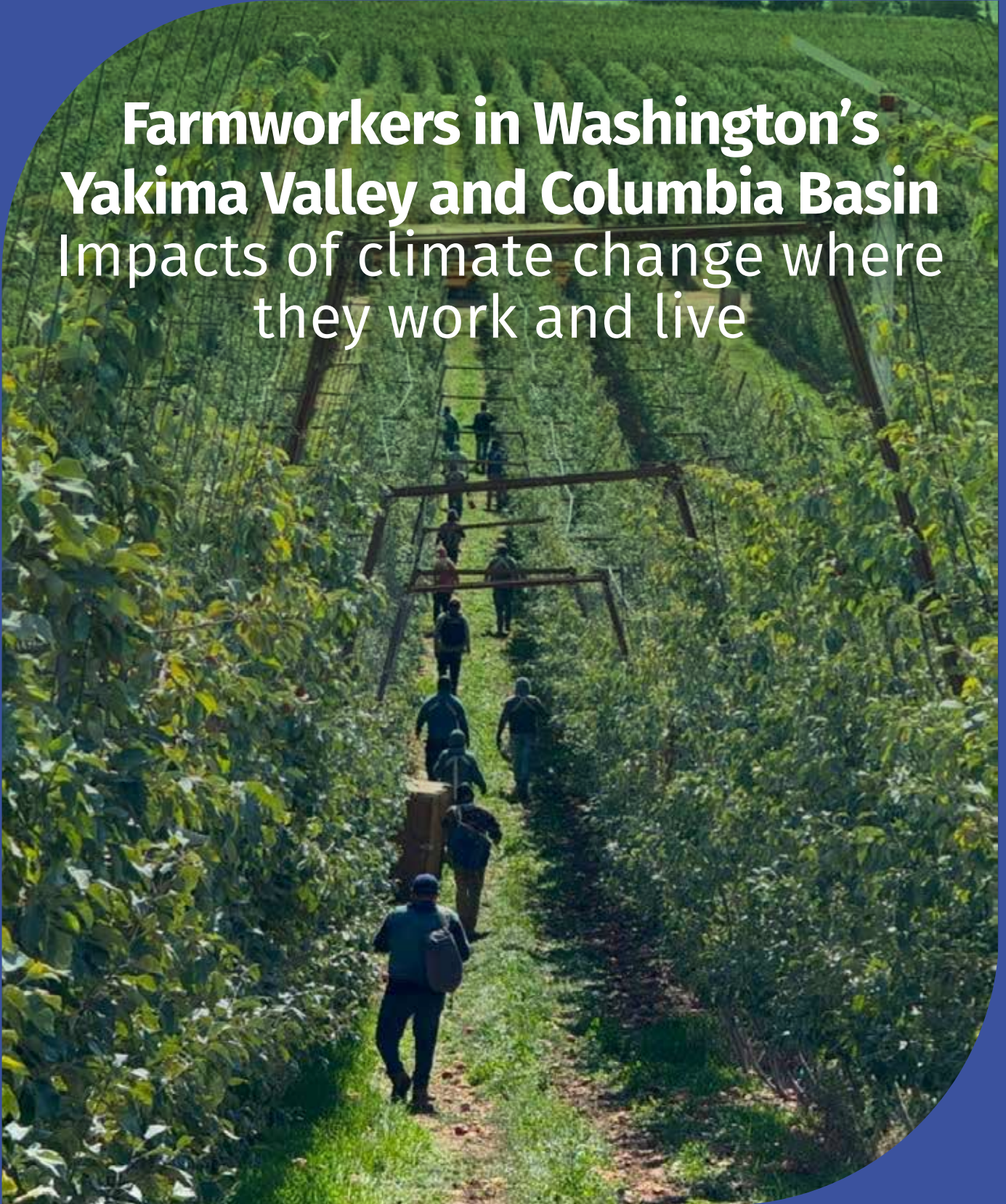


Farmworkers in Washington's Yakima Valley and Columbia Basin

Impacts of climate change where
they work and live





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September, 2026.

**FARMWORKERS IN WASHINGTON'S YAKIMA
VALLEY AND COLUMBIA BASIN**
IMPACTS OF CLIMATE CHANGE WHERE THEY WORK AND LIVE

2026



**“Thank you for doing this
for us farmworkers.
We really need help
because working in
the fields now is so
inconsistent, we don’t
know if we’re going to be
able to continue to survive
with so little work.”**

INTRODUCTION

This report is an urgent call for an industry-wide dialog. Changes in climate are pushing Washington's farmworkers and their families to the brink of economic collapse. Farmworkers are underemployed, and have seen their earnings drop while their expenses have soared. Climate related hazards in the workplace remain inadequately addressed with a majority of respondents reporting having experienced health symptoms related to smoke and heat. On too many farms, workers don't receive the legally mandated rest periods and personal protective equipment, putting their physical wellbeing in harm's way.

Washington's farmworker community is experienced, knowledgeable and resilient. Many of the 250 farmworkers Semillero de Ideas surveyed want to be part of the solution. Teams of farmworkers are now forming across the State to take on the challenges this report documents, looking to innovate new practices and tools that can mitigate the result of climate change.

These actions don't mean that the State government and industry don't have an urgent and important role to be part of the solution, they mean that workers are tired of waiting for others to act on their behalf. As part of their work to innovate new approaches, workers look forward to partnering with area growers and governmental officials to create impactful interventions.



Farmworkers from more than 20 communities across eastern and central Washington participated in this survey

The Semillero de Ideas team conducted this survey during the first six months of 2026. Contacting and obtaining worker consent to talk was no small effort. The presence of ICE combined with the national anti-immigrant narrative had workers rightfully laying low and not wanting to talk publicly. Yet the team prevailed, gaining many insights into how climate change is impacting farmworkers where they live and work.

This is the second time Semillero de Ideas conducted such a survey. In 2024, the organization interviewed more than 200 farmworkers about the impacts of climate on their lives. Those findings were later published early last year in the Washington Department of Agriculture's Climate Resilience Plan.

Both surveys were largely funded by the Washington Climate Commitment Act.

This report is divided into two sections. The first is an executive summary of the findings, interspersed with comments from farmworkers who participated in the survey. This section also discusses how workers, with the support of Semillero de Ideas, are now coming together to innovate new approaches to the challenges this report documents. The second part of this report shares the results of the survey.



EXECUTIVE SUMMARY

The survey design focused on domestic farmworkers, those who live year round in Washington, rather than those who visit the State as temporary guestworkers. 63% reported having worked in agriculture for more than eleven years, with 31% having worked for more than 20 years. Respondents shared they've worked in more than 30 crops, both here in Washington and in other States. 224 of the survey participants said three or more people live in their household, more than half of the respondents were women



“Too often the public thinks that farmworkers are single men who recently arrived to the US,” said Erik Nicholson, Executive Director of Semillero de Ideas. “Our survey documents exactly the opposite: Washington has a highly experienced and established workforce which has set down roots in rural communities across our State. Their wages and families support local business, and their taxes support schools, roads and law enforcement” said Nicholson.

CLIMATE IMPACTS AT WORK

Climate related change is profoundly changing how agricultural production happens in Washington State. From shifting from day to night harvest, to crops that previously matured at separate times of the year now maturing simultaneously, to shorter seasons, field work has changed. Unfortunately for farmworkers, not for the better.

“Before, thinning apple flowers lasted two weeks or more, now it’s over in less than 10 days. The cherry harvest also finishes faster. With the heat, smoke and drought, I’ve lost about 25 hours of work per month,” said survey respondent Maria Gutierrez.



Another respondent who preferred to remain anonymous said; “Climatic conditions have changed when and for how long harvests last, resulting in several harvests happening at the same time and then lasting for shorter periods of time. One example are the Gala and Honeycrisp varieties, which used to be picked at different times, now

they're harvested at the same time. The end result is that one harvest doesn't start when another is done. Furthermore, climate issues can damage the fruit, making there less to pick."

Crescencia Rios, who also participated in the survey described how she adjusts how she works to the heat; "Not all of us are affected by heat in the same way; I've always been able to work when it's really hot, I've worked when the temperature is over 100 degrees and I take my own precautions like hydrating myself 1-2 hours before starting to work, I work hard in the morning before it gets too hot and then when I feel the heat, I slow things down, I take time to breathe and to sit under the shade of a tree, obviously doing this when I'm being paid by what I pick, which is almost everywhere where I work."



