

From China's Fields to Global Tables: Talent Support and Capability Enhancement for Agricultural E-Commerce under the RCEP Framework

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Abstract: Regional Comprehensive Economic Partnership (RCEP) comes into effect during a time when the global trade order is being reformed and there's more regional economic cooperation, making it an important moment to improve how China's farm products move around the world. This study confronts the principal barriers to elevating the quality of agricultural cross-border e-commerce, which are typified by suboptimal logistics networks, insufficient brand recognition in global markets, and inadequate alignment with international technical regulations. Methodologically, this study synthesizes documentary analysis with focused case studies, utilizing the RCEP agreement as its primary analytical lens. From this investigation emerges a comprehensive framework for advancement, structured around five synergistic dimensions: optimizing policy instruments, modernizing cross-border supply chain systems, cultivating differentiated agricultural brands, harnessing digital platform capabilities, and developing a new generation of talent with blended digital and sectoral expertise. Output from this study is meant for immediate use. To give policymakers better information so they can make better plans to help farms work across countries, and to give schools new ideas about how to teach students who need both computer skills and farming knowledge for jobs in the future. Consequently, this inquiry holds substantial practical relevance for steering China's agricultural cross-border e-commerce toward a more sustainable and value-added developmental path under the RCEP regime.

Keywords: Cross-border Agricultural Product E-commerce; RCEP; Social E-Commerce; Talent Support; Capacity Improvement

1. Introduction

Cross-border e-commerce, developing under changing global trade conditions and growing regional integration, has turned into a key force behind international trade, and this phenomenon stands out especially clearly when it comes to agricultural trade. The implementation of the RCEP agreement is a turning point: at the same time as it broadens the export prospects for Chinese agricultural goods, it also improves the alignment of these goods with intricate multilateral trade administration. And thus we have a more unified, more effective "field-to-table" cross-border pipeline, making it much easier for Chinese goods to reach foreign customers. It's quickened along with the help of good policies and new digital tools. New social e-commerce models such as short video marketing and live commerce are not just new ways to sell things; they're actively causing big changes in how people talk about farming across different countries, changing old ideas about selling food, and helping to make new plans for getting supplies from one place to another. This has provided new possibilities for building a "branded, digitalized, and internationalized" development path for high-quality Chinese agricultural products. However, factors restricting the high-quality development of China's cross-border agricultural product e-commerce have also gradually emerged. On the one hand, structural issues such as high logistics costs for agricultural products, inadequate cold chain coverage, and inconsistent international standards are still widespread, significantly affecting product upward circulation and export efficiency. On the other hand, phenomena such as low brand awareness, weak overseas marketing capabilities, and insufficient understanding of international rules and consumer preferences have led to the situation where "high-quality products cannot be sold at good prices." In the context of the full digitalization of cross-border e-commerce, the

gap in operational talents, live streaming talents, supply chain management talents, and cross-cultural communication talents continues to expand. “Capacity-based shortcomings” such as insufficient digital skills, weak platform operation capabilities, and limited understanding of international markets have become important factors affecting the cross-border competitiveness of agricultural products.

Existing research on the export of cross-border agricultural products mainly focuses on policy environments, logistics models, platform mechanisms, and market demand, but few systematically analyze the talent demand structure, capacity composition, and their impact on export performance of cross-border agricultural product e-commerce in digital scenarios from the perspective of the underlying causes, namely “talent support” and “capacity improvement.” Similarly, there is a growing body of research on how social e-commerce reshapes cross-border value chains and drives agricultural product brand communication and trust building, but the human factors behind it, such as the skill structure, competence, and capacity improvement paths of digital operators—remain under-researched areas. Therefore, by analyzing existing studies, this paper incorporates talent capabilities and support mechanisms into the analytical framework of cross-border agricultural product e-commerce, and proposes future-oriented capacity improvement and talent support paths, including digital skill cultivation, platform operation capacity enhancement, cross-cultural communication capacity building, and a government-enterprise-university collaborative talent training support mechanism. This reveals the new logic of the cross-border path “from fields to dining tables” in the RCEP era, providing theoretical reference and practical basis for the government to optimize policy supply, enterprises to improve cross-border e-commerce performance, and universities to cultivate compound digital talents.

