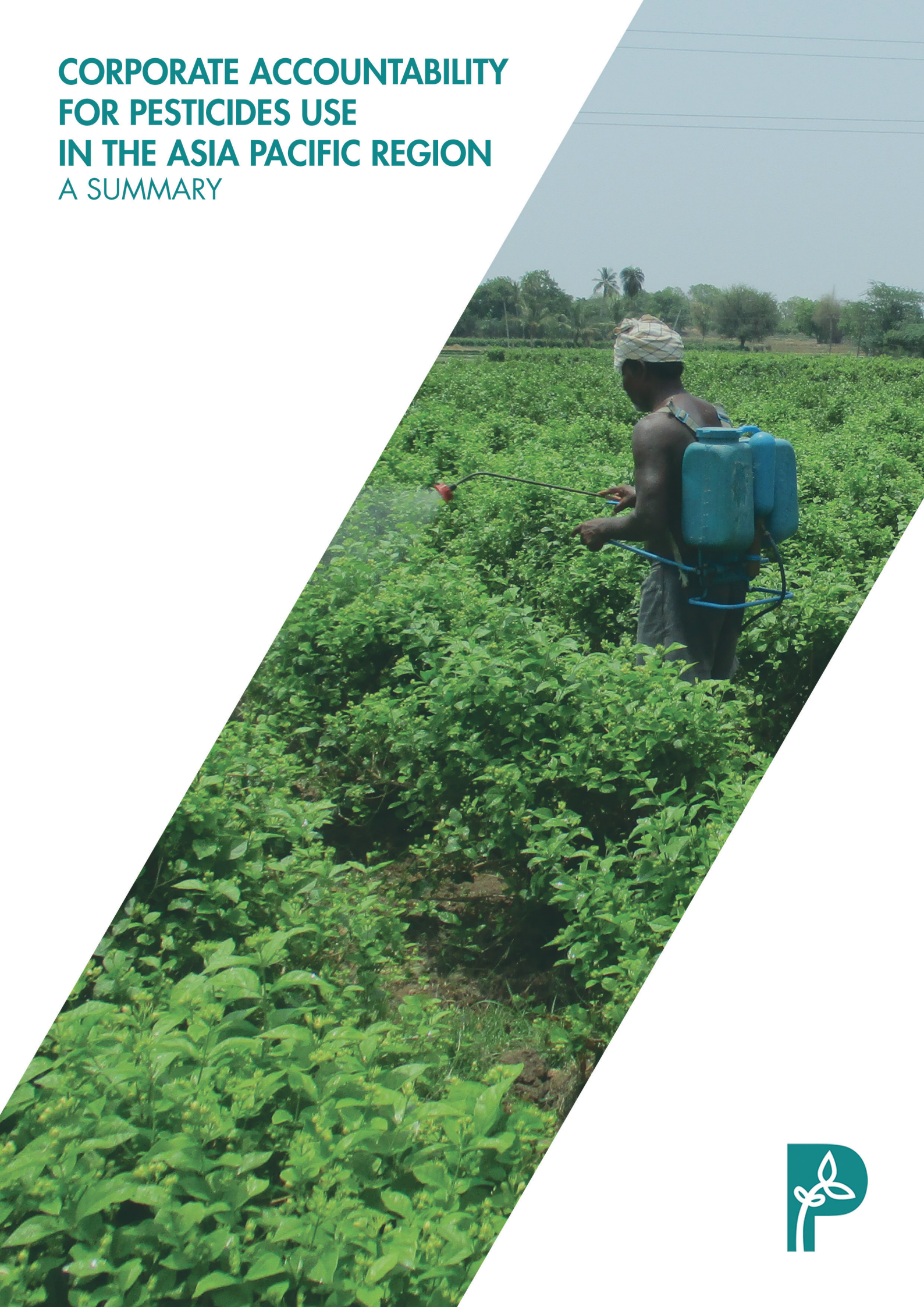
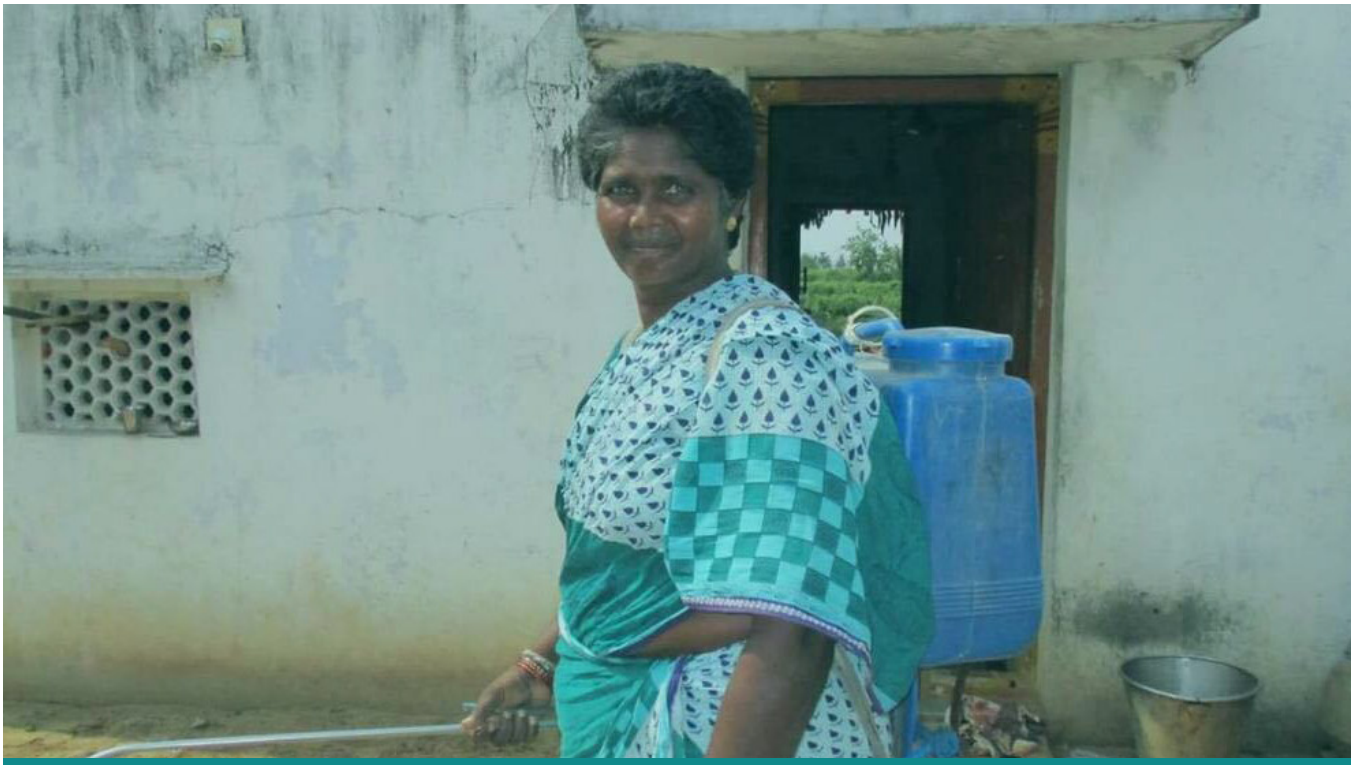
CORPORATE ACCOUNTABILITY FOR PESTICIDES USE IN THE ASIA PACIFIC REGION