Less work, 95% of workers shared that heat, drought and smoke has impacted the availability of work. 39% of those workers surveyed shared they're working 21 to 30 hours less a month than in previous years. 25% of workers said they've lost 30 hours of work or more a month. Taking into consideration that an average full time monthly job would have approximately 170 hours, this is a significant reduction in work.

Another farmworker survey participant who asked to remain anonymous said:

"We are being given fewer hours to work. Sometimes only working 3-4 1/2 hours a day. We need to be given more work in order to keep our family afloat."

LESS WORK MEANS LESS INCOME.



LOSS OF REVENUE

“During periods of intense heat, the work hours get significantly reduced, affecting what we earn and causing economic difficulties which now have me going to the food bank to be able to feed my family,” said a worker participant who did not want to be named.

Farmworker survey participant Jesus Pinoco shared; “When it’s too hot, the fruit gets damaged. The cherries bleach and the apples burn, this means they’re worth less. I’ve lost between \$2500 and \$3000 a month during the periods of extreme heat, between fruit that’s not good to pick and the hours they cut back on work.



Jesus is not the only person to have lost revenue. 41% of surveyed farmworkers said they’ve lost between \$500 and \$1000 in income while another 41% reported losses of more than \$1000 a month from past years.

Like Jesus, respondents reported their expenses have increased, especially in the summer months. 38% of workers said they have experienced increases between \$100 and \$200 a month, while 42% reported increases of more than \$200 a month.

With an annual wage in the mid \$30,000s (according to the Washington State Employment Security Department¹), the loss of

¹ <https://esd.wa.gov/jobs-and-training/labor-market-information/employment-and-wages/agricultural-employment-and-wages>

revenue combined with an increase in expenses is a significant hit to the well being of Washington's farmworker community.

"My life depends on agriculture, even if I miss one day of work that results in a significant loss in my paycheck, negatively impacting my ability to buy food," said an anonymous farmworker participant.

Another farmworker who chose not to be identified said; "Expenses like rent and utilities increase every year, but our wages don't, this means we end up spending more than we earn and having to cut back on essential items like food."



NIGHT HARVEST

In Washington State, crops such as cherries have increasingly been harvested at night. In past years, workers would have started work at daybreak, ending their work in the early afternoon as the heat of the day set in. But with hotter days and nights, many cherry growers have implemented night harvests where workers report to the fields at midnight or early morning.

This radical change in schedule has brought a number of challenges, first of which is where and how to find daycare at that time of the night. Workplace hazards, more clearly visible in the day, are obscure during the dark of night.

One female worker shared the intimate challenges related to working at night. She asked us not to use her name. “Because of the heat, the work day has been reduced to four or five hours a day; we started to work shifts at night. Working at night brings new challenges, the headlamps we have to wear attract mosquitos, which results in frequent bites and is irritating. At some farms they use large stadium style lights, making the surroundings more uncomfortable because of the dark shadows. We’re also quite concerned about the presence of coyotes in the fields.”

SHE WENT ON TO SHARE THAT MANY FEMALE WORKERS DON'T GO TO THE BATHROOM OUT OF BEING CONCERNED FOR THEIR SAFETY AT NIGHT, BE IT FROM COYOTES OR OUT OF FEAR OF SEXUAL ASSAULT, RESULTING IN URINARY TRACT INFECTIONS.

It's worth noting that Washington State regulations allow bathroom facilities to be up to a quarter mile of the worksite, or almost four and a half football fields away.



EXPENSES

Farmworkers, as has much of the general population of Washington State, have seen a dramatic increase in prices, from gas to groceries. Climate change has imposed additional expenses on many farmworker families.

In past years, workers would return home from the fields and open their windows to cool down their homes. But with nighttime temperatures often remaining high, this approach no longer provides relief. The presence of forest fire smoke increasingly also makes this approach counterproductive.

A study by MIT researchers published earlier this year documents that poorer communities, such as those where many farmworkers live, do not have as much shade as wealthier communities (https://phys.org/news/2026-02-city-richer-neighborhoods-sidewalk.html#google_vignette).

As a result, farmworkers have had to buy and operate fans, air conditioners, and air purifiers. Jesus Pinoco shared; “What’s more, we spend between \$100 to \$200 a month to have air conditioning going in our houses day in and day out.”

But with decreased income, something has to give. “This means we save less and don’t buy the things we need, like clothes for our children,” added Jesus.

CHILDREN APPEAR TO BE PAYING THE PRICE.



Another survey participant who asked to remain anonymous stated; “because we’re not earning enough, I can no longer buy the things I used to make my children happy.”

42% of workers reported their monthly summer expenses have increased by more than \$200.

The survey documents that 67% said they’ve cut back on food while 44% have reduced medical purchases.

“Medicine and food are not optional purchases,” said Jimena Hernandez, Semillero de Idea’s Farmworker Outreach Coordinator. “Families are paying a real price everyday because they’re not able to earn enough working in the fields.”

Even more disturbing, more than 80% of workers reported they have cut back on putting money aside for rainy days. It's important to note that these funds are what allow workers to put food on the table the days/weeks/months there is no work.

“These factors force workers into difficult daily trade-offs, such as choosing between buying gas to search for work or purchasing food for their families,” said Josefina Luciano, co-founder and board member of Semillero de Ideas. “During hot summer months, basic utilities became exceptionally expensive due to necessary air conditioning use. As a result many families must alternate paying essential bills – paying electricity one month and garbage/water the next month. It's heartbreaking to see families asking for assistance just to keep their power on. Those who perform the vital work of harvesting our food should not to have to endure these hardships,” she added.

HEALTH

While there are state regulations mandating additional safety measures during periods of extreme heat and smoke, 38% of workers reported employers are not consistently complying with these requirements. 53% of respondents reported experiencing smoke related health symptoms, including eye irritation, difficulty in breathing, persistent cough and pain or irritation in the throat. 64% of respondents said they had experienced heat related symptoms, including headaches, nausea and vomiting, and dizziness.

One worker shared that because of the smoke from forest fires, they suffered an eye irritation that turned into an infection that affected their ability to see, and later left the eye bloodied.

One worker who asked not to be identified said: “The growers at times don't stop the work when there is smoke, even if the smell is

strong and it causes sore throats and headaches. Even if we cover our mouths with a handkerchief, the work is hard and we have to breathe the contaminated air, which then causes more pain in our throats, headaches and eye irritation.”

There currently are no requirements in Washington State to provide any eye protection when forest fire smoke is present.

One anonymous respondent stated; “Employers are only providing water. Workers have to pay for facemasks and we have to find shade where we can rest.”



Access to cool, potable water is one of the the critical elements of farmworkers avoiding heat related issues. When asked what actions workers would like to see growers take to better protect them from heat and smoke, the top response was more and better access to drinking water.

The Semillero de Ideas followed up to this request at a workshop in Mattawa attended by survey participants. The team asked the approximately thirty workers in attendance for a show of hands for those people who drank the water their employers provided. Laughter erupted and not a single hand went up. When asked why not, workers responded that when they had drunk employer water before, it had made them sick, had been too hot to be potable, and they had no faith the water was actually safe. Notably, these comments were in response to instances where water was provided.