2. Literature Review

With the rapid development of global digital trade, cross-border e-commerce has gradually become an important channel for promoting agricultural product exports. Existing research mainly focuses on policy environments, supply chain organization, platform mechanisms, brand building, and digital communication models,

laying a solid foundation for analyzing the operational logic of cross-border agricultural product e-commerce, which is mainly reflected in the following four aspects:

First, at the macro level, a large number of current studies focus on changes in policy systems, trade rules, and the cross-border e-commerce ecological environment. Some scholars generally believe that the implementation of the RCEP can bring significant institutional dividends to intra-regional agricultural product trade by reducing tariffs, simplifying rules of origin, and improving customs clearance efficiency, providing more stable and open institutional support for digital trade [1, 2].

Secondly, there are some studies on supply chains and logistics systems have one thing in common – they have to deal with the fact that farm goods are perishable, take a long time to produce, and the market for them is uncertain. This makes it hard for farm goods to move easily across borders. This inherent difficulty is further complicated by an ongoing, man-made trio of obstacles. Exporters are hit by continuously rising freight costs, a big shortage of up-to-date cold-chain facilities, and poorly performing warehouse and delivery networks. Analysts generally agree that such a mix of natural and systemic obstacles creates a constant obstacle to China’s agricultural exports. And some researchers studying cross-border e-commerce find that those platforms make things easier by a lot, they can change how things get filled up completely. By putting inventories ahead of time into the pre-shipment hub, forming stockpiles nearer to foreign customers through overseas warehouse, and adopting clever, detailed storage administration, these digital middlemen give exporting organizations an important amount of operational adaptability. The result is a clear rise in the dependability and pace of deliveries. To put it simply, this method turns part of the inflexible, cross-border logistics problem into a group of manageable, optimizable jobs [3, 4, 5]. Third, in the area of brand development and overseas market expansion, relevant research holds that Chinese agricultural products still face problems such as low brand awareness, low added value, and mismatched standard systems in the international market. The deep integration of social e-commerce and live streaming e-commerce has opened up new channels for brand building and narrative communication of

agricultural products in cross-border circulation [6-9].

Fourth, in terms of digital technologies and social e-commerce models, existing research emphasizes their positive role in building digital supply chains, enhancing market reach, and promoting value chain restructuring. Among them, the development of algorithmic recommendations, content marketing, and interactive mechanisms has gradually become an important driving force for the growth of cross-border agricultural product e-commerce. However, such research focuses more on the application of technologies and pays insufficient attention to the talent capacity structure behind the technologies [10-12].

In summary, existing research on “talent support” and “capacity improvement” is relatively lagging. Although some studies mention changes in the skill requirements of cross-border e-commerce operational positions, they mostly focus on live streaming technologies, understanding of platform rules, or supply chain management capabilities, lacking systematic and structural analysis of talents in cross-border agricultural product e-commerce. Few existing literatures study digital skills, live content creation and marketing capabilities, supply chain and quality management capabilities, cross-cultural communication capabilities, and international rule cognition capabilities as a “compound talent capacity system.” There is also insufficient discussion on talent training paths, capacity improvement mechanisms, and their impact on export performance. Therefore, starting from the operational mechanism of cross-border agricultural product e-commerce, this paper incorporates “talent capabilities” into the analytical framework, analyzes the capacity bottlenecks of cross-border agricultural product e-commerce from the perspective of “talent support” and “capacity improvement,” focuses on exploring how talent capacity gaps affect cross-border e-commerce efficiency, and proposes corresponding capacity improvement and talent support strategies under the RCEP framework. It is expected to provide theoretical supplement and practical enlightenment for the government, enterprises, and universities to build a compound digital talent training and cross-border capacity improvement system.

