

# BANDA UNIVERSITY OF AGRICULTURE & TECHNOLOGY, BANDA (U.P.) 210 001

# ETHICS in RESEARCH

# **Ethical Guidelines**

Ethics—the moral philosophy, is a branch of philosophy that involves organizing, defending, and recommending concepts of right and wrong conduct. As a branch of philosophy, ethics investigates the questions "What is the best way for people to live?" and "What actions are right or wrong in particular circumstances?" In practice, ethics seeks to resolve questions of human morality, by defining concepts such as good and evil, right and wrong, virtue and vice, justice and crime. As a field of intellectual enquiry, moral philosophy also is related to the fields of moral psychology, descriptive ethics, and value theory.

Scientific research involves the cooperation and coordination of different people to achieve goals that have impact on society and are essential for overall development in all areas. Research requires experimentation, data analysis, writing research papers and grant proposals and educating future scientists. Thus, it is essential that research is carried out in ways that are ethically correct. Guidelines for research ethics are laid in such a way that concerns of research institutions and individuals are simultaneously addressed. Also, it is important to adhere to these ethical guidelines in order to preserve the dignity,

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rights and welfare of researchers and research participants. Based on area of research and subjects involved, guidelines for carrying research has been defined by various agencies.

#### Ethical Issues in Scientific Research

Research ethics involves the application of fundamental ethical principles to a variety of topics involving research, including scientific research. These include the design and implementation of research involving human experimentation, animal experimentation, various aspects of academic scandal, including scientific misconduct (such as fraud, fabrication of data and plagiarism), whistle blowing; regulation of research, etc. It is the researcher's ethical responsibility to not harm the humans they are studying; they also have a responsibility to science, and the public, as well as to future students.

Research ethics is most developed as a concept in medical research. The key agreement here is the 1964 Declaration of Helsinki. The Nuremberg Code is a former agreement, but with many still important notes. Research in the social sciences presents a different set of issues than those in medical research. The academic research enterprise is built on a foundation of trust. Researchers trust that the results reported by others are sound. Society trusts that the results of research reflect an honest attempt by scientists and other researchers to describe the world accurately and without bias. But this trust will endure only if the scientific community devotes itself to exemplifying and transmitting the values associated with ethical research conduct.

There are many ethical issues to be taken into serious consideration for research. Sociologists need to be aware of having the responsibility to secure the actual permission and interests of all those involved in the study. They should not misuse any of the information discovered, and there should be a certain moral responsibility maintained towards the participants. There is a duty to protect the rights of people in the study as well as their privacy and sensitivity. The confidentiality of those involved in the observation must be carried out, keeping their anonymity and privacy secure. All of these ethics must be honoured unless there are other overriding reasons to do so - for example, any illegal or terrorist activity.

# **Need for Ethics policy**

For promoting quality research in search of knowledge, technology, methodology, variety, genotypes etc. It is equally important that prohibitions against artificially constructing, fabricating, misrepresentation of research data and curbing the practice of plagiarism will ensure quality research.

#### **Objectives**

- (i) To encourage researchers to adhere to best practice relating to the ethical development, implementation and dissemination of research.
- (ii) To protect the integrity and reputation of the Royal Agricultural University.
- (iii) To protect the rights of participants.
- (iv) To protect the rights of fellow researchers.
- (v) To promote sustainability, enhance biodiversity and optimise energy usage in an environment of finite natural resources.

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# **Principles of Ethical Research**

The directorate of research of BUAT Banda will adopt the following principles in ethical research:

**Transparency**: The research must be as open as possible with respect to the decisions made and provide justifications for their actions.

Honesty: The researcher must possess unbiased and honest attitude in all kind of research.

**Confidentiality:** the researchers must respect the privacy, autonomy, diversity, values and dignity of research area and must be very sensitive while disclosing the information and data of public interest by ensuring the privacy and confidentiality of the source of information.

**Integrity**: Adopting a high level of academic moral character and intellectual honesty as well as assuming personal responsibility for the actions committed by the researchers.