COMPLIANCE



Workers understand all too well that the lack of compliance combined with the persistent impacts of climate change put them directly in harm's way. **Workers also have no faith in current enforcement mechanisms.** In fact, one respondent stated:

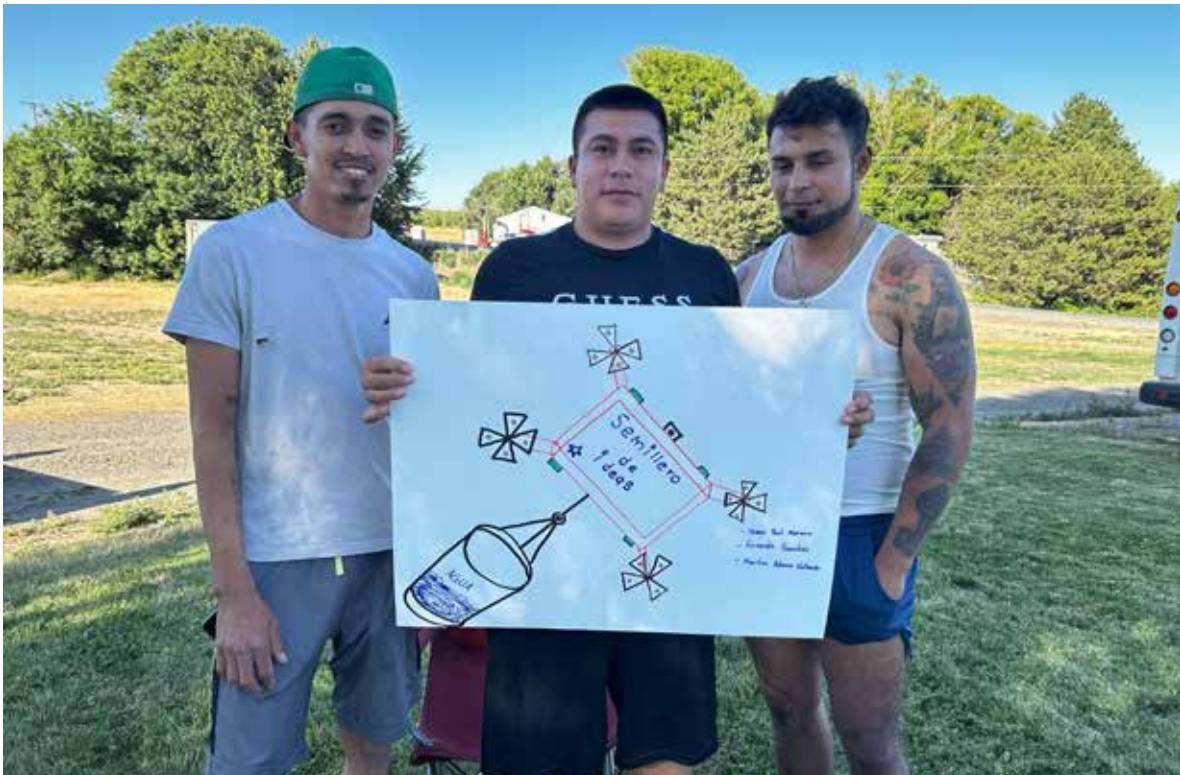
“They need to create a system for workers to report when a farm isn't complying with the law.”

This, in spite of both State and Federal agencies whose job is to ensure compliance with regulations. But with workers reporting over a third of employers not complying, for many workers, their lived reality is that there is no enforcement.

Another worker, understanding the urgency of what's happening, shared; “[they need to] implement **a law that allows workers to report situations where they don't feel well and don't receive the breaks they should. It should be something like 911 so that if something happens, there is an immediate response.**”

RECOMMENDATIONS

The survey invited workers to share what they would like the State government and employers to do to better address these challenges. Below is a sample of their feedback:



- 💡 “Employers need to pay more attention to our health and take into consideration that we’re working in difficult conditions. We need better training to know what to do when someone is suffering from heat stress.”

- 💡 “I want them to adjust the prices of food, rent and our other bills with what we earn in the fields.”
- 💡 “We need medical insurance that covers the consequences of us being exposed to smoke or the allergies that can result or time we lose because we can’t work due to climatic conditions.”
- 💡 “Take much more seriously what’s happening with climate change, for example, the President doesn’t believe in climate change, but it’s dangerous and they don’t know what can happen to us.”
- 💡 “Employers should be fined to make sure they take better care of the workers, the supervisors and field managers need better training to make sure they’re doing their jobs well.”
- 💡 “That the farms be more understanding when it’s really hot and not demand we meet a certain quota of bins because when it’s hot we can’t work as hard.”
- 💡 “Workers who can’t work due to climatic conditions, like fires, should be paid their full 8 hours, as what’s happening isn’t their fault and not being able to work has a serious impact on their income.”

NEXT STEPS

Upon compiling the survey results, Semillero de Ideas staff convened several private, community workshops where survey participants and their families learned the result of the survey. Farmworker participants were invited to identify their top priorities and they have been engaging in a series of workshops focused on innovating interventions that 1) further document and highlight the challenge, 2) mitigate the issue, or 3) resolve it.