3. Analysis of the Current Development Status of China's Cross-Border Agricultural

Product E-Commerce

3.1 Sustained Growth in Cross-border Agricultural Product Export Scale

As regional economic cooperation continues to attain higher levels of development and integration, the advancement of cross-border e-commerce for agricultural products in China has been demonstrating a steadily progressing and increasingly positive developmental momentum. According to the official statistical data released by the General Administration of Customs, the total export volume of agricultural commodities has maintained a consistent upward trajectory over the past few years; among all the export channels available, the growth rate of exports achieved through cross-border e-commerce platforms and channels has proven to be particularly remarkable and prominent. RCEP taking effect as a new wave of support measures, focusing on improving the rules of origin, simplifying customs procedures, and offering preferential tariffs on certain agricultural products, has improved the competitiveness of some important agricultural sectors in the region. The improved policy atmosphere was most immediately noticeable by way of the increase in exports from those high-potential groups. For example, shipments of fruits, teas, honey, and aquatic products experienced noticeably faster growth. At the same time as this policy-induced push forward, there has been an increase in the cross-border e-commerce channels for such items. This sustained upward trend provides strong proof of a bigger change: digital trade platforms are no longer merely another selling option. They've grown up into something basic, something important and almost necessary for Chinese farmers who want to get into and grow bigger in foreign markets. In fact, the strategy of going global is now actually being carried out via these digital conduits.

Social e-commerce platforms such as Lazada and Douyin have provided new channels for the export of potatoes and garlic. Through live streaming, short videos, and other forms, farmers and enterprises can directly interact with international consumers, enhancing product display effects and user stickiness. In recent years, relevant departments have introduced a series of cross-border e-commerce supervision models, such as “9710 cross-border e-commerce B2B direct export” and “9810 cross-border

e-commerce export overseas warehouse,” providing customs clearance convenience for the export of potatoes and garlic. At the same time, local governments are also actively promoting the construction of agricultural product export industrial clusters, such as Shandong's “export benchmark county” and “top 20 export enterprises” cultivation plans.

Taking potato-related agricultural products as a representative case study (see Table 1 for comprehensive details), relevant data and analytical reports published by Mysteel—a well-known professional service provider specializing in industry information—including the October 2024 Statistical Report on Exports of Fresh or Chilled Potatoes (Excluding Seed Potatoes) (HS Code:07019000) and Mysteel's In-depth Interpretation: Year-on-Year Export Volume of Fresh Potatoes (Non-Seed Varieties) to Witness Remarkable Growth in 2024, together with the official statistical figures verified and released by the General Administration of Customs of the People's Republic of China, clearly indicate that the export performance of China's fresh or chilled potatoes (excluding seed potatoes) reveals a two-tiered narrative of structural growth. Exports for the first ten months of 2024 reached about 498,900 metric tons in total. And what makes this cumulative figure noteworthy is that it already exceeds the full-year total for 2023. The difference is estimated at 107,800 tons. Reaching this threshold so early in the annual cycle is significant. It points beyond predictable yearly growth, hinting instead at a potential reset of the sector's underlying trade activity level. Looking specifically at October 2024 performance, monthly exports were recorded at 92,400 tons, bringing in revenue of \$32.9 million. Compared to September, this represents a steady month-to-month increase of 3.46%, the more striking insight comes from comparing this October to the same month last year. That year-on-year comparison reveals a substantial jump of 72.46%. We can see such a pronounced disparity in growth rates is revealing. It indicates that the sector's current expansion is being driven by more than just routine market forces. The magnitude of the year-on-year leap suggests exporters are effectively harnessing specific, powerful catalysts present in the current trade landscape. So distinguishing the primary drivers among these possibilities is a very important question [13, 14].

Table 1. Partial Statistical Data of China's Potato Export Volume

Product Category	Time Period	Export Volume	YoY/MoM Change	Export Value (USD)
Fresh or chilled potatoes	Oct-24	92,400 tons	MoM +3.46%; YoY +72.46%	32.9058 million
Fresh or chilled potatoes	January–October 2024	498,900 tons	Exceeded full-year 2023 volume by approx. 107,800 tons	—
Frozen potatoes	Oct-24	2,123.60 tons	MoM +14.26%; YoY +23.86%	2.1410 million
Potato starch	Oct-24	1,047.46 tons	MoM +85.11%; YoY +224.27%	1.1662 million

Data Source: Mysteel

3.2 Social E-Commerce Drives the Innovation of Cross-Border Agricultural Product Marketing Models

The cross-border trade of agricultural products has undergone a fundamental transformation, shifting from a transaction-centric model to one that is driven by narrative and trust due to the global rise of short-video and live-streaming platforms. We see this shift in a clear, three-part process that unfolds on these platforms. First, compelling content that the videos showing harvests, farmers' lives, and local traditions, so we can call this is “tells a story”. Second, this authentic story builds trust with viewers who feel a personal connection. Third, this established trust directly facilitates the transaction, turning cultural resonance into a commercial advantage.

