

华南农业大学国家重点学科“农业经济管理”系列丛书
农业龙头企业系列案例研究

粤澳食品安全合作 机制研究

——基于农产品安全视角

罗必良 李雁玲 罗明忠 等 编著

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序 言

华南农业大学经济管理学院是一所融农业经济、产业经济、工商管理、金融、贸易、财会诸学科为一体，具有博士后、博士、硕士、本科等多层次，多规格人才培养能力，实行人才培养、科学研究和社会服务相结合，在国内外具有一定影响的学院。

经过多年的建设，学院已经形成了以农业经济管理为核心的复合型学科群，其主要研究方向包括：农村经济发展与政策、农村经济组织与制度经济、农村产业集群与中小企业管理、农产品市场与国际贸易、农村金融与公共投资等。本学科的总体水平在国内同类学科及广东经济管理类学科中排名均处于前列。1997年被列为华南农业大学“211工程”建设重点学科之一，1999年被遴选为广东省重点学科，并评为广东省经济管理类三个A类重点学科之一，2001年评为国家重点学科，2006年5月再次复评为国家重点学科。

为了有效地实施重点学科的建设计划，经济管理学院于2002年决定出版“国家重点学科农业经济管理系列丛书”，集中出版以反映我院学科特色、具有较高质量的标志性成果。该系列丛书由教材、研究专著及部分优秀博士论文组成。分为四个子系列：经济发展与政策系列、经济组织与制度经济学系列、外向型经济与企业管理系列、国际贸易与金融系列。

上述四个系列由中国经济出版社出版。至今已出版专著40余部。

2002年，学院成立了华南农业大学广东农业企业发展研究中心。2008年被列为广东省普通高校人文社科重点研究基地。从2008年开始，我们将农业龙头企业的研究列为国家重点学科建设的主要工作

之一，计划从2009年开始每年选择一家具有代表性的农业龙头企业进行系统的案例研究。

2010年中心出版了第一份案例研究报告《合作机理、交易对象与制度绩效——“公司+农户”的合作方式及其对“温氏模式”的解读》，2011年完成了第二份案例研究《“公司+农户”：合作契约及其治理——东进农牧（惠东）有限公司的案例研究》。本书则是第三份研究报告。本报告特别关注粤澳食品安全合作机制这一特殊专题。

作为国内首例农业龙头企业案例研究的系列丛书，存在不足是难免的。因此，我们期待着社会和学界的关注、批评与呵护，同时希望此系列成为华南农业大学经济管理学院学科成长的台阶与标志。

罗必良

2012年3月16日于广州

摘 要

食品（特别是农产品）具有不可替代性，是涉及所有居民的不可或缺的必要品。其安全问题关乎消费者的身体健康和生命安全，关系到社会的稳定与和谐。

近年来，虽然澳门没有发生重大食品安全事故，但食源性疾病时有发生。不少澳门居民在思想上对食品安全存在一些盲目乐观的思想和情绪，对于食品安全尤其是农产品安全问题没有给予应有的重视。然而，受自身禀赋的限制及其产业结构的影响，澳门本地几乎没有农业，其食品尤其是农产品基本上都需要通过进口才能得到满足，决定了跨境食品安全合作对于澳门的食品安全保障至关重要。尤其是供澳的畜禽、蔬菜及水果等对保鲜质量要求较高的农产品主要来源于中国内地，其中，广东扮演着关键角色，是内地输澳农产品最主要的供应基地，同时承担了输澳农产品尤其是活动物最主要的检验检疫任务，因此，构建有效的粤澳合作机制对于保障澳门的食品安全具有重要意义。