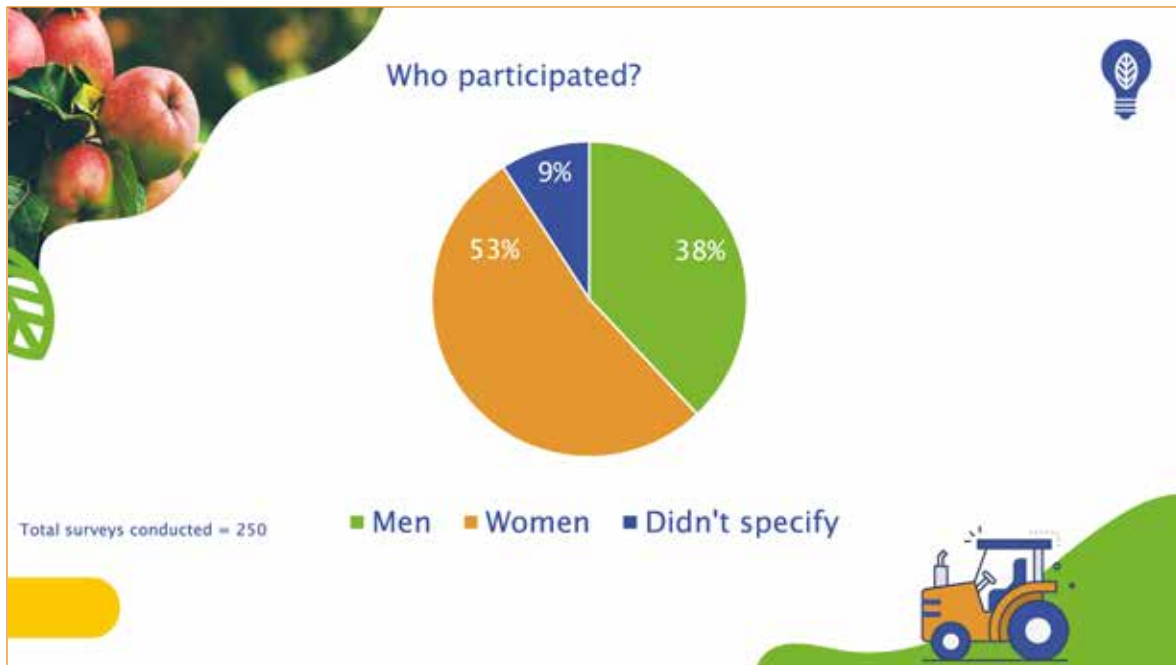


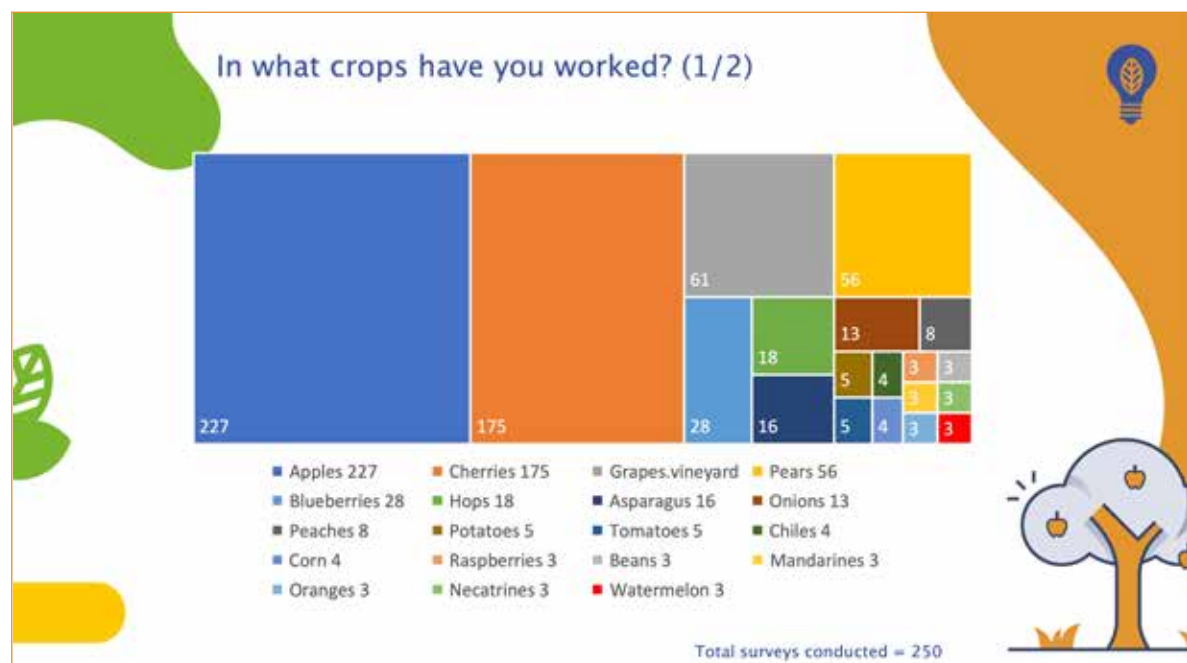
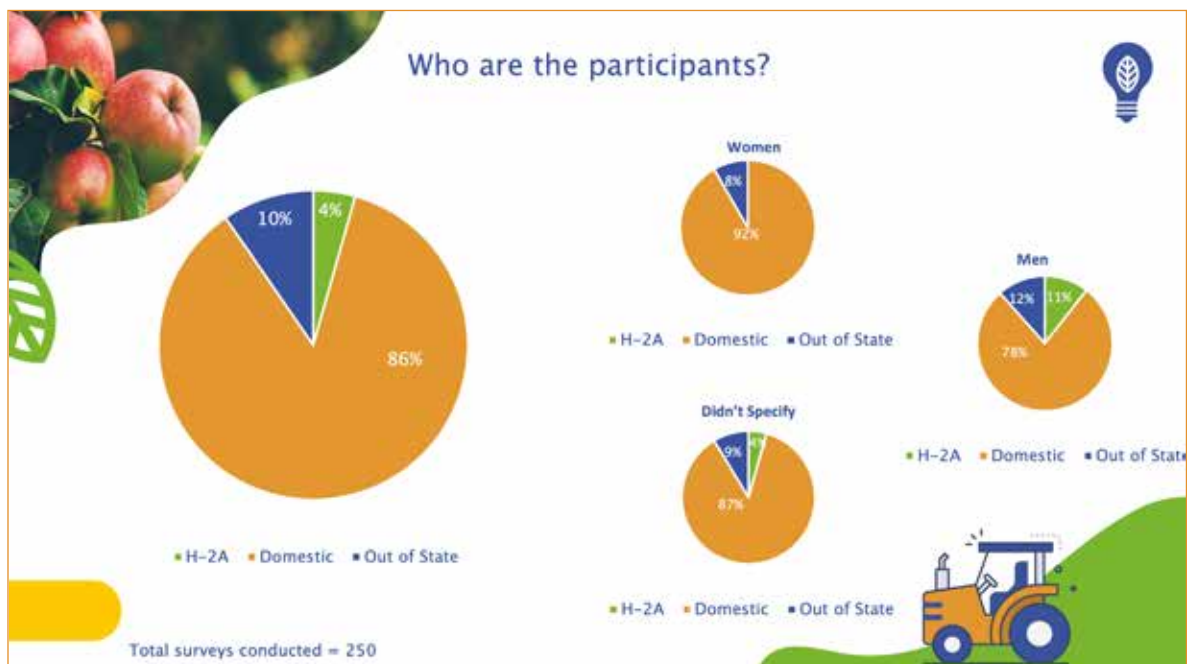
Lucy Gilbert-Fagen, Semillero de Ideas' leader of engineering said "workers want relief now; they want to safely and comfortably do their jobs. In addition to calling on growers to comply with State regulations, and for State agencies to ensure this is happening, farmworkers want to be part of the solution. We're already seeing workers have a number of very creative, impactful ideas about how to address climate related challenges."

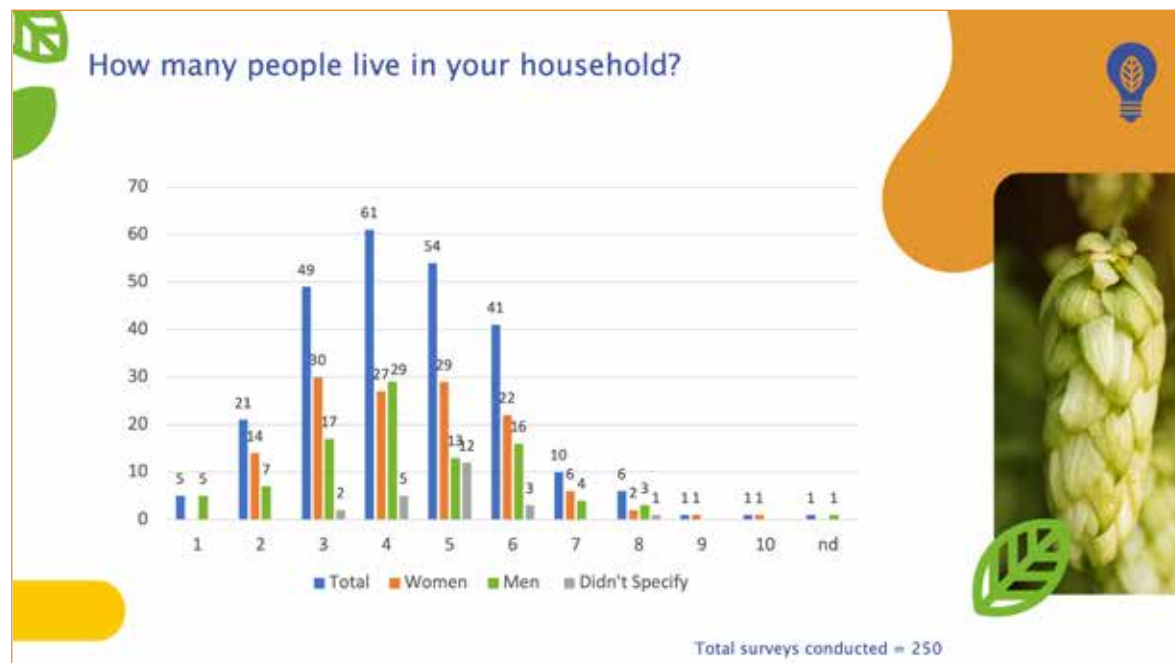
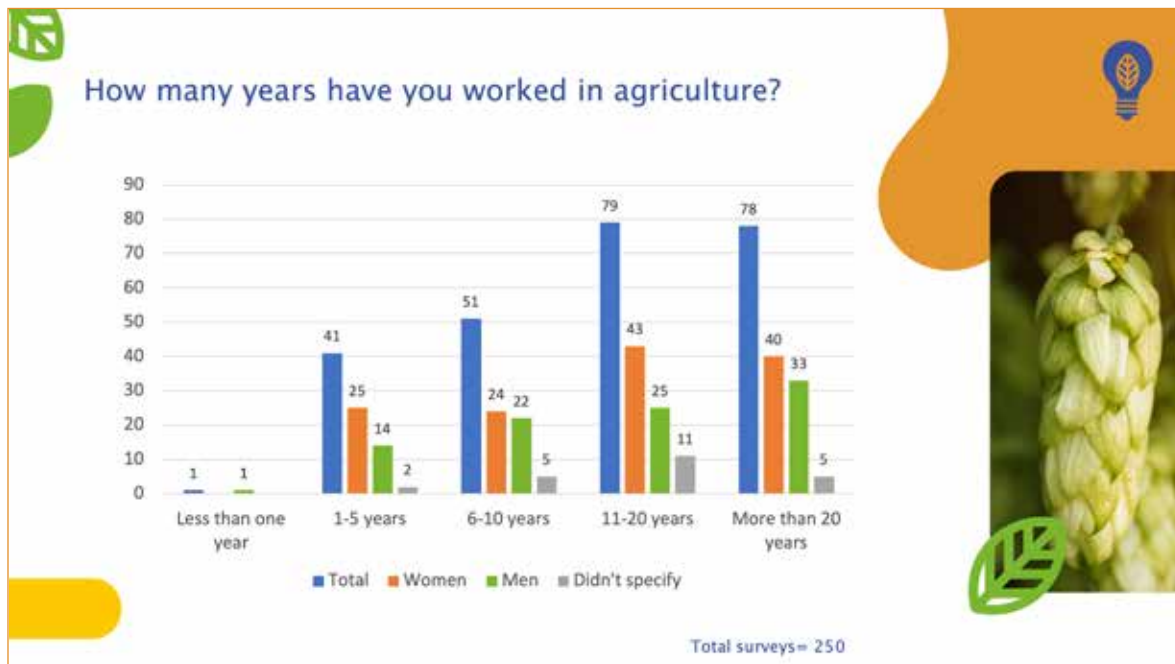
Teams of farmworkers from across Washington State are coming together to develop their ideas about how to best address heat, smoke and night harvest. As part of this effort, Semillero de Ideas will facilitate workers entering into dialog with growers to better understand their perspectives on these issues. A team of engineers and technologists will be providing their insights to further support farmworker led innovation. The goal is to generate impactful innovations that can successfully go to market to better support farmworkers and their employers to address climate related changes.

