

Little Green Warriors

Dr Richa Singh

Child waste pickers in India need our help and compassion



segregate waste materials from our streets, community bins, dumps, and landfills. What they collect and pick up are items like things made of plastic (like bottles), metal, paper, etc. that can be sold or reused.

Although it is difficult to determine the exact numbers of child waste pickers, it is estimated that there are millions in India alone. Many more of them live and work in the other less developed and developing countries of the world.

How do they work?

Child waste pickers are involved in this work not by choice, but because they come from desperately poor, marginalised sections of our society. Many of them might be orphans or might have been abandoned by their families. Poor families in cities, struggling to make ends meet, put their children to work. The waste these children pick

up and resell provides them a small additional income.

But who buys waste from them?

Child waste pickers are a part of the informal sector of waste management. See its pyramid below to understand where does waste go and who buys it.

• Waste pickers and Itinerant waste buyers: Waste pickers, including child waste pickers, primarily collect waste from roadside dustbins, landfills, and dumpsites. They also collect waste from households daily and may or may not have the means of transporting it.

Itinerant waste buyers undertake doorstep collection at homes but only once in a while. They usually own a bicycle and purchase large quantities of newspapers, plastic, glass, carton, metal, and other high-value recyclable items.

These waste pickers and itinerant waste buyers incur zero or minimal input cost and sell their waste to small scrap dealers or *kabadiwalas*, who almost always exploit them. The scrap dealers typically underweigh their waste materials, undercount their due money inaccurately, manipulate prices, or resort to other unfair means. Hence, as these waste pickers and itinerant waste buyers are exploited at every turn, they usually do not have the wherewithal to do any recycling. Thus, they majorly contribute to waste collection.

• Small scrap dealers: These people—the *kabadiwalas*—run small junk shops that have some storage space to collect waste. They purchase this waste from the waste pickers and itinerant waste buyers. Thereafter, they undertake negligible or minimal waste processing, like sorting large quantities of waste items.



- **Big scrap dealers:** These folks are waste aggregators. They collect waste in bulk and store it in large spaces, many times bigger than those of the small scrap dealers. They get this waste directly from small scrap dealers and other commercial sources. This waste is also of the same material type; thus, big scrap dealers specialize in waste collection. This specialization and bulk collection makes it possible for them to recycle waste. In some cases, they recycle it to produce secondary raw materials. Nonetheless, they supply their waste according to market demand.
- Waste processors: These are the final stakeholders

in the pyramid of informal waste recycling system. They buy specific quality of scrap material and convert it into secondary raw material for the manufacturing industry. They collect this waste from the big and small scrap dealers.

Is the waste picker's work important?

Very much so! Their work contributes to environmental sustainability. Recycling and waste picking play a vital role in reducing the amount of waste that ends up in landfills and in mitigating pollution.

But it is also true that thousands of children working as waste pickers are being denied education and a decent lifestyle and must be pulled up and out of this miserable existence.

What are their challenges?

- Severe physical hardships are normal, such as carrying heavy bags of waste, exposing themselves to hazardous materials such as chemicals, toxins, broken glass, etc. and working in harsh weather conditions.
- Child waste pickers are at risk of contracting diseases and infections due to exposure to unsanitary conditions and harmful waste materials, and due to their abominable working conditions. They have no access to protective equipment such as gloves or gumboots. Due to the poor living and working conditions, malnutrition, anaemia and tuberculosis are common among them.
- Most child waste pickers have no access to education and, hence, to a better future. Some NGOs are working to change this by setting up schools within or near waste picker communities.
- Child waste pickers often face social discrimination and isolation, as people look down upon their work. Their living

Did you know?

Apper the provisions in

As per the provisions in
the Child Labour (Prohibition
and Regulation) Act, 1986 and the
National Policy on Child Labour, there
is a restriction on employment of children
in any hazardous or dangerous occupation.
Waste picking has been included in the
Schedule of Hazardous Occupations, 2001.
However, children continue to be employed
in this sector. As per a study, around 20
per cent of the 51,000 street children
in Delhi are waste pickers.

quarters are frequently located close to dumpsites, and they work under unhygienic and unhealthy conditions. Often, they have no access to drinking water or public toilets.

- Child waste pickers also experience psychological stress due to the harsh working conditions, social stigma, and the feeling that their work is often considered degrading. This stress can lead to long-term mental health issues, such as anxiety and depression.
- Nutritious food is extremely important for growing children; this is usually denied to child waste pickers. Malnutrition can lead to stunted growth, weakened immune systems, and various long-term health problems.

How can we help?

- Educate: Advocate for their right to education. Support initiatives that provide access to schooling and vocational training.
- Make others aware: Reduce the social stigma and promote understanding and empathy about the issue.
- Integrate: Support ccommunity-based projects that provide safe working conditions, along with access to health and education facilities for these children. Focus on ensuring clean water, sanitation, healthcare services, and protective equipment. Also, support efforts to develop sustainable models that integrate adult waste pickers into the city's solid waste action plan.

Remember, many young waste pickers might have dreams and aspirations like any of you. Dreams of getting educated, of becoming a doctor or a scientist. It is partly because of their efforts that we are not drowning in the waste that we generate every day. Shouldn't we give them something in return, such as an opportunity for a better life?

The author was a Programme Manager, Solid Waste Management and Circular Economy, Centre for Science and Environment, New Delhi. Currently, she is a Research Scientist, University College Dublin, Ireland.



SWaCH Pune is India's first whollyowned cooperative of over 4,000 waste collectors and other urban poor. Working in collaboration with the city administration, SWaCH collects and recycles waste from over nine lakh households and businesses and promotes source segregation of waste. Its members get user fee from people and also earn by selling recyclable scraps. What puts SWaCH apart is its clear stand against child labour. particularly in waste picking. Its

clear stand against child labour, particularly in waste picking. Its campaigns have resulted in a decrease in the number of child waste pickers in the city! With mothers having taken up the task of door-to-door waste collection, their children are now free to go to school.