A SUMMARY





A woman working as a pesticides sprayer lacks Personal Protective Equipment (PPE) in a floriculture village in Tamil Nadu, India. Photo by SRED

AGROCHEMICAL TNCS AND THE NEED FOR CORPORATE ACCOUNTABILITY

For many decades, agrochemical transnational corporations (TNCs) have committed gross human rights violations and have violated various international human rights laws and instruments as well as national laws. However, there is a lack of a clear and direct legally binding obligation on corporations to respect human rights. These TNCs are allowed to manufacture, sell and promote hazardous products with impunity, while entire agricultural communities around the world are poisoned and toxic pollutants permeate the global environment.

Corporate accountability connotes the need for agrochemical companies to have formal duties and obligations to the users of their products, including responsibilities for their hazardous conditions of use. These include criminal liabilities, as well as the duty to compensate victims and clean up communities. In working for a global agreement or framework on corporate accountability, it is imperative that the deeds of agrochemical companies be examined with respect to internationally recognised and respected human rights. It is only through such a lens that the accountability of agrochemical TNCs—which have not merely sold hazardous products, but built an entire system of agriculture fitted for the use of these products—can be seen and exacted most clearly.

PAN Asia Pacific (PANAP), together with partner organisations, conducted studies on pesticides use in selected communities and areas in six countries in the region: Philippines, India, Malaysia, Bangladesh, Vietnam and Indonesia. Most of these studies were done using Community-Based Pesticide Action Monitoring, a methodology that PANAP has thoroughly developed and used.

Participating organisations are Bangladesh Resource Center for Indigenous Knowledge (BARCIK); SAHANIVASA, Society for Rural Development and Education (SRED) and PAN India with other partner organisations in India; Organisasi Penguatan dan Pengembangan Usaha - Usaha Kerakyatan (OPPUK) in Indonesia; PACOS (Partners of Community Organizations in Sabah) Trust in Malaysia; Sustainable and Rural Development (SRD) and Research Centre for Gender, Family and Environment in Development (CGFED) in Vietnam; and PAN Philippines with other partner organisations in the Philippines.

The summary of the results of these studies, conducted from 2015 to 2017, are as follows.

COMMONLY USED HIGHLY HAZARDOUS PESTICIDES

The studies on pesticide use in the Asia Pacific region revealed that 12 pesticides commonly used in two or more countries are in Pesticide Action Network International's Highly Hazardous Pesticides (HHPs) list. PAN International's HHPs list is based on the following criteria: high acute toxicity (e.g. fatal if inhaled), long term toxic effects (e.g. carcinogenic), endocrine disruptor, high environmental concern (persistent, bioaccumulative, and toxic to aquatic life), hazard to ecosystems (e.g. toxic to bees), and known to cause a high incidence of severe or irreversible adverse effects.

These are the following HHPs, their manufacturers among the top six agrochemical TNCs (Syngenta, Bayer, Monsanto, Dow AgroSciences, BASF and DuPont), and the countries where they were found to be used:

	Bangladesh	India	Indonesia	Malaysia	Philippines	Vietnam
Paraquat (Syngenta)		●	●	●	●	●
Glyphosate (Monsanto)		●	●	●	●	●
Cypermethrin (Syngenta)	●	●			●	●
Lambda-cyhalothrin (Dow AgroSciences, Syngenta)	●			●	●	●
Chlorpyrifos (Dow AgroSciences)	●	●				●
Thiamethoxam (Syngenta)	●					●
Metsulfuron-methyl (DuPont, Bayer)			●	●		
Butachlor (Monsanto)		●				●
Chlorantraniliprole (DuPont)	●			●		
Deltamethrin (Bayer)					●	●
Carbofuran (Bayer)				●	●	
Fipronil (BASF)		●		●		●