In practice, some ways to get this model working. Live streaming creates a window into the supply chain, making complicated logistics into clear, immediate stories that show if something is real. Working with dependable local influencers in desired markets gives important cultural translation and trust. At the same time, the platform communities encourage buyers to become brand advocates, creating organic word-of-mouth promotion. Together they let producers avoid the old-fashioned many-layered way of getting things out there. It results in a shorter, more direct route to the consumer. This simplified method greatly reduces the expenses and dangers involved in entering new markets and enables merchants to aim at particular client groups far more accurately. The system gets a big part of its power from the smart computer

ideas of the platforms themselves. These algorithms aren't just pushing random stuff. They act as fancy matchmakers, finding and highlighting what could be termed "visible authenticity," such as real farm scenes or the producer's personal story, and sending it straight to people who have similar interests and values. This technology tackles an old problem in agricultural exports: moving past competing merely on cost and developing a unique, worthwhile brand identity overseas from scratch. And we find out that short video contents are quite good at promoting cross-cultural communication. It shows rather than tells. Through visuals and demonstrations, it removes the obstacles presented by different languages and cultures. For a consumer abroad, this means that the entire process of seeing a product for the first time, understanding its story, and eventually having a good opinion about the brand can happen without interruption during a single, entertaining viewing session.

3.3 High Costs of Cross-Border Supply Chain Logistics

For cross-border e-commerce in agricultural products to thrive long-term, a robust logistics system is an indispensable foundation. The current landscape of global logistics is less a fixed entity than a dynamic field being pulled in multiple directions. The most evident trend is this: companies are actively establishing warehouse networks in key overseas markets, continuously refining their operational models, and consciously diversifying transport routes to avoid over-reliance on any single channel.

The expansion of overseas warehouses, especially those with optimized locations via data analysis, provides a vital "short cut." It basically moves the goods nearer to the customers ahead of time so there's no need for later cross-border transport, unpacking, and restocking procedures. Spatially speaking, it greatly narrows down the period between customers placing their orders and receiving them. Logistics getting faster and easier means people's shopping experiences get better too. But such a system based on efficiency still has great pressure underneath. Agricultural products' cross-border transportation is still faced with three major problems: high and frequently fluctuating freight prices, apparent but broken cold chain systems leading to unstable temperatures, and unpredictable and

hard-to-predict delivery times. These problems are especially bad for fruits and vegetables that are just picked. Even small changes in temperature over long distances can make the spoilage rate go up a lot, which makes money problems for both the people buying and selling things.

Therefore, while China's cross-border agricultural logistics system is continuously developing, it remains in a "build-and-patch" phase. There is significant room for improvement in the coordination capabilities across all links in the chain. The most urgent task now extends beyond simply building more warehouses or opening additional shipping routes. The true breakthrough lies in whether the entire supply chain can be "woven" into an organic ecosystem capable of real-time communication and rapid response. This requires achieving a deeper level of collaboration: resources must be flexibly allocated, information shared instantly, and every link from farm fields and warehouses to customs clearance and last-mile delivery must mesh like precision gears, operating in perfect synchronization. So only when information flows as smoothly and transparently as goods can newly built warehouses and expanded routes truly deliver their full potential.

3.4 Insufficient International Competitiveness of Agricultural Product Brands

Continuous investment in "origin branding" initiatives across various regions of China has yielded a clear outcome in recent years. That a wave of geographical indication products and regional public brands have been brought to market. This trend underscores a strategic shift, it moves beyond selling generic "local specialties" toward cultivating differentiated commodities that carry a "certification premium," thereby steadily increasing the added value of agricultural products.

And what's driving this change along is all those digital platforms that we use everyday. Short videos on Douyin, live commerce on Amazon, online communities on Facebook, it's not about these being apps, but rather they've become crucial new channels for producers to speak directly to the world. They allow farmers and processors to take apart and show off the special stories that were once hidden at the beginning: the particular soil and weather, the careful workmanship, even the intangible cultural

heritage that goes into a product. This kind of real, full story makes people feel as if they're right there with the thing on the internet, even when they're far away – it feels close enough to touch. There's a stubborn gap in perception on international shelves; the "Made in China" label on agri-products still rings out as "cheap" and "mass-produced." The reasons are related: brand impressions in global buyers' minds are weak and brief. Products have trouble shouting loudly enough how they differ from and are better than other products. And also, there is often a big difference between the quality, safety and even looks that overseas markets expect. To put it simply: the brand is forgettable, the product is undistinguishable, and the standards don't fit.