Something more you

can read!



Nayantara Alva Giulia Rocca

in Kharajgaon

An observation report made by high-schoolers in rural

Maharashtra, studying the impact of climate change and

the water resources installed by them a year earlier.

Farming Sustainably

t the cusp of the monsoon in Kharajgaon, land had laid barren for months. The countryside was tense and farmers awaited rains. Too early and the crops would die, too late and they can't be sold. Most farmers took multiple jobs during off-season to support their families. Navin, a farmer we worked with, forced his daughters to leave school to sustain their living costs.

Promised prosperous yield, they adopted inorganic fertilisers and pesticides. "We know that chemicals harm the soil," said Rakesh.

"But what is long run? We are supporting our family this year, we'll worry about those problems later." Extracting a lot of groundwater has lowered the water table, productivity, soil health, and trigged soil degradation and erosion. Further, it has made the farmer's dependent upon these city-sourced products, thus leaking the village economy.

However, the government has subsidised: water storage and micro-irrigation. To address these problems, our project, funded by the Go Make A Difference Foundation, relied upon

indigenous Warli knowledge. Drip irrigation is a promising solution, owing to its water-efficiency, pest prevention, and adaptability to local crops. We installed borewells, pumps, tanks, and drip pipes to minimise the reliance on irregular monsoon. Thus, even rice could be grown sustainably. Paddy farming, conventionally, requires intensive field preparation and unsustainable amounts of water for flood irrigation. Through drip irrigation, not only do rice sprouts gain the preferred aerobic conditions, their fields also release less methane.

Business-wise, farmers amass maximum profits by selling large rice quantities and incurring small production costs. But in the wholesale market, prices often crash due to oversupply and slack regulations. "What can we do?" lamented Navin, forced to stock the unsold rice. "Of course, we can eat some of this ourselves, but it feels like we are eating our own money."

Thus, our project addressed economic security by encouraging crop diversification. Radhika, another farmer, grew chillies, sunflowers, and toor dal with our drip pipes and earned good profits. Yet, a caveat interfering with farmer's income is beyond their realm: bureaucratic obstacles. There is vast ignorance about government schemes, the documents required, and rampant corruption at the Panchayat level. "We receive Rs 2000 a month," Rakesh informed us. "And I'm sure they (officials) keep five times of that." Yet, in a transforming India, traditional knowledge and modern technology can find solutions.

The authors were Class 12 students, United World College, Adriatic, Italy, in 2022. Currently, Nayantara Alva is an undergraduate at the Sciences Po Paris, France and Giulia Rocca is an undergraduate Pearson Scholar at the University of Toronto, Canada.





Past Paradox and Future Judgement

Dev Pradhan

Pensive thoughts by a Gen Z on the human civilization, and its past, present, future.

s the human civilization has advanced, it has undergone a trial of conscience at every successive step. Simply put, it has been in a court of paradoxes where there were problems, debates, and choices to be made.

The Homo Sapiens—
modern humans—appeared
around 20,00,000 years ago.
Gradually, these creatures
chose to migrate and sail
across the seas to make their
own way. In the Neolithic
Age, they opted to settle
down at different places and
brought new civilizations
into existence.
They invented a
language, began

language, began keeping records, practiced division of labour, evolved social hierarchies, started trading, set up an administration, and thus developed an economy.

Thereafter, 'ideas' no longer remained constricted locally but got swiftly conveyed worldwide. Conflicting ideas triggered wars and the greed for power led to the rise and fall of empires. Some have predicted that a calamity—can be in the form of climate change, virus outbreak, or nuclear war among many others—can easily demolish this human empire. The climate of the world and its

basic physical processes have already degraded owing to our interference. The carbon fuel based lifestyle has become an aspect of our daily life and combating this culture is indeed tricky.

Pessimism has also deepened in our society. It's quite likely that a disaster can knock us out in the immediate future, sooner than we predict.



However, one thing is certain that whenever it will hit, we'll be better prepared for it.

In Ancient Rome, Seneca postulated, 'To mankind, mankind is holy.' Since then, his words have become the slogan of humanists across the world. Human rights are most ardently discussed in the current era than hitherto any other period of human history. The desire for a better world—of a long-lived human civilization—is a subject of various perspectives. It is being widely discussed and, with the innovations in modern technology, solutions are underway. After all, the road to a better future starts from the present.

For example, sustainable development, now most people agree, is the necessity of our future. In fact, it's a solution that can heal our planet from many of its ailments. I feel that if everyone learns to survive sustainably then all our issues can be solved.

But not everyone has the same odds here. Many times, sustainability is endorsed as a moral value backed by religious beliefs and social norms

but an eco-friendly lifestyle is not an obligation for anyone. Are we even going to achieve anything by working for a generation which doesn't even exist as of now?

Despite these secondthoughts, the uncertainty of the unknown intrigues us to adopt sustainable development. How much ever our problems be, there's always a hope for future.

The author is a student of Class 12, Kendriya Vidyalaya, Muzaffarpur, Bihar.





As per the latest *State of India's Environment 2024*, published by the Centre for Science and Environment, New Delhi, air pollution is one of the biggest reasons for child mortality in India. From womb to birth to adolescence, murky air with heavy doses of PM2.5 and noxious gases cripple generations. Doctors say that Delhi and many cities in India are witnessing a spike in cases of children and non-smoking adults with black deposits in lungs. These deposits cannot be removed and damage the lungs. It is a criminal oversight to ignore this health emergency.