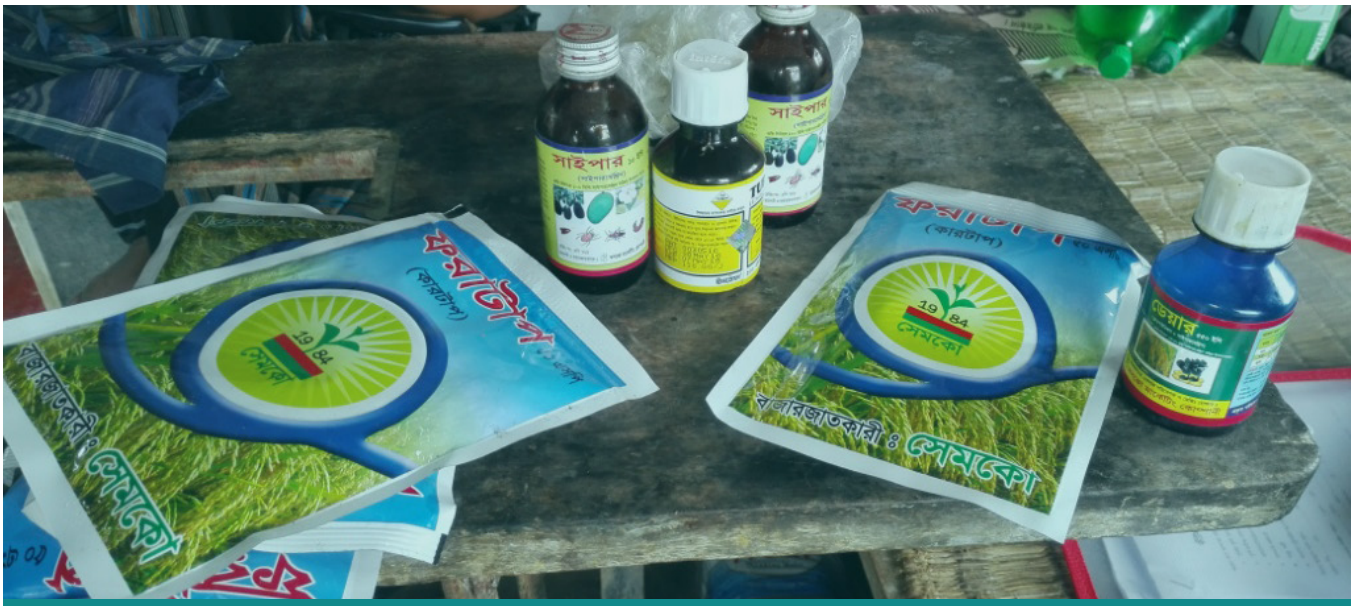
Other HHPs found in the participating countries were Diazinon in Bangladesh; Malathion, Ethoprop, and Benomyl in the Philippines; Imidacloprid and Abamectin in Vietnam; Quizalofop and 2,4-D in India; and Diuron, Fenitrothion, and Pymetrozine in Malaysia.

The study participants are constantly exposed to pesticides, with some applying pesticides daily. Farmers and plantation workers, including women and children, are exposed to pesticides while spraying, mixing, loading, decanting, purchasing or transporting pesticides. Household members are also exposed by washing equipment and clothes used for spraying or mixing pesticides; through contamination of soil and water sources; and through aerial pesticide drift.

HAZARDOUS CONDITIONS OF USE

The hazardous conditions of use of pesticides are similar in the six countries surveyed. The following are among the highlights of the studies:

BANGLADESH



Pesticides packets and containers are stored in a house in Tala subdistrict, Satkhira, Bangladesh. Photo by BARCIK.

Study area: Satkhira District

The study found that 24 percent of the respondents entered the fields on the same day they were sprayed; while 62 percent entered the sprayed fields the next day up to two days after spraying. A majority or 68 percent of respondents also did not spray with the wind direction.

More than half of the respondents did not wear Personal Protective Equipment (PPE). Ninety percent of respondents did not receive any training of pesticides use and handling. Unaware of the harm of direct contact with pesticides, some farmers even de-clog the pesticide applicator nozzle using their mouth.

Half of respondents kept pesticide containers in their homes. Pesticide spraying equipment are also stored and kept inside homes, along with other household goods and even food items.

More than half of the respondents revealed that they or their family member was suffering from at least one severe disease. The most common diseases were liver diseases, followed by diabetes, developmental disorders, learning disabilities, kidney diseases and cancer.

An empty pesticide pouch found in a cooking area of a residential house in Tala subdistrict, Satkhira, Bangladesh. Photo by BARCIK

INDONESIA

Study area: North Sumatra

Paraquat use in Indonesia. Women workers spray paraquat without PPE and they complain about health impacts. Identity of worker hidden to protect her from retribution from plantation management.

Women pesticide sprayers in oil palm plantations are required to spray seven to eight tanks to cover 1.5 hectares per day.

One plantation required their workers to purchase their own PPE. Since the workers are unable to afford it, all of them work without safety equipment. Instead, the women wrapped scarves around their faces to protect them from the strong fumes. In plantations that provided PPE, workers found the safety gear hot and uncomfortable to wear, making them miss their work target, such that majority chose not to wear it.