This kind of mental lag directly affects the price. Even the best harvests are forced into a "price by weight" system, where how much it weighs matters more than its story or quality. There's a persistent value gap between what can be shown and what can be charged. This is the main bottleneck for Chinese agricultural brands going global.

Breaking through will require going far beyond the basic foundation of an origin certificate. Brand building needs a more targeted, deeper push. Two things seem critical now. The first thing is figuring out how to systematically build brand assets that resonate emotionally, creating brands people remember and, more importantly, care about. And the second is developing the nuanced, market-by-market operational skill to ensure products don't just meet basic standards, but truly fit the evolving tastes and expectations of local consumers.

3.5 Difficulties in Breaking through the Bottleneck of Cross-Border E-Commerce Talent Capacity Shortcomings

Nowadays, the astonishing growth of cross-border e-commerce on agricultural products has shown its weakness. It is a deteriorating human capital crisis that actively erodes the market standing and long-term sustainability of the industry. And a close look at the current workforce shows four major trends, the most serious one being the absence of true integration talent. In this case, competence means that the intellectual architecture needs to combine those historically separate areas of study, it can't be reduced to a list of skills. In the digital world, people need much more than just basic reading skills; they need a deep

understanding of how things work, including choosing based on numbers, knowing about platforms, and looking at the numbers behind live shopping. And also a sense of the ongoing problems of international trade – figuring out all those complicated trade deals, working with folks from other places, running big groups of stores that sell lots of different things. Modern professional paradigm is formed by this crucial fusion of digital and traditional. That such a synthesis remains elusive is, perhaps, the defining challenge currently stifling industry ambition. For instance, many e-commerce live stream hosts are accustomed to using colloquial slogans like "Get it now! Only today! "and" Click the link below! "to promote products, yet they are unable to clearly explain the specific details of tariff preferential policies to overseas audiences; backend operators may be skilled at editing live streams into "exciting highlight reels" for promotional purposes, but few of them have the ability to analyze and interpret customer repurchase curves to optimize marketing strategies. At present, the number of talents who truly possess such comprehensive compound skills is relatively limited, and the industry generally faces structural talent shortages, such as the phenomenon that "people who understand agricultural products lack expertise in cross-border trade" and "people who are proficient in cross-border trade have insufficient knowledge of agricultural products."

Second, there is a lack of sufficient digital operation capabilities. A large number of practitioners have inadequate understanding of content marketing strategies, limited data analysis capabilities, and a superficial grasp of algorithm logic. These deficiencies directly lead to unstable operational effects across various social e-commerce channels. For example, it is a common problem that live streaming personnel lack the professional ability to design targeted live streaming scripts tailored to overseas audiences, while cross-border operators often lack the necessary skills in content planning, data review, and effect optimization.

Third, the understanding of international rules and overseas markets is relatively weak. Although the Regional Comprehensive Economic Partnership (RCEP) policy has been officially implemented for many years, operators of numerous enterprises in the industry still adhere to traditional trade thinking patterns and lack an in-depth and systematic understanding of

key elements such as RCEP rules, rules of origin policies, overseas consumer preferences, and local cultural customs. This lack of understanding ultimately results in poor adaptability of products when entering target markets, affecting their market acceptance and sales performance.

Fourth, there is a serious disconnection between university talent training systems and the actual needs of enterprises. In the digital era, technological development changes rapidly and iteratively, and the continuous iterative upgrading of cross-border e-commerce has become an inevitable trend of industry development. However, the training programs for relevant majors in many undergraduate universities are four-year programs that have not been revised or have been rarely adjusted from freshman to senior year. Their curriculum settings still focus on traditional foreign trade or general e-commerce knowledge, with very few specialized compound courses oriented to the field of cross-border agricultural product e-commerce. Additionally, the practical training system is insufficient in content and lacks flexibility in form, failing to keep up with the latest developments in the industry. This situation has led to the long-term existence of the problem of “insufficient supply of talent training and mismatched capacity structure” between university graduates and enterprise recruitment requirements.

