

A framework based on ethical principles for innovation not involving human participants or their data

1. Clearly **identify the problem** you are seeking to address, and what benefit you expect the innovation to have.

2. Ensure that the innovation shows **respect for human dignity**. This is a broad concept. The focus of concern must be a respect for human beings. It is a broad concept but involves showing due respect for the multiple and overlapping interests of those affected by any innovation. It extends beyond a concern for physical wellbeing to include psychological and cultural integrity. It also incorporates a concern for individual privacy and a respect for the confidentiality of people's data.

3. **Involve the end user** from the start of the process. Innovation should be driven by the requirements of the user. The innovation cycle should be participatory, using methods to involve relevant individuals and communities. Innovators must be sensitive to power dynamics between and within cultures and power imbalances between aid workers and beneficiaries.

4. **Identify and balance benefits and harms**. When considering innovations, a critical first step is the identification, as far as is reasonably possible, of potential harms along with the anticipated benefits. The next step involves weighing and balancing these harms and benefits.
 - a. Where reasonably foreseeable harms outweigh the likely benefits, implementation will not be ethical. Potential harms include, but must not be restricted to, physical and psychological harms to individuals. There is also need to consider potential harm to communities. In addition the concept of 'wrongs' should be considered. An example of a wrong is commercial exploitation, when commercial benefits arising from an innovation are not shared with the community.
 - b. Where innovation involves a favourable balance of benefits and harms, all reasonable steps must be taken to minimise (mitigate) the harms as far as possible. Unnecessary harms must be eliminated. Where harms are unavoidable, those affected should be informed of the nature and severity of the risks involved.

- c. Conflicted partnerships or conflicts of interest may result in reputational harm to the organisation. If these are identified then oversight by an existing Ethics Review Board is recommended.

5. **Consider the distribution of harms and benefits.** Innovators need to give careful consideration to the distribution of benefits and harms associated with their projects. Do the risks or benefits fall unfavourably on certain groups? If so, is it appropriate to proceed, and how can these inequalities of distribution be addressed or mitigated? Equally, it is important that the innovation takes into account vulnerable groups; it may be ethically warranted to give particular attention to those who have particular needs. Just as we tend to give more health care to the unwell, so particular attention may need to be given to those who are vulnerable or who may not be able to protect their own interests. This is essentially the humanitarian principle of impartiality.
6. Establish what information is required for subsequent decisions to implement or scale-up the innovation, and design the **evaluation plan** accordingly. Innovation requires an acceptance of the risk of failure – not all innovation projects will achieve their desired outcome. But in all cases, we can learn and apply these lessons in the future. Given the time, energy, and resources that these projects require, rigorous evaluation and sharing of lessons is itself a moral obligation. Therefore, consideration should be given to dissemination of findings, since it may be important to avoid further exposure to potential harm by sharing findings, whether these are positive or negative. Likewise there should be a willingness and strategy for wider implementation of the innovation if found to be successful, and a **commitment to ensure beneficiaries - at least in the communities where it was tested and ideally in similar communities affected by humanitarian crises - have access to the innovation** subsequently.