There were no adequate washing facilities in plantations. Women used the nearby river to wash their hands and shower after work. Clinics located inside the plantation also only carry medicines for headache. Workers are forced to seek medical attention outside the plantation at their own expense.

MALAYSIA

Study areas: Sabah and Selangor

Community members (left) and plantation workers (right) reuse herbicide containers for water collection. Photo by PACOS

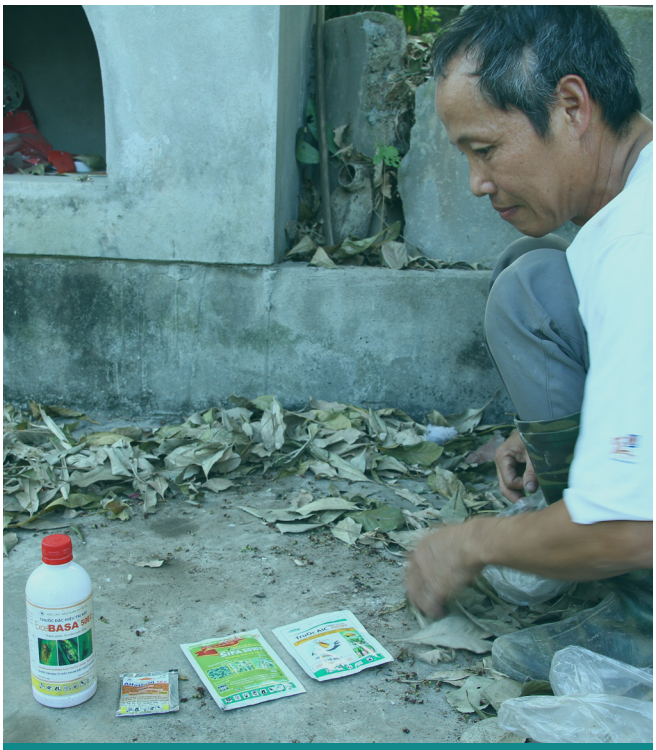
Pesticide containers are disposed of by throwing them into the rubbish bin, fields, and rivers; and by burying and burning. During the survey, empty pesticide bottles were found in open spaces. Farmers also reported reusing pesticide containers for other purposes, such as containers for toys and household items, seeds, and even as a diesel container and fishing net float.

River pollution because of contamination by pesticides used in palm oil plantations was observed. When there is no rain, villagers are forced to drink polluted water from the river, leading to illnesses. Aquatic life, a community food source, has been depleted. Wildlife has become rare and animals for livestock die easily. Villagers also cannot plant food because of the changed quality of the soil.

It was found that the ancestral lands of the villagers, all belonging to ethnic groups, were forcibly taken by palm oil plantation companies at least a decade ago.

VIETNAM

Study area: Nam Dinh and Dong Cham



A farmer in Dong Cham village, Dong Dat commune showing pesticides stored at his garden. Photo by SRD

Majority of the farmer participants in the study experienced accidental spillages while spraying pesticides, mostly as a result of defects in spraying equipment. Thirty-four percent were accidentally exposed due to spraying in the opposite direction of the wind.

Farmers washed pesticide spraying equipment and clothes used for applying pesticides in canals, irrigation culverts and wells near the fields, since tap water is not readily available in the village.

Almost all respondents exhibited symptoms of pesticide poisoning, including headache, itchiness, trembling hands, dizziness, nausea, excessive sweating, diarrhea, shortness of breath, vomiting, blurred vision, and even convulsions. Women proved to be more vulnerable. Women had headaches after pesticides exposure while just a small number of men reported this symptom; and women experienced excessive sweating three times more than men.

PHILIPPINES

Study area: Southern Mindanao

Workers in banana plantations were exposed to pesticides from four to eight hours a day. All households were exposed to pesticides through aerial drift, contamination of water systems, and storage of pesticides at home. Every household surveyed had at least one diseased member. The most common illnesses were hypertension, allergy and asthma, kidney disease, heart disease, and thyroid disease. In total, respondents and their household members suffered 73 types of illnesses.