In summary, the “human factor” plays a crucial and irreplaceable role in various aspects such as cross-border logistics efficiency improvement, content marketing effect enhancement, brand building achievements, and market expansion. The existing talent capacity gap has become a prominent weak link in the cross-border export chain of Chinese agricultural products, restricting the high-quality development of the industry.

4. Main Restrictive Factors for the Development of Cross-Border Agricultural Product E-Commerce

Given that policy benefits as well as the ongoing development of e-commerce platforms have slowed the growth of cross-border agricultural product exports, the sector also continues to face a number of practical obstacles in sometime. Those challenges stem besides in part from inherent structural inconsistencies that exist within pertinent supply chains along with

industrial chains of their own, but they additionally have a strong connection to elements like the intricacy of international market regulations, the unequal development of digital capabilities among businesses, alongside the poor building of professional talent teams.

4.1 Insufficient Supply Chain Coordination Caused by High Cross-Border Logistics Costs

One major barrier to achieving supply chain synergy is the high cost of cross-border transportation, which is enabled by the perishable and time-sensitive nature of agricultural products. Poor local cold-chain infrastructure has become unreliable and disconnected, making the situation worse by causing delays at important times such as international shipping, final mile delivery, and customs clearance. The most common outcome is considerable product loss during transit, which directly increases operational costs and diminishes the advantage over competitors concerning price and shipping speed in foreign markets. Intrinsic complexity for world wide agriculture e-commerce also adds to this. A lot of little purchases spread out over different places with lots of different people involved in moving things around make up what happens here. Coordination is very difficult because of this long and disconnected structure. Digital management system deficiencies, poor forecasted inventories, and unsatisfactory cooperative procedures for decision-making are just a few of the basic faults that impede many firms working within this environment. When all these problems are put together, they cause trouble for cross-border farming business because it makes it hard to keep stable and last a long time. This stops the farming industry from growing much.

4.2 Low Recognition of Agricultural Products in Overseas Markets

China's agricultural products export brands are in a bad situation compared to the abundance of good agricultural products in the country. But we can see that there is still a certain gap in system. Many makers do not have a good plan for reaching out to other countries and putting their brands in position, which makes it so that their things become just another type of goods or something without much value in foreign places, stopping them from making strong brands that people trust. There's a big lack of proper ways to

tell stories about brands because there aren't enough good ways to share those stories, even if the products are better than others in your area, people won't know about them outside. So the cross border game is harder. Offering different things from packaging along with marketing tales to customer help steps, ones that do not fit some international crowds are usually due to not knowing local buyer standards and rules around. Low conversion rate and ongoing struggle to maintain brand competitiveness leads to immediate commercial consequences, a place that keeps good products trapped in a never-ending cycle of underestimation.

4.3 Insufficient Understanding of International Rules by Operators

Cross-border trade of agricultural goods needs to know about the complicated regulatory environment involving food safety, patents and other intellectual property, origin certification, and quality control procedures to succeed in cross-border trade of agricultural goods. There are big differences in how countries make their own rules and laws, so it's hard to follow them all. Micro, small, and medium-sized enterprises (SMEs) that have members who don't fully understand what it takes to comply with regulations in different markets are especially hard hit by this hodgepodge of rules. So they often make mistakes in important parts such as product certification, labels, and customs documents, and these things stop them from entering the market and make their work less effective. It goes past simply complying with the rules; there is a failure to participate in strategic policies. The Regional Comprehensive Economic Partnership, which has been operating for quite some time now, is turning into a prime example. Companies know about it but still remain largely unaware of its most basic workings, such as the rules of origin accumulation and phased tariff concessions. More than just slowing things down, the gap in the information they got means there's a bigger problem with not using the good things that institutions give out easily, showing that the industry isn't good at changing policy chances into actual competitive wins.

4.4 Significant Gaps in Digital Capabilities of Social E-Commerce Enterprises

Difficult trio of abilities needed for agriculture exporters to keep succeeding on overseas

e-commerce sites: using data-based marketing, making interesting material, and encouraging lively groups of people who use the internet actively. Short video and live streaming platform's own volatility, constantly redefine the operation manual because of the unclear algorithm, changeable performance indicators, flexible rules, making it even more urgent. Many agribusinesses can't enter this market because they don't have good digital skills. Their users can't understand or use the main ideas behind these platforms because there are big problems with how people relate to each other, figuring things out, and making important content. A vicious cycle of bad sales conversion, poor brand exposure, and bad content results in direct business damage. And this pattern of action eventually cuts down the chance to develop in the digital export market.

