

**Kingdom of Cambodia**

**Nation Religion King**

# **Research Ethics**

**National Council of Science, Technology & Innovation**

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# Content

## Acknowledgments

1. Statement
2. Vision
3. Purpose
4. Principle
  - 4.1. Researcher
    - 4.1.1. Honesty
    - 4.1.2. Accountability
    - 4.1.3. Professional Courtesy
    - 4.1.4. Goodwill
  - 4.2. Research Institute
    - 4.2.1. Responding to Irresponsibility
    - 4.2.2. Research Environment
    - 4.2.3. Social Responsibility
  - 4.3. Environment

# Acknowledgments

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## 1. STATEMENT

To be in firm compliance with “**Research Ethics**” is a value of a noble person and means much more than etiquette, morality, virtue, and the provision of law itself. This code provides regular reminders which serve as a set of standards, values, and organizational structures contributing to the creation and regulation of research activities, including obligation to research integrity and responsibilities to colleagues, other people, animals, environment, and society for activities and results of the research. Values and benefits of conducting research focus on integrity. Integrity is a value of greatness and advancement of humanity. Therefore, “**Research Ethics**” is the foundation of research to ensure the birth of knowledge and innovation in all sectors.

The requirement of ethics for researchers and research institutions has become a new trend to which countries around the world have paid great attention in the last decades due to research being conducted in all sectors, including the private and public sectors. New knowledge is created and rapidly emerging in the form of technologies and methods. However, the industrial revolution has been questioned for its devastating impacts on humanity and the environment. Other technologies for industry 4.0, in fact, may be questioned for even further consideration of research ethics. Other factors such as legal standards, traditions, intellectual property, human rights, privacy, safety, data, sustainability, social stability, and the rapid evolution of technology have been leading towards setting clear and specific norms for individuals and legal entities that conduct research. The Kingdom of Cambodia is not different from other countries in the world as it also needs to prepare appropriate research ethics. This research ethics is not only a compass for conducting research but also a concept for the government, private sector, and development partners to participate in the promotion of research in line with the national interests and security with responsibility, honesty, integrity, and accountability.

The evolution of research as a correspondence to human needs has brought attention to the challenges and negative effects of research findings and publications. Other activities of research that can result in negative consequences to the society include misinterpretation of data, manipulation of data or images, violation of privacy, violation of human and animal rights, infringement of intellectual property rights, etc. All these factors might be even worse rapidly when a wide variety of media outlets nowadays disseminate misinformation about research, whether intentionally or unintentionally to serve a specific purpose.

Generally, being in firm compliance with research ethics not only cultivates a culture of integrity but also builds a good cooperation and trust which are the foundations of research knowledge building for serving humanity. Properly complying with research ethics is an esteemed attitude seemingly indispensable in the context of globalization. This will bring great benefits to the socio-economic development through the application of new knowledge gained from research. Therefore, the principles and professional responsibilities for research shall be laid out as a basis of integrity to ensure a generally acceptable research standard.

Seeing the challenges, opportunities, and importance of ethical research, preparing and creating a common standard for research in the Kingdom of Cambodia is an immensely important task to ensure the national best practice with a high level of knowledge and responsibility. This will further assist the research community in the country to avoid any mistakes in their research process and

management. Particularly, researchers must adhere to their own codes of ethics to obtain quality information and data and maintain the value of their research.

## **2. VISION**

Conducting research with high professional ethics of knowledge creation on the basis of research community development, the national interests and security for the progress of socio-economic welfare.

## **3. PURPOSE**

This research ethics has been developed to motivate researchers and research institutions to perform their duties with high ethical standards ensuring the value of research. The main objectives of the research ethics are:

- To promote good manners and morals in the community and society
- To promote the mindset of valuing the common interests of society
- To promote and support inclusive research development
- To cultivate a culture of caring for research.

## **4. PRINCIPLE**

In principle, an ethical research requires a high consideration of individual researchers, research institutions, and other impacts on the environment. All research works that directly involve humans, animals, biodiversity and / or data collection that affects social security, interests, and prestige require prior consent from relevant authorities.

### **4.1 RESEARCHER**

Researchers should adhere in principle to four basic principles: honesty, accountability, professional courtesy, and goodwill, based on openness, regular capacity building, and high professionalism. Researchers need to be highly confident, cautious, and responsible for any knowledge and negative activities involved in their research. Moreover, researchers are strictly prohibited from copying other people's work as their own and falsifying research results. In addition to adhering to the country's legal instruments and organizational mechanisms, researchers must also respect the morals, traditions, and customs of places where they visit or conduct interviews.