Most vulnerable are the women and children. One woman sprayer had breast cysts and myoma, while another had vaginal itchiness she attributed to peeing on newly sprayed fields. Among wives of plantation workers, two had miscarriages while three had a stillborn child or a child that died shortly after birth. Another child became mentally handicapped at the age of three after exposure to aerial spray.

A banana plantation community in Davao del Sur were all exposed to aerial spraying. Photo by PAN Philippines

INDIA

Study areas: Tiruvallur District; Andhra Pradesh, Arunachal Pradesh, Assam, Madhya Pradesh, Telangana and West Bengal

Paraquat bought in plastic carry bag. Photo by PAN India

While the Central Insecticide Board and Registration Committee (CIBRC) of the Indian government has approved the use of paraquat in only nine crops, paraquat is being used in 25 crops. Also, while paraquat is only approved to be applied through spraying, farmers apply it through dispersion—or mixing paraquat with either sand, fertilisers or salt and dispersing the toxic mixture by hand.

Safety labels were not written in the local language, Bengali. Paraquat is also sold not in its original container, but without labels in refill containers, bottles and even plastic carry bags. Retailers were observed to be refilling and decanting paraquat containers without care—there would be leftover paraquat either smeared around the containers or spilled on the floor or table.

In floriculture plantations, children laborers aged 10 to 17 were exposed to pesticides. Children use their bare hands in plucking flowers that have been sprayed by pesticides, and also mix chemical powders used for preserving the whiteness of the flowers without gloves.

Pesticide spraying takes place very near the children's homes and school premises, which are within a radius of less than one kilometer from the fields. Most child laborers exhibit symptoms of poisoning and found to be malnutrient. They are also often absent in class.

Another study in 2017 interviewed 227 respondents from eleven districts across seven Sates, namely Andhra Pradesh, Jharkhand, Himachal Pradesh, Karnataka, Tamilnadu, Telangana, and West Bengal in India to focus on the use and impact of five highly hazardous pesticides, i.e.paraquat, glyphosate, fipronil, chlorpyrifos and atrazine. In addition, the study also reviewed the regulations and use of the five pesticides at National and State level. It was clear that 90% of the respondents did not use any protective equipment and those who indicated they did some kind protective measures used only handkerchiefs over face, long sleeved shirts and raincoats. A considerable percentage of respondents buy some of the pesticides without labels and information leaflets. Most of the farmers surveyed sprayed pesticides against the wind direction, often fell ill after spraying for the whole day, suffered pesticide spills when opening the lid of container, spills on hands while mixing, and spills on their bodies while loading the sprayer. The respondents suffered health effects from nausea to blurred vision and abdominal pain after spraying the pesticides. Exposure and poisoning to chlorpyrifos was reported by 10% of respondents while and after spraying for a considerable long time. Skin burn, blurred vision, nose irritation,

cough, abdominal pain, nausea and vomiting were the symptoms reported.

Escalating cases of death and poisoning were monitored in the districts of Yavatamal, Nagpur, Chandrapur, Amravati, Buldana, Bhaudana and Akola with Yavatamal has the highest number of poisoning cases at 450 and 23 cases of death as of October 2017. Small-scale farmers and laborers mostly coming from Adivasi communities working in cotton plantations were the most common victims. Sixteen agrochemical brands are making their way to the pesticides trade and use in the area – approved or not approved.

HUMAN RIGHTS VIOLATIONS AND ACCOUNTABILITY OF AGROCHEM TNCS

Agrochemical transnational corporations have a life cycle responsibility for its products; they are ultimately responsible for the adverse effects of their products wherever they are found. The effects of exposure and hazardous conditions of use of pesticides in surveyed farming and plantation communities in Bangladesh, India, Philippines, Vietnam, Malaysia, and Indonesia show that these companies violate the **right to life and health** of farmers, agricultural workers, and other villagers, including the elderly, women and children. Households in affected communities have been shown to suffer from various ailments linked to exposed to Highly Hazardous Pesticides (HHPs).

