

# Nepalese and Indonesian policymakers' views on the ethics of protecting children from air pollution

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# Factors Affecting Childhood Exposure to Urban Particulates



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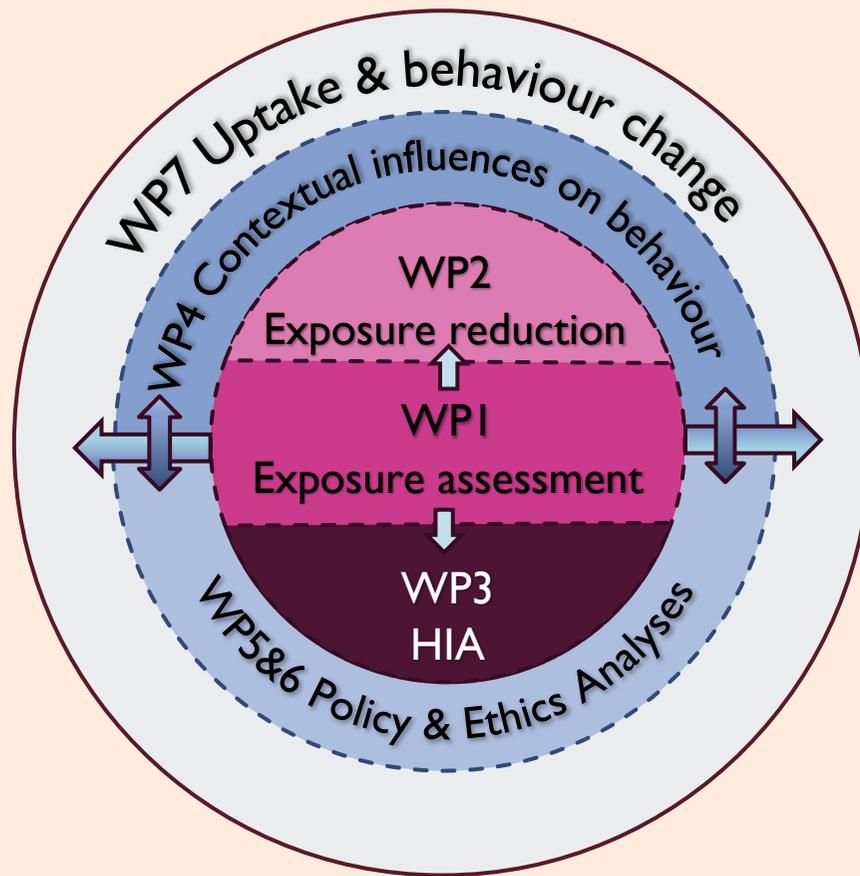


Bandung City Environment Agency



# Project rationale

- In South-East Asia (including Nepal and Indonesia), 99% of children under 5 live in environments with airborne fine particulate (PM<sub>2.5</sub>) concentrations above WHO guidelines.
- Death rate from air pollution for children under 5 has risen to ~75 per 100,000.
- Children exposed to particulate air pollution (PAP) are predicted to experience illness and neurodevelopmental issues risking quality of life and earning potential. This limits the ability of their societies to function, develop sustainably, and prosper.
- Reducing exposure to PAP is one of four actions identified in UNICEF's framework for improving children's health.
- **Until pollution levels decrease, we need to find ways to protect children by reducing their exposure to PAP.**



# Study Purpose

The purpose of WP6 was to better understand what and how policymakers from Nepal and Indonesia - LMICs with frequently high levels of PAP - framed any moral obligations about protecting children from high levels of PAP.



# Methods

- Informant interviews with key stakeholders, in Indonesia N = 13 and Nepal N = 13.
- Study locations: Bandung, Indonesia and Kathmandu, Nepal.
- In 2023, both countries had average annual PM<sub>2.5</sub> concentrations exceeding WHO guidelines by 7–10 times.
- The cities also have comparable population densities (in excess of 15,000 people per km<sup>2</sup>) and topographies (bowl-shaped basins which trap and accumulate pollutants).
- Deductive thematic analysis based on:

McDonald et al. “Facemask use for community protection from air pollution disasters: An ethical overview and framework to guide agency decision making” (2020) 43 *International Journal of Disaster Risk Reduction*, 101376.