本项研究的主要任务是：基于农产品安全问题来阐明粤澳食品安全合作机制。本书共分八章，前四章为理论部分，后四章为粤澳合作实务。

本研究认为，中央政府把供港澳食品摆到非常重要位置，供港澳食品成为一项重要的战略任务。但是，作为一个食品尤其是农产品主要依靠进口的国际性城市，澳门的食品安全和保障监控体系还是有进一步改进的空间，包括：多部门共同监管中的权责问题，“水货”的质量安全和监控问题，以及相关餐饮企业及消费者的安全意识确立问题等。

即使是一直运行良好的粤澳食品安全合作机制（包括单方面的供应承诺机制、两地信息交流与联系机制、技术交流与合作机制、产

品原产地监控合作机制)也面临一系列的问题与挑战:相关主体的利益激励不足、两地对农产品的监测标准不一致、量小品种多的供应保证以及分段监控可能存在的问题。

在跨境合作背景下,澳门农产品安全具有其特殊性:一是澳门农产品数量安全。包括农产品总量的保证及其价格的稳定性和合理性,以及主要农产品的应急保障;二是澳门农产品质量安全,重点在监控农产品的病原菌、重金属含量、农药兽药残留、食品添加剂和非食品添加剂等内容。另外,从供应链视角看,供澳农产品还具有以下特点:生鲜供应链呈现典型哑铃状——两头宽、中间窄,供应链成员众多却又缺乏规模,供应链成员间的联系以“市场买卖关系”为主,供澳农产品跨境供应链较长、涉及主体多。

食品安全是保障澳门社会繁荣稳定的基础,因而供澳农产品安全的政治意义大于经济意义。但是供澳农产品的数量安全与质量安全平衡仍具有一定的两难性,因为供澳农产品管理属于分段监管及重复检验检疫模式,这种模式增加了供澳农产品安全的管理成本,必然引起价格的上升。安全保证与成本之间必然会存在两难,其核心就是数量安全与质量安全的平衡问题。

可能导致澳门农产品数量安全的风险因素主要有入境游客数波动、不可抗力以及主要利益主体间的矛盾等;而供澳农产品供应链质量安全的风险则主要源于生产环节、流通环节和消费环节。

针对上述可能存在的风险因素与问题,目前粤澳已建立了一套相对完整的食品安全法律法规体系。供澳农产品质量安全管理体系总体是安全有效的,但也存在以下几个急需解决的关键问题:如何平衡澳门农产品市场的数量安全与质量安全的目标问题,供澳农产品可追溯体系的深度、宽度与精度的确定问题,供澳农产品的识别问题,供澳农产品质量信息传递问题,供澳农产品供应链组织的整合问题以及完善供澳农产品供应链的制度环境问题。

新加坡、我国香港食品安全保障及食品安全合作的经验告诉我们:完善的食品安全法规体系是保障,健全的食品安全监管体系是重点,先进的食品安全监测技术是核心,良好的食品安全合作机制是关键;强烈的食品安全意识是基础。

本研究认为,粤澳农产品安全合作应该在保证农产品供求基本平

衡的基础上，对粤澳农产品供给安全的合作机制进行优化，以提高供澳农产品质量安全、保持澳门经济社会的繁荣稳定为中心，以保护澳门消费者权益、提高农产品市场竞争力为目标，以构建绿色农产品的封闭供应链为核心，以建立农产品供应链可追溯体系、农产品供应链质量安全标准、供澳农产品公共信息平台 and 澳门食品安全基金为重点，从供应链管道控制入手，实施从“田间”到“餐桌”的全程监控，消除粤澳农产品供应链中潜在的安全隐患，同时也为内地农产品安全监控和管理模式提供示范。

粤澳农产品安全合作机制的目标任务可分解为“三点一面一量”，即生产、流通、消费（三点）、供应链（一面）和数量（一量）的全程、实时、动态的安全监控。重点在于：进一步加强生产环节、流通环节和消费环节的质量安全监管，进一步加强农产品供应链全程、实时、动态的质量安全监管，进一步强化对输澳农产品的数量保障监管。