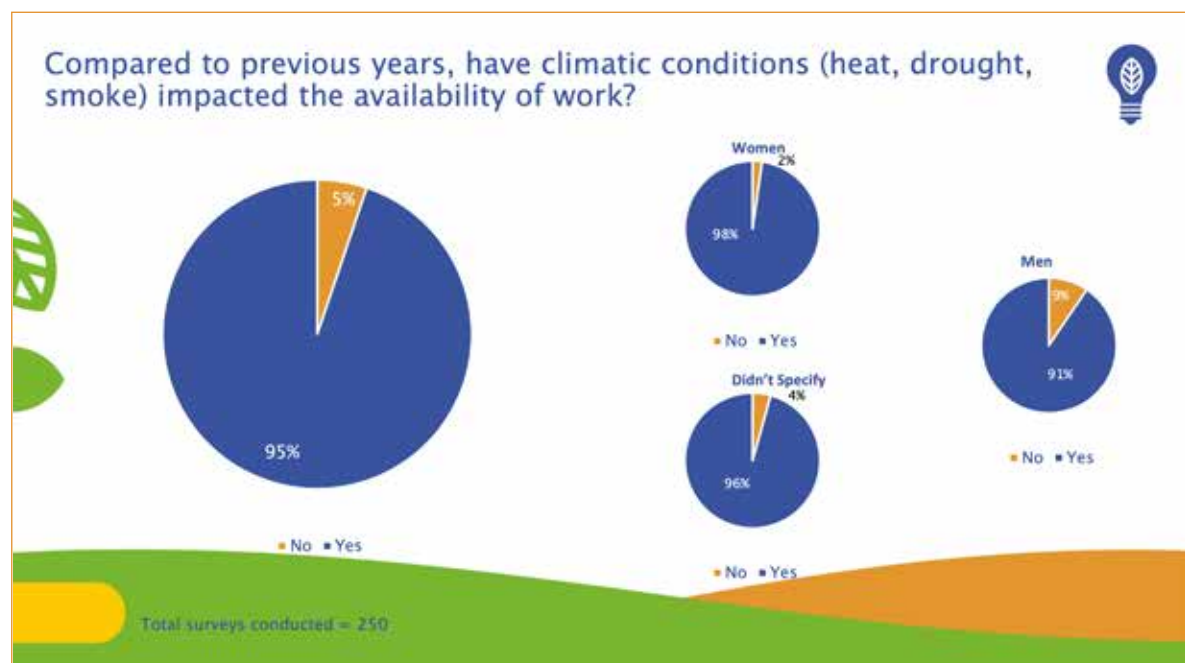
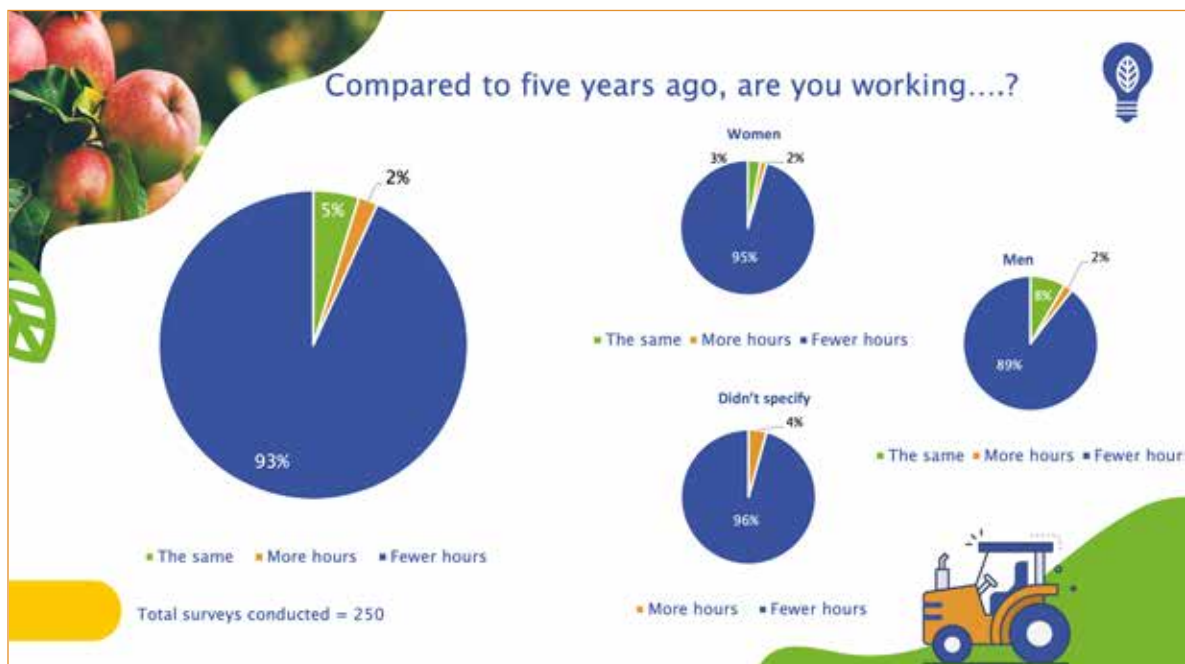


APPENDIX









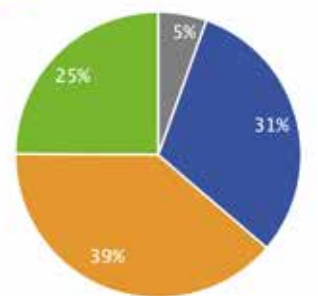
How has the work changed? Work starts earlier in the year, shorter seasons, crops coming in all at once



Comments	Mentions
Shorter seasons	186
Harvest begins earlier in the year	97
Multiple crops now harvested at the same time	31
Harvest begins later	17
Greater variability in the work	11
Crops damaged due to climate related stress	37
Poor quality fruit	21
Crop loss and lower production	20
Shortage of water	4

Total number of respondents to this inquiry = 133

Approximately how many fewer hours are you working a month than in previous years?