# Moral status of children vis-à-vis population

- An obligation to safeguard children's health and protect children and future generations from the impacts of PAP was framed in moral terms with interviewees using terms such as: *duty, responsibility, protect, sensitive, higher risk, and vulnerable.*
- “If given the choice to protect children, it must be children. Because these children are the next generation. ... This is also a big point, that the ones to be saved are children because we are heading towards the golden generation in 2032-2045. So, I fully agree that children should be prioritised first, because they will replace us in the future.”

[Irene, Health Agency - Indonesia]

# Moral status of children vis-à-vis population

However, some responded:

“Since air pollution is everywhere, you know, in every part of Kathmandu there is some kind of air pollution. Maybe it’s severe in some areas and moderate in others. So, while talking about prevention approaches regarding children, in my view, we should not just focus on this particular, specific group but take this message in a blanket approach within KMC [Kathmandu Metropolitan City].” [Hanit, City Council - Nepal].

# Exposure reduction or protection?

“Both...both are very important...we can't reduce pollution at once so our responsibility is to protect children that suffer from a high level of pollution and at the same time reduce our exposure, our pollution level. So, I think equal weighting to both things.” [Sajit, Government Department - Nepal]

“I do not believe that a facemask is the answer to air pollution. Air pollution needs to be dealt with at the source itself, to reduce it, and there are ways in which it should be minimised.” [Kiran, Government Department - Nepal]

# PAP or other environmental, health or social risks?

“It’s not becoming an issue yet, especially at the moment, there’s a waste emergency. All efforts are invested there, both in terms of budget, in terms of personnel, so the issue is more about waste [...]”

[Kemala, Research Agency - Indonesia]

Why is air pollution not a priority? “[...] the major other priority happens to be [things] like infrastructure development that happens to raise their popularity in terms of political [...] So, politicians try to gain short-term popularity.” [Binsa, NGO - Nepal]

# Justice/Equity - Nepal

‘Because the impact is very high on their [children’s] growth rate, their mental health, everything is affected by air pollution. So, first, is to reduce the air pollution, we should not rely on masks all the time, but, at the moment, until we are able to control this air pollution, we have to rely on the masks and to make N95 especially designed for the children, accessible and affordable. The government should give or subsidise these just like sanitary pads” [Sanani, Government Department - Nepal]

# Focus for government assistance - Nepal

- “In my opinion, we should protect more **vulnerable** people, like children and elderly people, and then we can go through like other factor(s), like socio-economic status and other things. So, first we should identify who are more vulnerable.” [Sajit, Government Department - Nepal]
- “It [access to/subsidy of facemasks] should be based on **exposure**, I think, exposure, exposure is the first thing. And because even if these vulnerable people, you see, older people or children, if they stay at home, then maybe they don’t need them [facemasks]. But once they go out for the working or are exposed, then they need it.” [Feba, University - Nepal]

# Focus for government assistance - Nepal

“You cannot provide [masks] to all the sections of the people, but you need to be specific, so subsidising to the target group could be a good option ...You cannot have a blanket approach. And even providing subsidy is not that easy, it’s a very difficult task to subsidise, because in the case of COVID-19, we had a lot of budgetary irregularities, you know ... So, it [allocation/distribution] should be targeted...maybe connected with **the level of income of the household or individual people**, you know.” [Manish, Government Department - Nepal]

# Focus for government assistance - Indonesia

“For us ... what we must do is to prioritise again [like during Covid]. As previously mentioned, when it comes to **poor citizens**, the poor citizens should automatically get (the subsidy), they should be first.

The second one is the **vulnerability life cycle** ...

And then third, is related to whether she/he is **vulnerable to infection** or not. This means that if s/he works in a place that is vulnerable to air pollution, they must be given [a subsidy]. So, there will be places we need to prioritise.

The fourth one, maybe for the **service providers** ... Or those who have a **high risk of pollution** ...” [Rani, Research Agency - Indonesia]

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## WELCOME TO FACE-UP

The **FACE-UP** project is testing culturally-appropriate interventions to reduce the exposure of urban children to particulate air pollution, a major risk factor for a range of non-communicable diseases that are hindering sustainable development in LMICs.