**Objectivity:** Consciously upholding the values of being independent and true and avoiding individual subjectivity.

Based on area of research and subjects involved, guidelines for carrying research has been defined by various agencies. These guidelines are available on WEBSITE of various government agencies. All the Ethical Guidelines in Research to be followed by researchers at Banda University of Agriculture and Technology, Banda are expected to follow the Ethics of research as described in the guidelines. Directorate of Research BUAT Banda will ensure that the ethics guidelines mandated by the funding agencies are followed. Some of the guidelines are

# 1. Biomedical Research on Human Participants

The Nuremberg Code formulated in 1947, was the first international statement on ethics of medical research using human subjects. Over the years, various international and national advisory bodies have revised and laid down principles for scientific research involving human beings. Clinical research is required for better understanding of science and developing drugs, vaccines, diagnostics, instruments and materials which can enhance quality of human health. However, it is important to give credit to individuals who volunteer to participate in biomedical research. To protect the interest of participants in biomedical research, ethical guidelines are established. In India, Council of Medical Research (ICMR), Govt. of India, sets ethical guidelines involving biomedical research human participants. Research human subjects follows the principles of essentiality of the research, voluntariness, informed consent, non-exploitation, confidentiality, accountability and transparency.

# 2. Working with Laboratory Animals

In India, the Committee for the Purpose of Control and Supervision on Experiments on Animals (CPCSEA), has laid down guidelines to assure quality maintenance and human care of laboratory animals while conducting scientific experiments. These guidelines also set rules for proper procurement, quarantine and rearing of laboratory animals. University of will form an Animal Ethics Committee as per need, which will examine and approve all the proposals of research involving small experimentation animals.

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# 3. Working with Chemicals

The Bureau of Indian Standards, Govt. of India, recommends a code of safety for all chemical laboratories in India. It involves guidelines for recognizing potential chemical hazards and employing corrective actions in order to expeditiously minimize accidents. Every researcher at Banda University of Agriculture and Technology, Banda is expected to follow the guidelines especially with the hazardous chemicals.

# 4. Radiation Safety

These guidelines set by the Department of Atomic Energy, Govt. of India, apply to practices adopted and interventions applied while working with radiation sources in Indian laboratories. They ensure that the ionizing radiation and nuclear energy does not cause any risk to the health of researcher and the environment. Close monitoring by institutional radiation safety committee helps in ensuring compliance to these guidelines so that the exposure to all sources of ionizing radiation should be 'as low as reasonably achievable.

# 5. Recombinant DNA Technology and Bio-contaminants

Recombinant DNA technology is the most popular method of introducing gene or related material in microorganism, plants and animals. Department of Biotechnology has given guidelines for research work in this area.

# 6. Environment safety

Researchers should identify and follow established codes of best environmental practice. Wherever possible and practicable, researchers should minimise the use and waste of energy, reducing emissions and recycling materials.

The protection, restoration and enhancement of biodiversity in all terrestrial and aquatic habitats should be encouraged by reducing pollution.

Researchers with an interest in agriculture need to protect and conserve natural resources for future generations in a sustainable fashion.

Researchers have a duty to raise the environmental awareness of others, by training and education, especially in relation to the environmental impact of their own research.

Where appropriate, researchers should develop, with their supervisory team, a set of environmental standards that can be regularly monitored and reviewed in relation to their research.

# 7. Respect for the Person

Respect must be shown for all those participating in the research process, whether actively or passively. The University's commitment to inclusivity, equality and diversity must be reflected in a non-discriminatory approach to participants in the research process. Respect for the person does not depend on gender, age, race, religion, sexuality or any other distinguishing feature.

# 8. Respect for the Integrity of Knowledge

Due credit should be given to the contribution made by all of the researchers involved. Authorship should be credited to those who have had a applicable input into the research

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output in question, with the appropriate relative weighting being accorded to authors in terms of the order of authorship, irrespective of professional position or seniority. Researchers should be careful not to engage in research which they know to be beyond their competence. They should have the ability to use the appropriate methodological tools required for the research in question.

#### **Ethics Committee**

Dr Sweta Soni	Dr Sunil kumar
Dr Dinesh Sah	

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