■ 1 to 10 hours
 ■ 11 to 20 hours
 ■ 21 to 30 hours
 ■ 31 or more hours



■ 1 to 10 hours
 ■ 11 to 20 hours
 ■ 21 to 30 hours
 ■ 31 or more hours



■ 1 to 10 hours
 ■ 11 to 20 hours
 ■ 21 to 30 hours

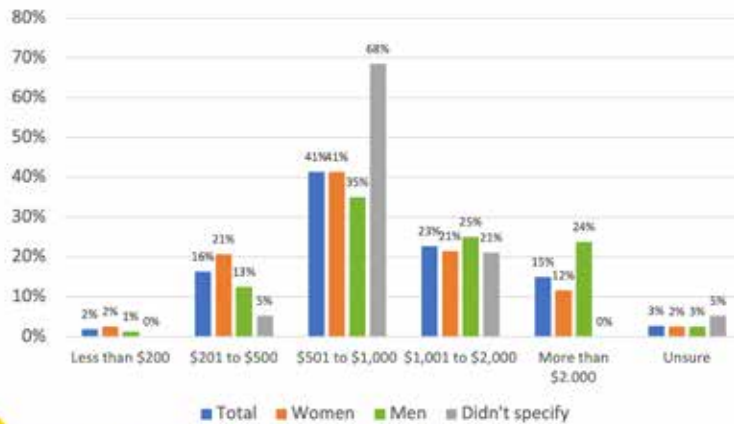


■ 1 to 10 hours
 ■ 11 to 20 hours
 ■ 21 to 30 hours

Total surveys conducted = 250

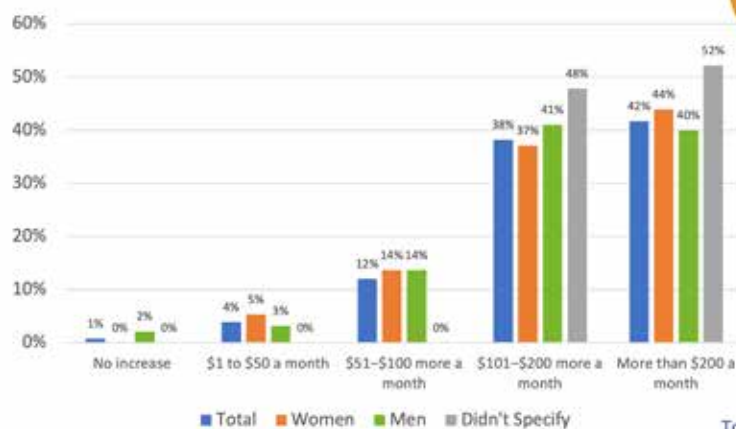


Approximately how much has your income decreased per month?

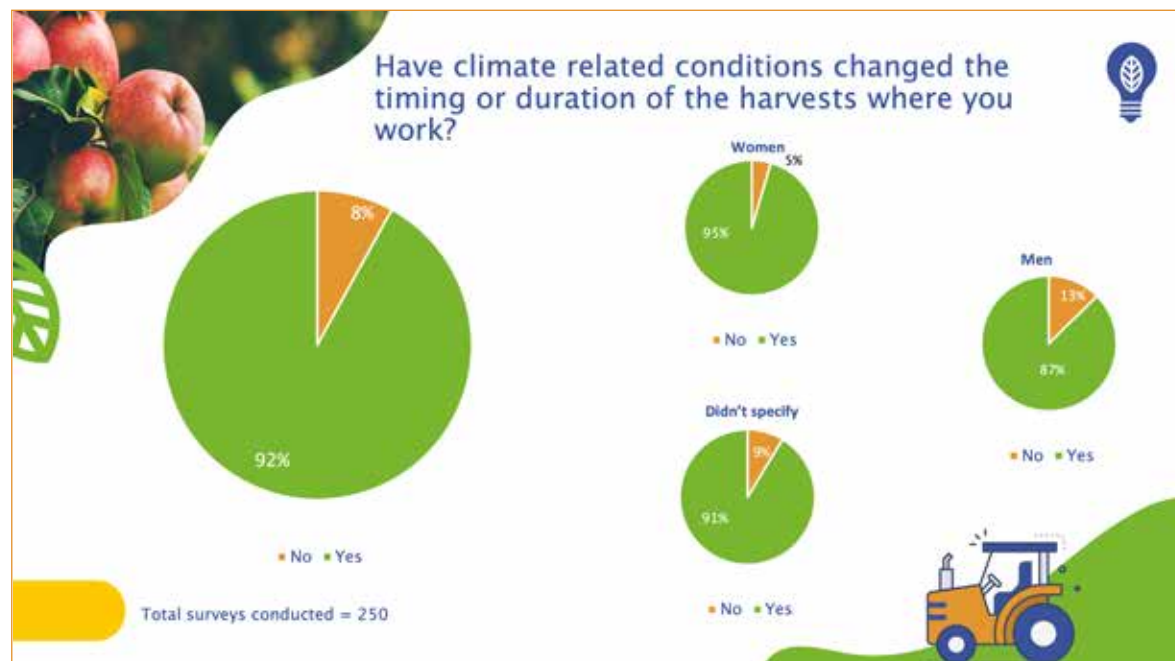
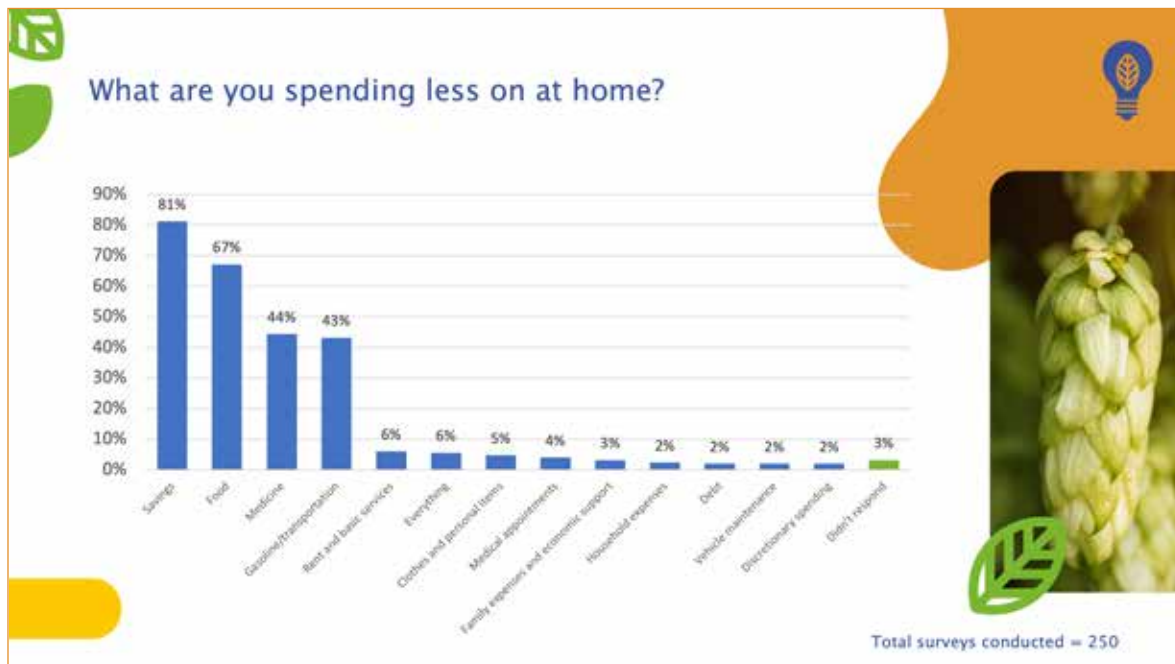


