

SEI Asia Podcast miniseries: Air Pollution in the World of Work**Episode 1:** Intersectionality aspects of Air pollution in the world of work**Host:** Jenny Yi-Chen Han**Guest:** Thanh Vu

0.32-1.19

Jenny: Hello, my name is Jenny Yi-Chen Han. I am a Research Associate on Gender, Environment, and Development at the Stockholm Environment Institute – Asia Centre. In this miniseries, we will take a deep dive into multiple aspects of air pollution and its impact on work and livelihood. In the first episode, we will focus on the aspect of intersectionality on air pollution. Our guest today is Thanh Vu, one of our research partners in the project titled “The impact of air pollution on the world of work for women and youth in East and Southeast Asia”. Thanh is currently working for the Institute of Human Studies based in Hanoi where she serves as a head of the department of human development and human resources study. Thanh, welcome to the podcast.

1.19-1.22

Thanh: Hello, Jenny. Thank you for inviting to the podcast.

1.23-1.39

Jenny: Thank you so much. Nice to have you today. So, let’s start with the existing research on air pollution. What do existing research tell us about the socio-economic and gendered impacts of air pollution; for example, what are some of the current gaps in this field of research?

1.40-4.04

Thanh: Existing studies show the effect of demographic and social factors on a person’s exposure to air pollution. These include education, work history, family needs for work division, family structure. Factors such as where people live and work can greatly impact their exposure because air pollution is not equally distributed spatially.

Studies in the world indicate that sex and gender are factors influencing the exposure to air pollution of women and men. Women and men are affected differently by air pollution due to biological and social differences. Gender influences the roles of women and men in performing daily activities. It therefore has shaped the ways that men and women are exposed to air pollution. The disparities in income and education between women and men are also the root causes of their exposure to air pollution. On average, the amount of time that women spend in the kitchen tripled that of men, and

women therefore are more exposed to sources of indoor pollution. These make women and girls more exposed to household air pollution.

Regarding Vietnam, air pollution has become serious and has been paid a lot of attention in recent years. But air pollution issues in the studies in Vietnam are usually investigated from environmental or health perspectives while there are limited studies examining air pollution from an intersectional lens, especially social and cultural aspects. So, our research project on *“Intersectional impacts of air pollution on the world of work of informal labour groups in craft villages in Hanoi, Vietnam”* use gender and intersectional lens to examine the interrelationship between air pollution and the working condition of informal worker groups in craft villages, especially groups of women and young people who face disadvantages in work and life due to inequalities related to social norms, social hierarchies, division of labor models and limited personal resources.

4.05-4.23

Jenny: Thank you so much. And now that we have some background information. Let’s talk more about your research. You already mentioned about your research focused on the intersectional impacts of air pollution on informal workers in the Hanoi’s craft village. Could you please tell us a bit more about your case study?

4.24-6.36

Thanh: You know, craft villages in Vietnam have created employment for many workers in the informal economy, making an important contribution to promote economic development in rural areas. However, informal workers in craft villages face many risks relating to polluted environments, including air pollution. Many studies in Vietnam have reflected that, in craft villages, environmental pollution in general and air pollution, in particular, affects the lives and health of craft villagers as well as neighboring areas. However, there is no study investigating intersectional factors associated with the exposure to air pollution on labourers in craft village. Our research project aims at unpacking the structural causes of air pollution and main drivers of exposure for different labor groups in craft villages in Vietnam. It looks at the differentiated effects of air pollution on informal workers. It investigates the gender and youth related issues associated with air pollution due to working in informal sectors in the craft villages. It also identifies the measures of various stakeholders to prevent air pollution and minimize its impacts on labourers.

In this project, we applied participatory methods to explore the perceptions, understanding and experiences of worker groups about the potential danger of air pollution in their working places. The study uses qualitative methods such as focus group discussions, in-depth interviews, writing working diary, and photovoice. It reflects the situation of air pollution in craft villages from insider viewpoints through labourers’s sharing and stories of their experience of air pollution at the workplace. And the project also shows the measures to protect workers from air pollution.