具体合作模式为：内地基地 + 物流 + 检验检疫 + 海关 + 澳门批发市场 + 政府监管。

为此，必须推进观念创新、制度完善、技术实现、管道控制和自我运行，为粤澳农产品安全合作提供制度保障、经费保障、技术保障和政策保障。

主攻领域包括：构建粤澳农产品的封闭供应链、完善粤澳农产品供应链的质量安全追溯体系、完善粤澳农产品供应链的质量安全标准体系、建立粤澳农产品合作的补贴机制、削减中间批发商的层次、加强对食品供应链两端的食品安全控制、鼓励澳门企业到投资内地农产品基地、建立澳门食品安全基金、加大对“水客现象”的治理。

Abstract

Food (particularly agricultural products) is irreplaceable, and it is related to the essential necessities of all residents. The security issue of food is also related to health and safety of consumers, together with stability and harmony of the society.

In recent years, although major food safety accidents never happened in Macao, yet diseases caused by food-borne bacteria have occurred for several times. Macao residents have some blind optimistic thoughts and emotions in their mind about food safety, so that the food security, especially the safety of agricultural products, has not attracted enough attention they deserve. However, Macao almost has no local agriculture for being limited by their own endowments and the influence of industrial structure. They have to basically meet their needs for food, especially agricultural products, through imports, which determines the importance of cross-border cooperation to Macao's food safety. Especially some agricultural products provided for Macao, such as the livestock and poultry, fresh vegetables and fruit, which relatively have higher requirement for freshness, mainly come from China. Meanwhile, Guangdong plays a key role, not only being the main supply base of agricultural products from Mainland of China to Macao, but also undertaking the inspection and quarantine of the output agricultural products, especially the live animals, which are the most important tasks. Thus, it will be of much significance to make up an effective Guangdong-Macao cooperation mechanism to ensure the food safety of Macao.

The main task of this study is to clarify the Guangdong-Macao coopera-

tion mechanism on food safety based on the safety problems of agricultural products. This book consists of eight chapters, the former four chapters being the theoretical part, while the latter four chapters being the practice of Guangdong-Macao cooperation.

This study argues that the central government should put the supply of food to Hong Kong and Macao on the very important position, which will become an important strategic task. However, as an international city with major imports of food, particularly agricultural products, Macao still has room for further improvement of the food safety and security monitoring system, including: the rights and liabilities of multi-sectoral's co-regulatory, the quality safety and monitoring issues of the smuggled goods, and the issues to establish safety awareness of related food and beverage enterprises and consumers.

Even though the Guangdong-Macao cooperation mechanisms always run well (including the unilateral supply commitment mechanism, the mechanism for information exchange and contact between Guangdong and Macao, the technical exchange and cooperation mechanism, the cooperation mechanism for monitoring the origin of products), yet it still face with a series of problems and challenges, such as insufficient interests incentives for the relevant subjects, the inconsistent monitoring standards of Guangdong and Macao on agricultural products, the supply guarantee with a small amount but wide in varieties, potential problems of sub-monitoring, and so on.

In the context of cross-border cooperation, the security of Macao's agricultural products has its particularities. Firstly, the number of Macao's agricultural products is safe, including the guarantee for the total amount of agricultural products, the stability and rationality of the prices, and the guarantee for the emergency conditions of the main agricultural products; Secondly, the quality safety of Macao's agricultural products should put emphasis on the surveillance of agricultural pathogens, contents of heavy met-

als, residues of pesticides and veterinary drug, food additives and non-food additives. In addition, from the perspective of the supply chain, the agricultural products supplied to Macao have the following characteristics: the supply chain of fresh raw agricultural products presents to be typical dumbbell-shaped, wide of two sides, narrow of the middle; the supply chain has many members but lack of scale; the links between members of supply chain are mainly “the market trading relationship”; the cross-border supply chain of agricultural products supplied to Macao is longer, and involves more subjects.