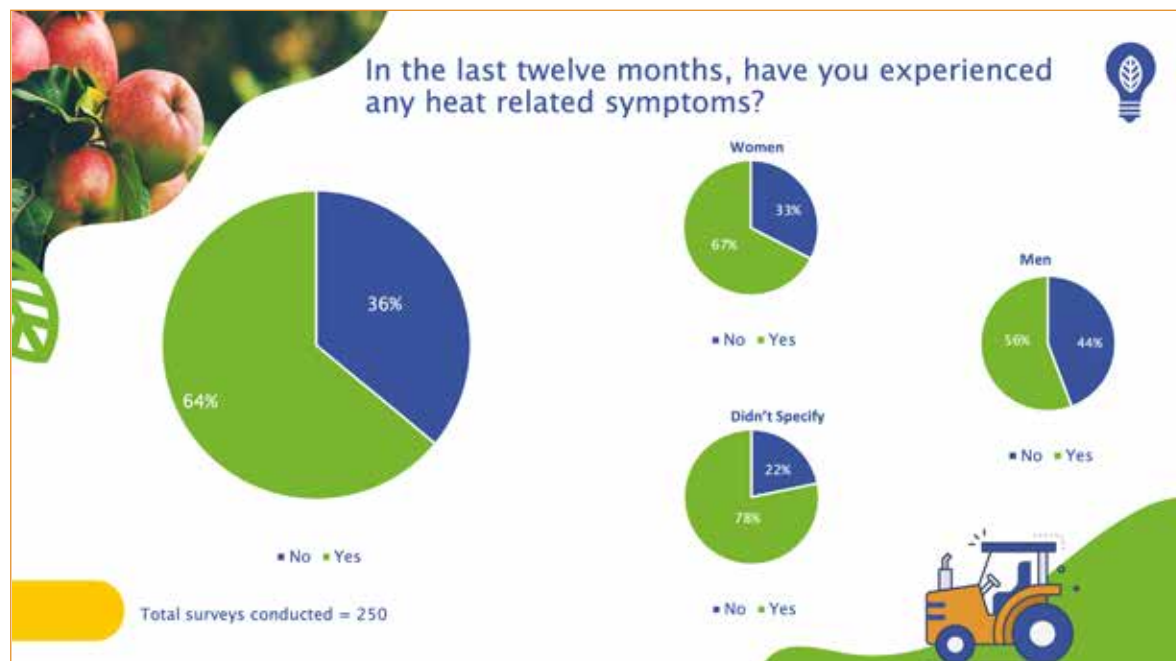
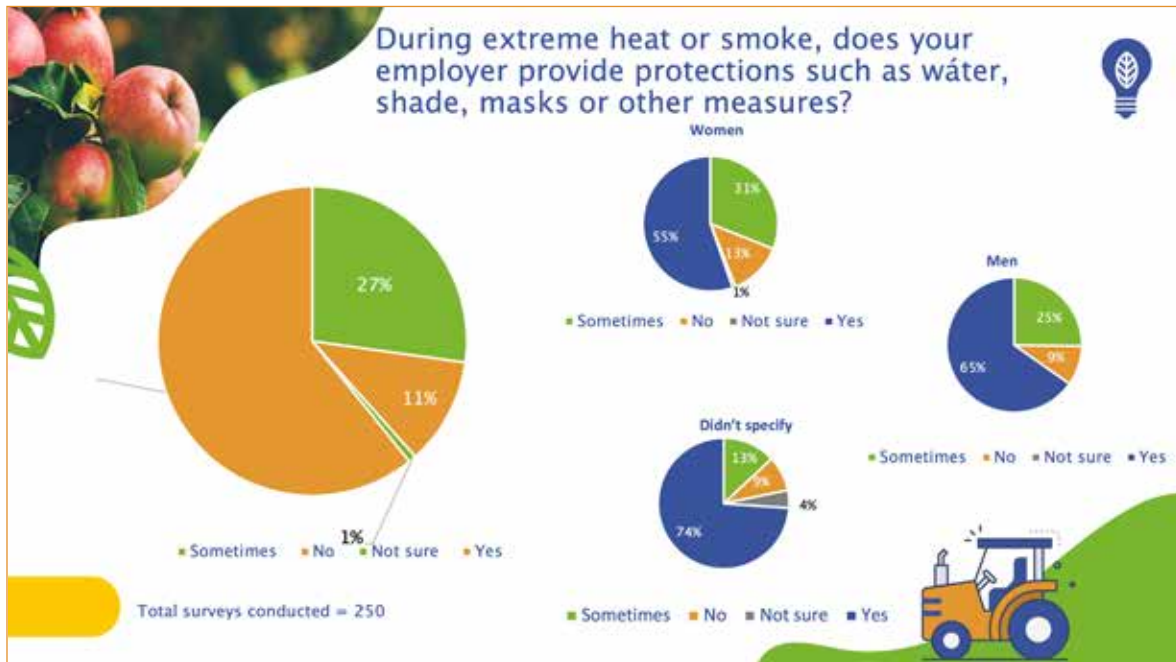
Total number of respondents to this inquiry= 220

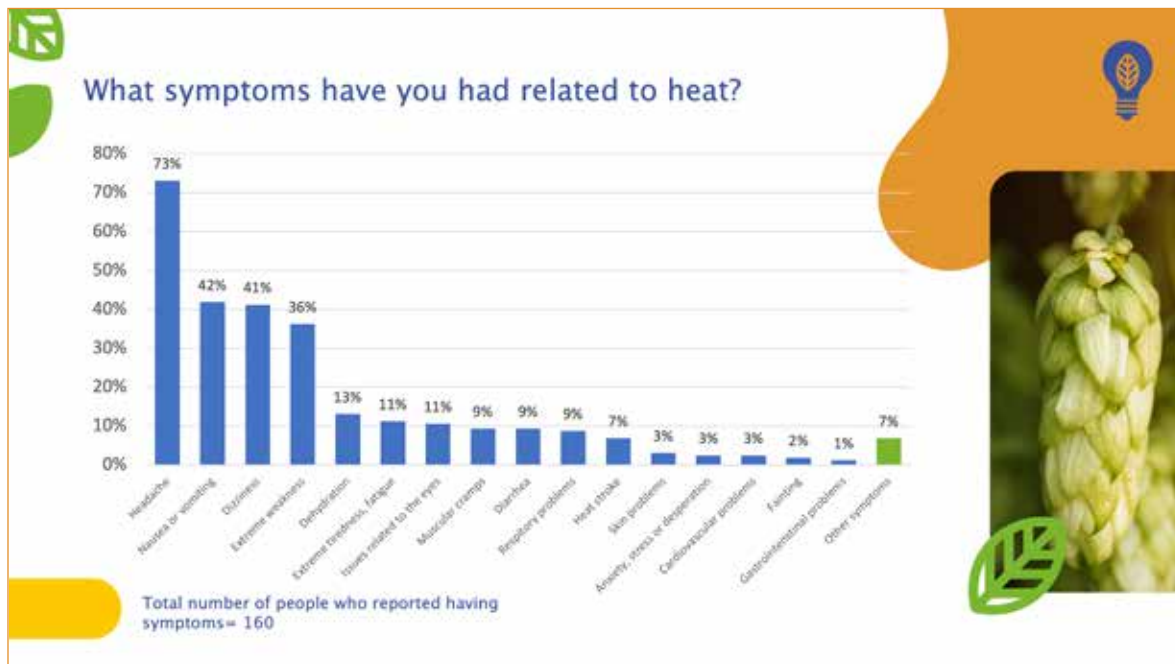
During the summer months, how much more are you spending on bills than you did five years ago? (For example: higher electricity bills for using air conditioning, having to buy air conditioners, purchase and use air filters etc...)



Total number of respondents= 250



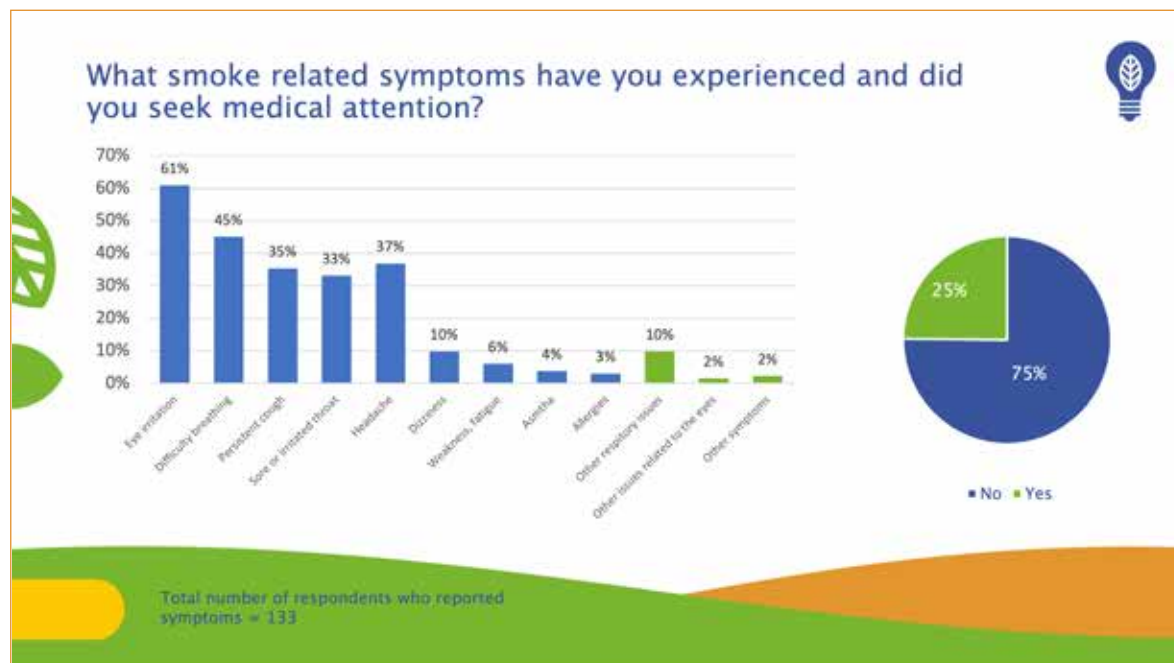
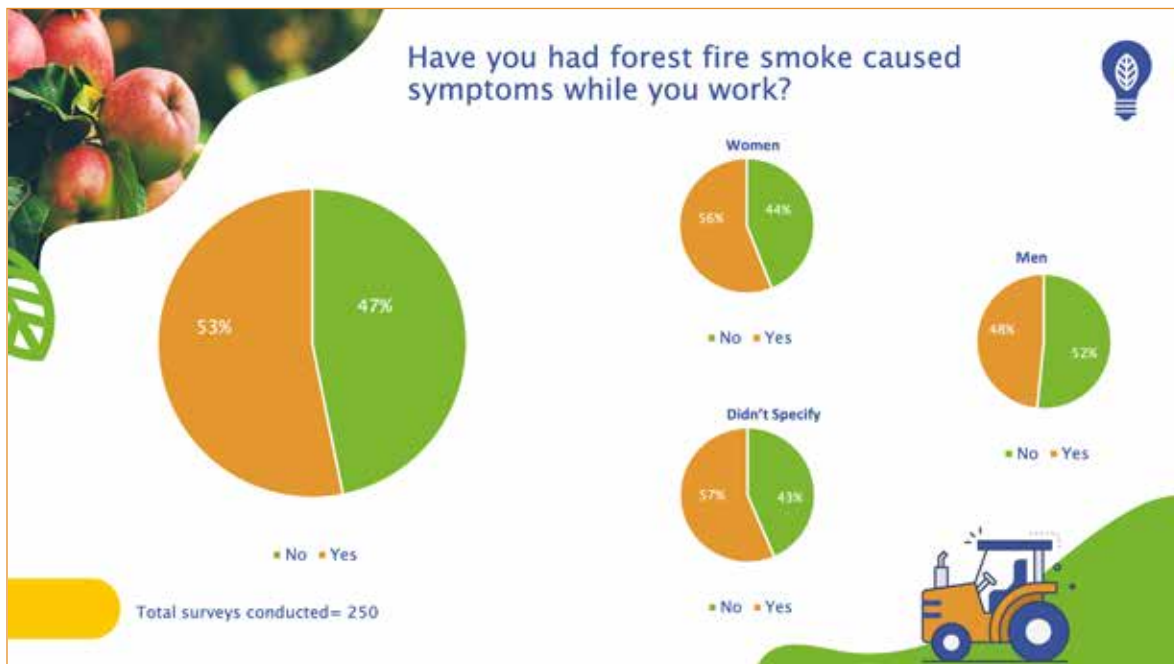