6.37-6.50

Jenny: It's really great to hear that you use multiple research methods to understand workers' experiences of air pollution in their workplace. Can you tell me a bit more about how your findings help address current research gaps?

6.51-11.54

Thanh: Well, our study reflects intersectional influences of air pollution on labourers. It shows that the exposure and impacts of air pollution on laborers in craft villages are influenced by various factors.

The first factor is personal factors such as sex. The study shows that women often do lighter jobs than that of men but their jobs require more attention, carefulness and meticulousness due to their patience. Meanwhile, men with good health often do jobs that require more physical strength, and in many cases, they participate more in hazardous working stages of work in more air polluted environments. Men and women work in same workshops, they have to breathe in polluted air in production facilities. However, men tend to spend less time than women at the workshop because men's job provided them with chances to move to other places in working time.

About the youths, they are more likely to undertake more work with direct exposure to pollutants due to their physical advantages. This may in turn make young men disproportionately exposed by air pollution. Middle-aged workers are also more likely to have pre-existing health conditions than their younger counterparts, making them more vulnerable to the impacts of air pollution.

And the second factor is social and cultural. You know, gender norms affect the choice of employment of workers in craft villages. Women are still seen as the ones responsible for housework. Although they know that working in production facilities in craft villages can affect their health, many workers still choose this job because they can have more time to take care of their family than other job such as working for companies in industrial zones. On the other hand, gender norms on men's role, considering men the breadwinner in the family, pushes them to try to earn money. Although they are aware that some work in craft villages involve hazardous environment such as spray painting, operating cutting machines, so on and so forth. Some men still do this work as they offer high income compared to other work in the craft production facilities.

Cultural features of rural villages sometimes become barriers to manage air pollution. The influence of village community relations restricts workers from giving their complaints about air pollution in their workplaces to employers and stakeholders. Village culture also sometimes prevents local authorities from trying to apply some regulations to production facilities who violate environmental regulations.

Migrant status also affects the workers' exposure to air pollution in the craft village. You know, migrant workers work and live right next to the production facilities. Therefore, they might be exposed to the air pollutants from production facilities not only during working time but also during rest time. In addition, since the migrants only work in the craft villages for a while, they accept to do heavy jobs with more risks of exposing [themselves] to hazardous pollutants but provided them with higher income. Notably, migrant workers are seasonal workers coming from other provinces so they do not usually join in local organizations. In general, they hardly participate in any organization that is responsible for protecting their interests.

The third one is institutional factors. There are formal and informal regulations in craft villages to manage and reduce air pollution in craft villages. However, to be honest, their effectiveness is not high. The craft villages have not yet had assessments of air pollution due to lack of financial, professional and technical resources. Occupational safety and health at the workplace have not been implemented and monitored well. The village conventions contain some regulations relating to environmental protection, but there is a lack of supervision or resources to ensure that the regulations are effectively implemented.

11.55-12.13

Jenny: Excellent. It is interesting to know there are three factors that influence the exposure and impacts of air pollution on workers in the craft villages. Can you elaborate a bit more about how you use a gender and intersectional lens to analyze your findings?

12.14-13.59

Thanh: Multiple and intersectional characteristics might make some worker groups become more vulnerable to air pollution due to restricted resources, opportunities or power to protect themselves from air pollution, and to improve their working environment or livelihoods. Our studies analysed how gender and intersectional features associate with the labourers' exposure to air pollution. In our study, gender, age and migrant status are cross-cutting issues to examine the impacts of air pollution on workers. Specifically, in this study, we look at how gender norms and gender stereotypes associate with the pattern of labour division in craft villages, and thereby influence the exposure to air pollution of men and women. Youth are vulnerable to expose to air pollution. Due to their physical health advantages but less working experiences, young people undertake heavy work in direct contact with places that emit a lot of pollutants.

And migrant status makes migrant workers affected by air pollution in craft villages. In particular, the living conditions of migrant workers in craft villages and the pressure of earning money while working temporarily in the craft village make migrant workers at high risk of being exposed to air pollution because they accept doing in very air-polluted environment that local people do not want to do.