Food safety is the basis to guarantee the stability and prosperity of Macao, therefore the political significance of the safety of agricultural products for Macao is greater than the economic significance. However, it will still be in a dilemma in the balance between quantity safety and quality safety of agricultural products for Macao. Because the management of agricultural products for Macao applies the mode of sub-regulation and duplicate inspection and quarantine, which increases the costs of managing the safety of agricultural products for Macao, it would inevitably lead to price rise. Besides, it also will be in a dilemma between the security guarantees and cost, the core of which is the balance between quantity safety and quality safety.

The main risk factors which could lead to the quantity safety of Macao's agricultural products are as follows: the fluctuations of the number of inbound tourists, force majeure, and the conflict between the main interests subjects; while the main risks for the quality safety of agricultural products supply chain to Macao are mainly due to the processes of production, circulation and consumption .

In response to these possible risk factors and problems, Guangdong and Macao currently have established a relatively complete legal system for food safety. The management system of agricultural products' quality safety

to Macao is safe and effective as a whole, but there are several key issues which need to be resolved, including the target problem of how to balance the quantity safety and quality safety of agricultural products; how to make sure the depth, width and precision of the traceability system of agricultural products to Macao; the recognition of agricultural products to Macao; the transmission problems of agricultural products quality information to Macao; the integration problems of supply chain organizations of agricultural products to Macao; the problems of institutional environmental systems of improving the supply chain of agricultural products to Macao.

The experiences of Singapore and Hong Kong's guarantee of food safety and cooperation of food security tell us that the perfect food safety regulatory system is guarantee, the right food safety supervisory system is the key point, the advanced food safety monitoring technology is the core, the good food safety cooperation mechanism is crucial, and the strong awareness of food safety is the foundation.

This study argues that the Guangdong-Macao's safety cooperation of agricultural products should optimize the Guangdong-Macao's cooperation mechanism of the supply safety of agricultural products based on the balance of supply and demand of agricultural products, with the main goal to improve the quality safety of agricultural products to Macao and to maintain the prosperity and stability of Macao's economy and society, the aims to protect the interests of consumers of Macao and to improve the market competitiveness of agricultural products, the core to build a closed supply chain of green agricultural products, the emphasis to create a traceability system of agricultural products supply chain, to make up the quality safety standards of agricultural products supply chain, to establish the public information platform for agricultural products to Macao, and to organize food security fund of Macao. Afterward, this study points to implement the full monitoring from the "field" to the "table" by starting from the control of the supply chain

pipeline, to eliminate the potential safety hazards of agricultural products supply chains of Guangdong and Macao, and to set an example for the security monitoring and management of Mainland's agricultural products .

The objectives and tasks of Guangdong-Macao's safety cooperation mechanism of the agricultural products can be decomposed into the full, real-time and dynamic security monitoring of three points (production, circulation and consumption), supply chain and quantity. The emphasis is to further strengthen the quality safety supervision of production, circulation and consumption processes, to further strengthen the full, real-time and dynamic quality security monitoring of the entire supply chain of agricultural products, and to further strengthen the quantity safety supervision of agricultural products to Macao.

The concrete cooperation model is: the base in Mainland + Logistics + Inspection and Quarantine + Customs + Wholesale Market of Macao + government supervision.

Therefore, we must promote the concept of innovation, system improvement, realization of technology, pipeline control and self-run to provide institutional guarantee, financial security, technical support and policy support for the safety cooperation of Guangdong-Macao's agricultural products.

The main areas to be study include: to build a closed supply chain of Guangdong-Macao's agricultural products, to improve the quality safety traceability system of Guangdong-Macao's agricultural products supply chain, to improve the quality safety standards system of Guangdong-Macao's agricultural products supply chain, to establish subsidy mechanism of Guangdong-Macao's cooperation on agricultural products, to reduce the levels of intermediate wholesalers, to build the Macao Food Security Fund, and to increase the governance of the phenomenon of selling smuggled goods.

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