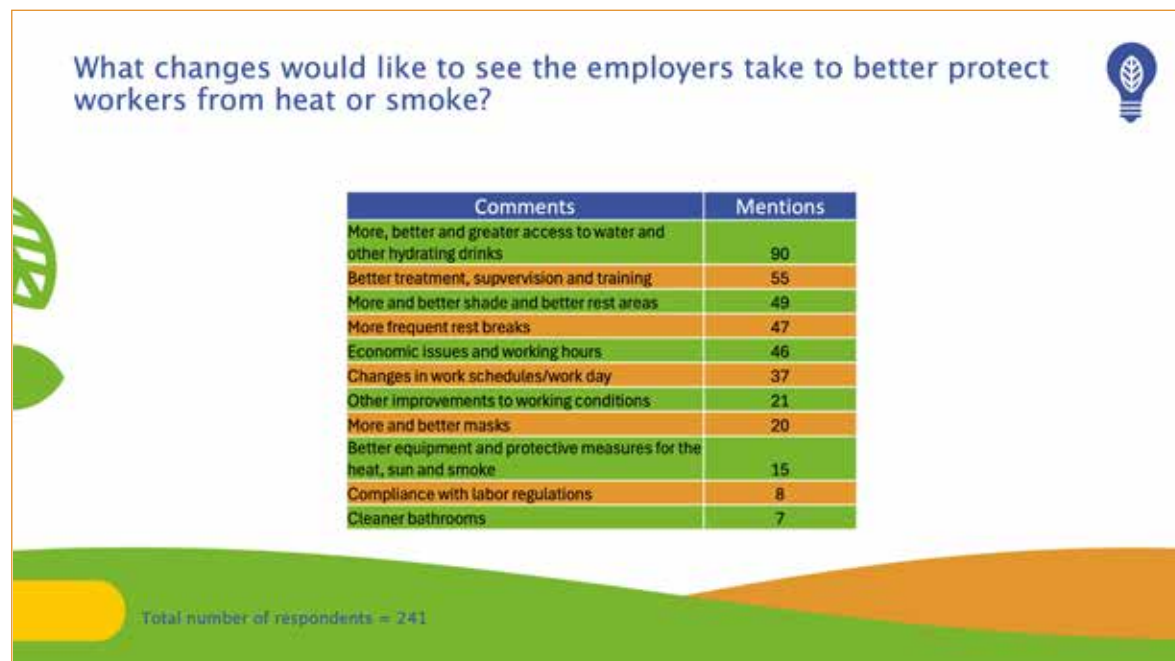
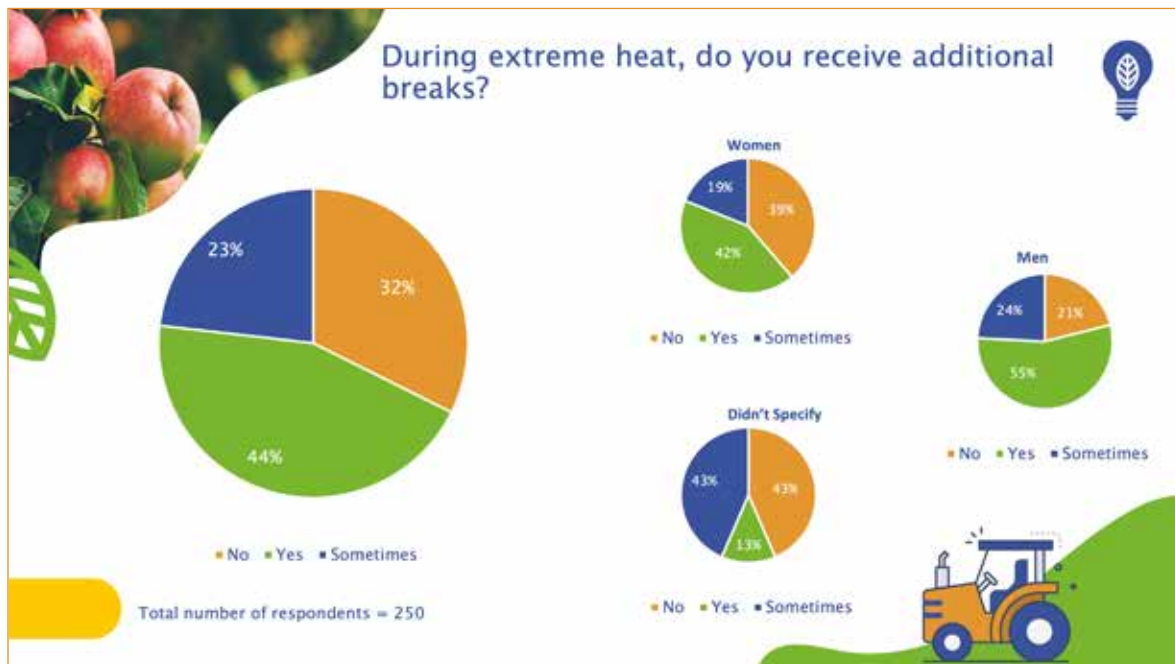


Comments re. Periods of extreme heat

Comments	Mentions
They only give us water	28
Inadequate or insufficient breaks	21
Water is of bad or questionable quality	19
Inadequate or insufficient protections	16
Workers have to bring our own protective gear	11

People who commented = 92





What changes would you like the government to make to protect farmworkers from climate change?



Comments	Mentions
More work, better pay and increased economic wellbeing	137
More protective measures for farmworkers	41
Economic assistance	36
Equality and fair treatment	25
Support for medical treatment and services	25
Oversight, vigilance and supervision of labor regulations	23
More training, information and education	8
Have legal status	8
Equality between local workers and those who have an H-2A visa	6
Take environmental and other measures to prevent climate changes	4
More participation, representation and awareness of the labor conditions that farmworkers have	3

Total number of respondents = 235



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