

"BREADING" BETWEEN THE MINISTRIES AND  
BIOTECHNOLOGY: FROM PROVISIONMENT TO  
DIVERSIFIED FOOD INDUSTRIES

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## **"BREADING" BETWEEN THE MINISTRIES AND BIOTECHNOLOGY: FROM PROVISIONMENT TO DIVERSIFIED FOOD INDUSTRIES**

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**Selected key issues of your topic:** In this paper it tries to link some implications, such as food & nutrition for better life, between the missionaries and modern biotechnology with the development experience from Taiwan. As the largest Protestant denomination in the country, the Presbyterian Church has maintained a strong sense of health services and spiritual "bread". On the other hand, agriculture comprises about 2.69% of Taiwan's GDP. Missionary "breeding" has continued spreading, and the food systems including its industrialization have continued being ongoing. Some local institutional documents as well as international trends were reviewed and discussed in this study.

**Objectives / Projects:** Nutrition is an input to and foundation for health and development. Such as the recent case of malnutrition, a widespread problem among children under five in the Horn of Africa countries. Malnutrition is not just only related to a lack of food. It's also related to access to health care. World Vision is an international Christian relief and development organization. Its founder Dr. Pierce helped a little girl so that she got her food and basic needs. World Vision's case expressed that provisionment is just a proper service for not only health reasons but the gospel mission. However, people have faith or not need to find some ways to survive wherever they live. A tropical case is typical. Bananas and plantains constitute a major staple food crop for millions of people in developing countries. In most tropical countries green & unripe bananas used for cooking represent the main cultivars. Nutritionally one green cooking banana has about the same nutritional and calorie content as one potato. People had learned how to find their own "bread" and utilize what kind of skills they have for the possible better life they thought for a long time. Now the food systems are improved and industrialized globally by using biotechnology without government boundaries. Taiwan with its high-tech equipment had no longer kept the traditional agriculture rules but built itself as well as some relate countries to improve food systems more effectively. Provisionment is now being linked to the food industry locally and internationally in many developing and developed countries.

**Results / Meeting challenges:** It's somehow meaningful to recheck the development implications and humanitarian aids through those "breeding" models above. For generations, white bread was considered the preferred bread of the rich while the poor ate dark bread. However, the connotations reversed in the 20th century with dark bread becoming preferred as having superior nutritional. The global society is changing rapidly. What's interesting is the people of the developed world began eating the "poor" dark bread

because of health reasons while people in developing countries ate the white bread supplied from the western missionaries. Furthermore, applying modern biotechnology techniques is becoming essential. In Taiwan, provisionment had not been an issue for a long time. Biotechnology has been widely applied on the food industries for product innovation. Several related industries had been achieved, such as plant and marine seed technology, biological pesticide and fertilizer, and aquaculture biotechnology. The industrialization of Taiwan's agricultural biotechnology is facing the problems of multifunctional agriculture as well as the issue of diversification, and how to enrich the industrialized food system with multiple biotechnology items. The issue of provisionment is resettable.

**Conclusion and Recommendations:** There seemed to be some linkages to rethink for further studies between the ministries & humanitarian model and the biotechnology trend by "breeding" the missionary provisionment services and the industrialized food systems. It totally could be a historical process, a national policy vision, a international cooperation way, and surely a current development issue being transformed because of health reasons and concerns.