4.5 Obvious Shortage of Cross-Border Compound Talents

There are some related regulations constantly evolving. And what businesses require from their employees is rapidly shifting as cross-border e-commerce develops. Narrow specialists are no longer needed, and it is intended for the inter-disciplinary talents. Digital operational fluency is the only thing non-negotiable at the center of this new demand. This paper frames what's required not as a list, but as a structure. Consider four interrelated layers (Figure 1): content marketing, cross-cultural engagement, supply chain orchestration, and international regulatory literacy. When faced with multi-channel management, the simultaneous dance across short-video, live broadcasts, and social media that thin knowledge strains, often to breaking point. The company collaborate, they work together, which is how development takes place. A new type of practitioner is needed for this sort of adaptable integrator. Someone who could do campaigns and deal with the logistics and merchandise, someone who could get past cultural differences and talk about trade rules. And there's the problem that such talent isn't easy to find anywhere. Integrators are not so easy to find, and here comes a glaring capability shortcoming.

This is something that a lot of managers in cross-border e-commerce have seen up close – quite a few of their people are working with a pretty incomplete set of tools. They know about live streaming for overseas audiences, making

plans for content, and following international trading rules, but these things exist separately, not all together. And this kind of scattered expertise makes it hard for them right away. Managing many channels at once, such as short video platforms, live commerce, and social media communities, is not just difficult. This shows a big difference between what the job needs and the skills that people have right now. On the graduate supply side, the universities preparing these future professionals also face a similar, albeit different, challenge. What they teach in class and in the lab often does not match how fast the cross-border e-commerce world changes. You can see there's a distance between the curriculum and what the industry really needs every day. There are two major causes of this gap. One is time, the academic process of cultivating talent is inherently lengthy. Another, perhaps more serious one, is the lack of execution. The idea of tight “industry-education integration” is much talked about, yet the relationship between studying and doing often feels shaky and uneven, more like a row of stepping stones than a sturdy bridge. The skill gap on the ground and the delay in training aren't just sitting next to each other. Over time, they start to feed off of each other, creating a reinforcing cycle that locks in a chronic shortage of ready talent. Agricultural businesses trying to expand across borders is not merely an HR issue of finding staff anymore. It has become a deeply entrenched obstacle to operations, one that consistently restricts the extent and longevity of their international expansion.

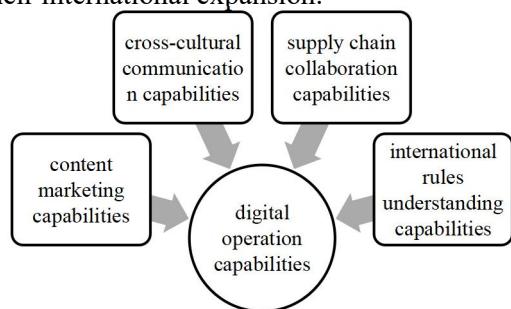


Figure 1. Core Compound Capabilities of Cross-Border E-Commerce Practitioners

4.6 Need to Strengthen Industrial Collaboration Mechanisms

To operate well within the cross-border agricultural e-commerce domain involves moving through the confluence of various different worlds: farming's physical world, trading's physical world, logistics' physical

world must all be merged with data's digital world and online commerce's digital world. Such a merging requires a great deal of orchestration, it has to coordinate the efforts of lots of different people from many different places and organizations. But the frameworks that make such a synergy possible are often lacking or entirely non-existent. Effective collaboration is still lacking between industries, among different regional administrations, and between the key players of business, government, and higher education. This systemic deficiency shows up concretely. Many places do not have organized training systems designed specifically for cross-border e-commerce, which are closely linked to local agriculture. Also, a persistent communication gap exists between industry and academia. Businesses often don't clearly and constantly talk about how their skill needs are changing to universities. As a result, academic institutions find it hard to match their course planning and hands-on training units to the constantly changing, complicated situations that their students will face when they start working. In short, it's a weak connection between some important things. Logistics responsiveness, international brand salience, depth of regulatory adaptation, and the provision of multifunctional talent put cross-border agricultural goods at a disadvantage. These elements, when working alone instead of together, create a big roadblock for becoming strong and lasting in foreign markets. So, the long-term development of cross-border e-commerce needs more detailed research on these three aspects: targeted policies, ongoing staff capability improvement, and better organization cooperation methods.