Despite knowledge of the hazards of their products and their hazardous conditions of use, especially in undeveloped countries, and despite bans and restrictions on some of their products, agrochemical TNCs, particularly the Big 6 (Syngenta, Bayer, Monsanto, Dow AgroSciences, BASF and DuPont) continue manufacturing and aggressively selling these products in countries with weak regulatory mechanisms. This is the reason why Glyphosate and Paraquat—HHPs whose toxicity to human and ecological life has been extensively documented—remain the most used pesticides in the six countries surveyed.

Agrochemical TNCs are also complicit with plantation companies in violating agricultural workers' **right to a safe working environment**. Workers employed in plantations as pesticide applicators or doing work that exposes them to pesticides are frequently not provided Personal Protective Equipment (PPE). PPE, even when provided by the plantation management, are neither sufficient, durable, or appropriate to the working conditions. Workers also have no access to washing facilities and are not provided regular medical care nor emergency treatment. The studies further show that accidental pesticide spillages are common in all countries surveyed. Yet, no adequate steps are taken to ensure that the right to a safe working environment and other labor rights—such as right to fair wages and benefits—are enjoyed by workers who are among the heaviest users of their products.

Agrochemical companies also violate affected communities' **right to access to information**. The studies show that product labels provided by the companies are not enough to ensure that its users are informed of its hazards and proper use, with text that are too small or unreadable, and written in language not understood by locals. The practice of decanting pesticides to smaller containers is found to be commonplace, such that many users do not even see the safety labels. Further, majority of farmers and plantation workers surveyed are not given safety trainings by either their employers, governments, and pesticide manufacturers. So hazardous practices—such as spraying against the wind direction, and immediately entering newly sprayed fields—are widespread.

The practice of using water systems e.g. rivers, brooks, and creeks, to bathe, wash and rinse pesticide spraying equipment and work clothes contaminates the environment. Aerial drift, as well as the improper storage and disposal of pesticide containers also violate communities' **right to a safe and healthy environment**.

Women's rights are violated, as the studies affirm that they are more vulnerable than men to the adverse effects of pesticides due to the higher amount of fatty tissue in their bodies. Their reproductive and sexual health and rights are violated. **Children's rights** are violated, with child laborers in plantations suffering the worst impact of

Child with acute respiratory disease in a banana plantation, South Cotabato. Photo by PAN Philippines

pesticide exposure. The right to education of these child laborers is also violated.

The **right to self-determination** of indigenous peoples are violated, as their ancestral lands are grabbed by plantation companies that force them to become exposed to hazardous pesticides. Other economic, social and cultural rights—such as the **right to food sovereignty** and **right to livelihood**—are violated by agrochemical TNCs, since chemical-intensive agriculture has harmed biodiversity, water, soils, and the over-all ecological balance, preventing farmers from planting other crops and depending on aquatic life and livestock or wildlife for livelihood or subsistence

HUMAN RIGHTS RESPONSIBILITY OF STATES

Overall, the States have a responsibility of preventing the pesticide poisonings and its impact on human health and the environment by banning or not allowing highly hazardous pesticides to be used.

The States included in this study are responsible for:

- Allowing the use of highly hazardous pesticides that pollute the environment and human health, particularly the health of farmers, workers and the communities surrounding the farms and plantations, as well as pesticides that require personal protective equipment.
- Not fully pursuing alternative and less hazardous forms of agricultural production particularly agroecology.
- Not recognizing the value of local and indigenous knowledge and social relationships they create and sustain
- Not honouring obligations arising from ILO Conventions and Recommendations, especially concerning unfair labour practices such as decent and safe conditions of work, and the right of association, movement, and freedom of speech and expression of the organized and unorganized labour and, further, not repudiating, in actual effect the obligations arising from the Child Rights Convention.

PAN Asia Pacific

For a just and pesticide-free future

PAN Asia Pacific (PANAP), one of the five regional centres of the Pesticide Action Network, is dedicated to the elimination of harm upon humans and the environment by pesticide use and the promotion of biodiversity-based ecological agriculture/ agroecology. PANAP works together with more than 100 partners to advance food sovereignty, gender justice and environmental sustainability.

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