#### **4.1.1 Honesty**

Honesty is a must for all researchers. Researchers must take responsibility for and be honest with their research. Researchers must strictly abide by research regulations and other policies related to research. Researchers must make judgments and conclusions on their research based on data collected and results of technical analysis derived from scientific methods that are basically recognized by their research community.



#### **4.1.2 Accountability**

Accountability must be present in conducting research. Researchers must keep accurate data, record facts and specifics of the entire research process, enabling other researchers to review, verify, reference, and evaluate the research work. Researchers must share research results on time openly and data which do not affect socio-economic security to expand knowledge in the community as well as to maintain priority rights and assertion of ownership of the knowledge that they have created.

Researchers need to respond in a highly professional manner when communicating with the public; for example, during conferences, seminars, and other scientific events, by clearly differentiating between professional research advice on research and personal opinions. In addition, researchers must adhere to other necessary reporting requirements regarding research results and expenses.

#### **4.1.3 Professional Courtesy**

Researchers must use the right research methods based on clear scientific standards, with references as the basis for their research methods. Conclusions must be based on an in-depth, evidence-based analysis, and results shall be reported in a comprehensive manner in accordance with the objectives set. Researchers need to properly and clearly keep the original copies during their research as arguments for verification and for imitation of the research by other researchers.

Researchers are responsible for various contributions to their research, including collaboration and/or cooperation, publication, intellectual property, budget request submission, as well as result reporting and sharing in different formats. All research must comply with ethical obligations, clearly weighing the social benefits and potential risks in their research.

The list of authors should include those who have participated in the research activity. The order of the authors should be based on the level of involvement of each author in knowledge creation. In principle, authors refer to those who contribute to knowledge creation through research. The acknowledgement section of the research publication must highlight the names and roles of individuals or entities that have made real contributions to the research such as assistants, funders, sponsors, or others who do not meet the author criteria.

Researchers must ensure a fair, timely, and thorough analysis and confidentiality during the reviewing process by co-reviewers. If necessary, researchers must present financial and other conflicts of interest to ensure general credibility of research projects, publications, and other public relations, as well as matters related to reviewing done by co-reviewers.

#### **4.1.4 Goodwill**

Researchers' goodwill is a fundamental value that helps maintain public trust in research. Researchers shall report to relevant authorities for any irresponsible research activities. These activities are suspicious research misconducts which include fabrication, forgery or plagiarism,

and other irresponsible research practices such as negligence, incorrect naming order of authors, failure to report inconsistent data, or incorrect analysis methods.

## **4.2 RESEARCH INSTITUTIONS**

Research institutions refer to legal entities that have a role and / or contribution to the creation of new knowledge for the research community. An appropriate environment and legal support for researchers must be established at the institutional level. Research institutionalizations are indispensable for the ethical creation of knowledge in line with social interest and national security.

### **4.2.1 Responding to irresponsibility**

Research institutions, including journal publication institutes, professional organizations, and research agencies, must have procedures and mechanisms in place to prosecute research misconducts and irresponsible research practices and provide solutions. In addition, the institutions must have procedures and mechanisms within the institutions to protect individuals who report with the intention to correct these unfavorable actions. The measures shall determine an appropriate response, including a timely correction of research records when research misconducts and irresponsible research practices are detected.

### **4.2.2 Research Environment**

In principle, promoting and creating a favorable environment by institution is a core factor towards achieving a research with integrity. Research institutions must create and maintain a favorable environment to endorse the value of integrity through educating and training researchers, specific policies, and various reasonable standards aiming at promoting advancement.

### **4.2.3 Social Responsibility**

Research institutions must respect and promote ethical obligations by clearly weighing the social benefits and unforeseeable risks under their research authority.

## **4.3 ENVIRONMENT**

Research must place a careful consideration on the impact on the overall environment of society. In principle, researchers or research institutions must carefully consider their research activities as well as results and various negative impacts on the sustainability of the natural environment, including humans, animals and plants, etc., in addition to the whole human society. For example, human-related research must ensure dignity, confidentiality, privacy, rights, security, well-being, and prior consent of individuals selected to be sampled and / or interviewed, etc. at max. Moreover, research that involves different archeological excavations must pay close attention to historical and human values.

*These Research Ethics have been adopted on 12 January 2022 by the National Council of Science, Technology & Innovation presided over by His Excellency Kitti Settha Pandita Cham Prasidh, Senior Minister and Minister of Industry, Science, Technology & Innovation, as Chairman of the National Council of Science, Technology & Innovation.*