Meanwhile, there is little protection and support from social organizations given to migrant workers in craft villages.

14.00-14.06

Jenny: Very interesting. Can you tell us a little bit more about the ways that workers can be affected by air pollution?

14.07-16.43

Thanh: Obviously, air pollution affects worker's health and income. Men are less likely to mention their health problems than women even though men's work are directly exposed to harmful emissions. This can be explained as men's physical condition is better than that of women. In addition, men pay less attention to their health problems. Similarly, young people have better health, so even though they do heavy jobs, they seldom talk about the effects of air pollution on their health.

So workers in the three craft villages all worked on a day-by-day basis or they are paid by [number of] products. Therefore, even if they do not take a break but they are tired, their productivity will decrease and therefore their income will also be lower. It is found that some workers, who are usually women, have to take time off work on working days when there are activities at the factory that they feel their health can be affected by air pollution in their workplace.

Notably, workers are paid based on many factors including skills, level of difficulty, but also partly based on exposure to air pollution. Accordingly, people who do jobs that are more directly exposed to air pollutants will receive higher wages than other workers. However, in fact most workers in production facilities of craft villages work in the same workshop, so both men and women are affected by air pollution directly or indirectly. Although men are directly exposed to emissions, the time they are exposed to air pollution in the workplace is less than that of women because men have more mobility in work than women. Due to be able to drive trucks and load items, men also do transporting and delivering goods which provides them with opportunities to work outside production facilities.

As a result, although both men and women work about 8-9 hours per day, men spend less time in production facilities than women. Nevertheless, women's income is lower than that of men, and they do not have toxic [exposure] allowance. This partly reflects income inequality from an air pollution-related perspective.

16.44-18.06

The roles of stakeholders and labourers themselves also influence the exposure to air pollution of workers in craft villages.

For the employees, workers have little opinion with their employers or with local authorities or organizations about the situation of air pollution in their workplace and its effects on them. This is

possibly due to limited awareness and activeness of workers, and the influence of community relations in rural villages. Notably, many workers still do not use minimum protective equipment such as masks during the production process because they think it is uncomfortable. It is found that women are more likely to use measures to protect themselves from air pollution than men. This can be explained by the fact that, as I mentioned earlier, men have less health problems than women, and also because their tolerance to air pollution is stronger than women.

About local authorities, due to the nature of work in the craft village as informal economic sectors, there are no organizations in craft villages to protect the rights of workers. The localities have few regulations to ensure workers' safety against risks of air pollution at work.

18.07-18.22

Jenny: Thank you for the information. And lastly, I would like to ask you about the air pollution policies. What are some ways that workers can be impacted by air pollution policies that are often overlooked?

18.23-19.46

Thanh: Policies and regulations from the state, local governments, village conventions, and self-governing community organizations influence the management of air pollution and the support given to workers in craft villages. Currently, the implementation of policies and laws on air pollution in craft villages has not been fully and effectively implemented. Existing regulations are scattered and not specific, leading to a lack of comprehensive regulations on ensuring safe working conditions for informal workers in the craft villages.

Notably, existing policies do not take into account the vulnerability of informal workers, and in particular, migrant workers. Advocacy for informal and migrant workers' rights have been implemented by NGOs such as ILO and trade union organizations such as Vietnam General Confederation of Labor, however advocacy efforts are also limited. Moreover, policies on environmental protection in Vietnam are largely gender-blind and lack the nuances to address gendered vulnerabilities; for example, specific support for women workers in polluted environments.

19.47-20.16

Jenny: Ok great. So, thank you again. I think it's really great to hear about your findings and your analysis through an intersectional lens. It allowed us to understand more about how factors such as gender, age, migration status, and cultural norms shape the unequal exposure to air pollution.

Again, I really appreciate the time that you've spent with us today, and your willingness to share your knowledge and experience with us. It's been a real pleasure talking to you.

Thanh: It's my pleasure too. Thank you, Jenny.