# Agro-food Innovation in Thailand: An Investigation of The Current Practices, Challenges and Opportunities

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### Abstract

The current challenge to meet consumer demands to increase food production and maintain food security is becoming more complex due to climate change, land degradation, and the conversion of forests. The limited capacity of smallholder farmers as food producers is the suspicion of a shift in R&D priorities from agriculture to industry in Southeast Asia and other developing countries, followed by a widening gap in the absorption capacity of R&D. This path leads to severe threats to food security in most developing countries. **Sustainable agriculture** cannot be achieved only by **consistent adherence to ecological principles**. Agriculture should aim to provide economic benefits and incentivize farmers to stay in their current roles as critical actors in food production and innovation process.

Thailand Board of Investment (BOI) attempted to support Thai and international investors and encourage them to invest in research and development in food industry. The government expected that Agro-food industry will generate 7% of GDP focusing on research and development and productivity improvement.

This study aims to examine the current practices of agro-food innovations in Thailand, for developing new business models by addressing the challenges and exploiting the opportunities. Eight business experts and practitioners have been interviewed as the first step qualitative research to develop some understandings on the complexity of the current practices. The current practices in the Thailand agro-food industry have been examined from an innovation perspective, covering Initiation, Collaboration, Local Customization, Product Innovation, Process Innovation, Position Innovation, and Paradigm Innovation. The thematic analysis indicates that Thailand's agriculture and food industries are dynamic and diverse, with opportunities for new products to target five distinctive food categories, namely mass market, premium, health and beauty, niche, and low cost.

The emerging Information Technologies and the varied consumer demands have created opportunities for product innovation, echoed by investment capital and the emerging technologies with new start-ups in the food industry. For instance, the consumers have displayed their shifting trends in favor of time-saving, plant-based, and nutrition rich agro-food products. However, the challenging issues remain in realizing the full potentials of the agro-food innovation in Thailand, which include but not limited to financial and quality infrastructural availabilities, cultural diversity and regulatory constrains, which consequently create considerable challenges for the collaborations between different businesses to developing new products. The challenges must be addressed for collaborations between the engaged parties which is imperative for agro-foods innovation.

### Keywords

Agro-food, innovation, partnership collaboration

### **Biographies**

**Miss Naphatr Sathapornpong** is a motivated and accomplished individual pursuing a postgraduate degree in MSc International Management at the University of The West of England, Bristol, UK. She has excelled in the program and achieved a Merit distinction, demonstrating a solid academic foundation and commitment research excellence. Before postgraduate studies, Naphatr completed her undergraduate studies in Product Development at the Agro-industry Faculty of Kasetsart University in Bangkok, Thailand. This educational background provided her with a solid understanding of product development processes and a comprehensive knowledge of the agro-industry sector.

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**Dr. Buddhi Pathak** is a Senior Lecturer in Digital Innovation Management at Bristol Business School at the University of the West of England, Bristol, UK. He has taught Strategic management and Digital Innovation for over eight years at the undergraduate, postgraduate and doctoral levels at various UK universities. Prior to the current appointment, he worked at the University of Warwick, the University of Reading, and the University of Northampton. Buddhi has completed his doctorate and master's from Henley Business School at the University of Reading and his undergraduate from the University of Wales. He is a fellow of the higher education academy, UK. Buddhi's research focuses on the role of digital technologies in creating value in organisations, the rise of digital firms, its impact on the existing innovation ecosystems and policymaking in developing country contexts, people's perception of the impact of mass adoption of Artificial Intelligence, and critical realism in organisational research. He has published several research articles in ABS peer-reviewed journals and acted as a reviewer for journals and conferences.

**Dr. Ximing Ruan** a Senior Lecturer in Strategy and Operations Management at Bristol Business School, University of the West of England and remains active in research and publications, with supervision responsibilities for PhD and DBA students. Apart from publications on the peer reviewed academic journals, Ximing has also worked with colleagues to successfully secure £0.8 million research fund, which started in Apr 2016 for 24 months. Dr. Ruan has received British Council-Newton Funds to present research outcomes at six international workshops in 2016 and 2017, which were organised in Thailand (March/2016), Mexico (May/2016), China (August and October/2016), Kazakhstan (November/2016) and Brazil (May/2017). Dr Ruan presented his research findings as keynote speaker at The International Conference on Management, Economics and Finance in Istanbul in 2016 and 2019.