

## Guidelines for potential environmental and social risk from laboratory and field experiments\*

### Environmental

Activities	Issues	Mitigation Measures
Laboratory research involving Research on Genetically engineered organisms, Genetic transformation of plants & animals, Transgenic crops, Hybrid crops and animals etc., Transfer of genetically engineered material	<ul style="list-style-type: none"> <li>• Release of uncontrolled genetically modified organisms</li> <li>• Biotechnology wastes/Bio wastes</li> <li>• Bio Hazard</li> <li>• Health issues</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance of Bio safety Rules and Guidelines.</li> <li>• Provision of appropriate containment facilities to ensure any uncontrolled release in the environment</li> <li>• Bio hazard wastes shall be properly treated (may incinerated) and destroyed before its disposal</li> <li>• Follow Good Laboratory Practice given under Guidelines for Bio safety</li> <li>• Develop voluntary code of practices for research and development in laboratories based on experiences and best practices in the world.</li> </ul>
Field research On – Farm research on crops Research on livestock	<ul style="list-style-type: none"> <li>• Biodiversity.</li> <li>• Uncontrolled Release</li> <li>• Bio hazard wastes.</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance of Bio safety Rules and Guidelines for on-farm research activities.</li> <li>• Destroy all the crop residue of on-farm research by proper burning in the field and to ensure that nothing is left.</li> <li>• Follow Glasshouse (on field) Containment Conditions for plant experiments guidelines</li> <li>• Develop voluntary code of practices for research and development on farm based on experiences and best practices in the world.</li> </ul>

### Social

Activities	Issues	Mitigation Measures
On-farm controlled research	Spillage from controlled sites to other neighboring areas	<ul style="list-style-type: none"> <li>• Develop code of practice for research and development on farms.</li> <li>• Open communication channels with the community to inform them about the project activity and seeking their participation, where required.</li> <li>• The community/farmers should be told about all risks before undertaking on-farm research activities</li> <li>• Ensure that selective farms are not near bio-diversity hot spots so that people are able to conserve natural varieties (including wild varieties) of crops.</li> </ul>

For details please refer to Environment and Social Assessment and Environment and Social Management Framework for the National Agricultural Innovation Project, Volume I: Environment, Volume I: Social, November 2005(available on website: [www.naip.icar.org.in](http://www.naip.icar.org.in))