Project Details

Project Title
Measuring agrochemical burden in the body and analysing implications for regulating public health

Project Summary
There has been a growing concern with regard to the pervasiveness of agrochemicals in our bodies and the serious risks they may pose to public health. However, there is hardly any systematic data available in India regarding the body burden of agrochemicals in ordinary people, be it the scale, nature, source or the consequences of such exposure. Therefore, the relationship between the body burden from agrochemicals and its health effects in the population requires further systematic study. There is also hardly any systematic data available in India regarding the implications of such persistent exposure to public health concerns.

The proposed project would be part of a larger study geared towards filling the aforementioned gap. The selected scholar will collect biological samples from selected populations for analysis of agrochemical residues along with conducting the laboratory analysis of the said samples and producing residue reports. These reports will be evaluated against existing regulatory data regarding disproportionate / excess exposure to determine the extent of risk / hazard that selected populations have been subjected to. Further, the reports will also be used to shed light on the (in)adequacy of the regulatory structure itself and on the nature of regulatory evidence in judicial bodies. This project is both geared towards producing a scientific study, and further in studying how scientific evidence comes to be deployed as regulatory evidence, inform governance structures, and in creating an informed public.

Ph.D. Supervisors

<table>
<thead>
<tr>
<th>Role</th>
<th>Faculty</th>
<th>Academic Unit in IITD/Institute/University</th>
<th>Email ID (Official)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor 1</td>
<td>Zia Shaikh</td>
<td>DBEB</td>
<td><a href="mailto:zia@dbeb.iitd.ac.in">zia@dbeb.iitd.ac.in</a></td>
</tr>
<tr>
<td>Supervisor 2</td>
<td>Naveen Thayyil</td>
<td>HUSS</td>
<td><a href="mailto:nthayyil@hss.iitd.ac.in">nthayyil@hss.iitd.ac.in</a></td>
</tr>
</tbody>
</table>

Project requirements (Student qualifications, experience required, etc)

- Masters degree in natural sciences including environmental science, environmental engineering, biotechnology, public health, community medicine or allied field.
- Experience in collecting biological samples from the field and conducting laboratory analysis is desirable.
- Experience in working on scientific regulation or technology governance is desirable.
Source of fellowship/funding
(CSIR/UGC/DBT/ICMR/ICAR/NEET-PG/DST-INSPIRE/IRD/FITT Project details, if any)

CSIR/UGC/DBT/ICMR/ICAR/NEET-PG/DST-INSPIRE/JRF/ any other fellowship

Role of Faculty Members involved:

Dr. Zia Shaikh will supervise the data collection of biological material from the field site and the laboratory analysis of the material. Dr. Naveen Thayyil will train the student in understanding the broader public health and regulatory implications of the findings and presenting them for contributing towards refining regulatory and public health frameworks.