

UNIVERSITI TEKNOLOGI MARA

**BIOETHICAL ISSUES RELATING
TO FARMERS' RIGHTS
ARISING FROM
GENETICALLY MODIFIED
CROPS IN MALAYSIA**

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AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is a result of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

Concerns on genetically modified (GM) crops focused on intrinsic ethical concerns on whether it should be permissible to intervene in the natural process and also concerns on the principle of playing God and changing the creations of God. Later, bioethical debate on GM crops focused on extrinsic bioethics inclusive of exploiting the potential benefits of this technology and corporate-dominated seed sector. For the purpose of this thesis, the discussion focuses on bioethical issues relating to farmers' rights arising from GM crops. Bioethical issues on farmers' rights include the struggle of the farmers to balance GM crops' benefits and demands, with conventional livelihood viability, and seek to preserve their autonomy. Bioethical issues to farmers' rights also concern the right of farmers who have little control over contractual decisions leading to unfair justice. Previous research in Malaysia has not addressed these issues. This research is pertinent because it would provide the investigation of the existing biosafety regulatory measures in protecting farmers' rights arising from GM crops and to revise any gaps in the regulatory measures. This thesis examines the bioethical issues relating to farmers' rights in the biosafety regulatory measures of GM crops; the comprehensiveness of the biosafety regulatory measures in protecting bioethical issues affecting farmers' rights in Malaysia arising in GM crops as compared to other countries such as India and Australia, focusing on the farmers' rights to livelihood; and farmers' rights to contractual obligations; and suggests the biosafety regulatory measures to address the protection of bioethical issues pertaining to farmers' rights arising from GM crops. In this research, doctrinal and empirical methods have been combined. While the doctrinal method is a research of legal proposition by way of analysing the existing statutory provision along with the present case laws to find out gap, the empirical research employs methods through semi-structured interviews to generate empirical data that answers research questions. The research found that the protection of bioethical issues relating to farmers' rights arising from GM crops is significant to be addressed in the biosafety regulatory measures to ensure their rights as one of the stakeholders in this technology are protected against the rapid revolutionary scientific assessment of this technology. The research also found that the current biosafety regulatory measures, which conforms to the Precautionary Principle as the guiding principle, are incomprehensive to address bioethical issues relating to farmers' rights arising from GM crops; hence, protection needs to be strengthened through the ethical approach, namely Principlism to further enhance the comprehensiveness of the Precautionary Principle. Finally, the recommendations proposed based on experiences from differences in jurisdictions and empirical data method to further enhance the comprehensiveness of the biosafety regulatory measures in protecting bioethical issues relating to farmers' rights. This study will not only contribute to the understanding of the relevant laws surrounding the bioethical issues relating to farmers' rights on GM crops based on the current Precautionary Principle approach but also, to propose a better approach, which is Principlism to further enhance the existing Precautionary Principle and therefore regulating this area for the betterment of farmers' rights.

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CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

This chapter provides the structure of this research, outlining the main aspects of the research covering the background scenario and the problems being studied in bioethical issues arising from genetically modified (hereinafter “GM”) crops affecting farmers’ rights. Firstly, the research background explains the development of GM crops in the agricultural industry, which is part of the advancement in modern biotechnology,¹ the potential risks of this technology that has raised bioethical issues affecting farmers’ rights, as well as the case laws that establish those bioethical issues relating to farmers’ rights arising from this technology. A brief explanation on the regulatory measures on GM crops pertaining to the integration of these bioethical concerns in Malaysia, and other jurisdictions as well as in the international agreements is also presented.

Secondly, the central arguments or problems of this research are stated, followed by thirdly, the research questions which explains the subject matter of the study. Fourthly, the chapter presents the research objectives of the study.

Fifthly, the chapter illustrates the methodology undertaken to address the research questions and meet the research objectives in the study. This part elaborates the methodological aspects with regard to both the primary and the secondary data engaged in this research.

The scope and limitations are then discussed in the sixth and seventh parts of the chapter, respectively. Whilst the former describes the boundaries underpinning the entire research, the latter explains the constraints faced in carrying out this research. Finally, this chapter also incorporates the outline of the research structure by summarising the respective chapters of this thesis.

¹ Biotechnology is a technology that uses living organisms to make new product to obtain the best result. See Shmaefsky, B.R.(2006). *Biotechnology 101*. Greenwood Publishing Group, Westport Connecticut, London. Pg 1-6.