5. Paths and Countermeasures for the Development of Cross-Border Agricultural Product E-Commerce

With the continuous improvement of the policy environment and the increasing infiltration of digital technology, the Chinese cross-border agricultural product e-commerce has kept growing steadily. But there are still shortcomings in the main aspects such as logistics efficiency, brand effect, rules adjustment ability and talent comprehensive skills which limit the high-quality development. So creating a complete improvement process that includes policies, supply chains, brands, platforms, and people gives us a good way to help agricultural things go into other countries with better quality

and stronger power.

5.1 Leverage the Institutional Benefits of RCEP to Enhance the Level of Cross-Border Trade Facilitation

Regional Comprehensive Economic Partnership has been formally implemented, which creates a better policy environment for cross-border agricultural products trade. In order to increase the practical effects of policy incentives, the relevant policy-making departments could adopt a two-pronged approach that focuses on both uptake and operational smoothness. And the first prong is to go past just announcing policies and start helping out, making sure important things such as lowering tariffs and adding up rules about where goods come from aren't just done but also explained clearly to companies so they understand them better. This move from passive giving to active supporting is important for changing policy possibility into real business benefit. Then the second prong is on the physical frictions during exports. Here we need to combine the supervision of e-commerce with the logistics at the port. Reforms by relevant policy-making departments should emphasize simplifying the whole clearance process from document preparation and inspection to final release, and especially improving the predictability and speed of agricultural cargo releases. An actual application of this idea would be setting up fast "green lanes" for big volumes of things that have to be sent quickly, such as fresh fruits and vegetables, which would help solve a big problem for people who sell these items – how much it costs and how good they are when they arrive.

5.2 Optimize the Cross-Border Logistics System to Strengthen Supply Chain Collaboration Capacity

For the long-term problems such as high cost and damage of Chinese cross-border agricultural trade, it needs e-commerce companies to do two upgrades at the same time, and people involved need to further improve the construction of cross-border cold chain facilities. That means building up the physical logistics network and coordinating long-haul transport, warehousing management and last-mile delivery simultaneously. Relevant Governments should also support businesses in expanding their overseas warehouse networks from their side. And the enterprises may choose tactics such as

dividing into regional warehouses and having stock ready before customers place orders to make orders easier to fill and shorten how long it takes to deliver things. So the cross-border governments should work together to promote the digitalization of supply chains. They could help companies use smart tools such as demand prediction systems, supply chain management systems, and logistics visualisation platforms to improve their ability to manage inventories and coordinate with other companies. And so the industry can create a more stable, open, and effective system for exchanging goods across border by many parties participating and sharing information in real time.

5.3 Strengthen Brand Building and Overseas Communication to Improve International Market Competitiveness

Building a brand is what makes agricultural goods have an advantage over other goods in the world. Companies need to use the special features of their own products and the culture that comes from where they were made to make pictures of their brand that are different from others and show a lot about the culture. Take the brands that could emphasize ecological planting environment, traditional processing methods, regional cultural heritage etc. to stand out from the rest. And enterprises can also enrich the forms of brand display by various digital channels, such as high-quality short videos, interactive live streaming sessions, and cross-border variety show cooperation, etc., to enhance the overseas consumers' understanding and confidence in their products. Also, companies should adopt customized marketing plans according to the consumption traits of different countries and regions. It means changing how we tell stories about our brands, how we wrap things up in boxes, and what kind of help we give people when they buy something new to fit better with how people in different places like to eat and think about nice things. By making good use of the traffic analysis and big data tools given by overseas warehouses and cross-border e-commerce platforms, companies can greatly improve the accuracy and efficiency of their brand promotion activities.

5.4 Digital Technologies Empower Cross-Border E-Commerce Operations

Digital tech's strategic use is basically changing how efficient cross-border e-commerce is. For

individual companies, it requires that the content created by professionals is systematized, the live stream structure is improved, and the way people interact with the content is better. It fosters a closed-loop performance engine, constantly improving the whole process from ideas and manufacturing to aiming at delivering and converting.

This setting is one where the operation is data-driven by its very nature. Keep up the tough analysis of how well things are doing, how much people come and go, and what they buy. And it means constantly keeping an eye on small numbers about how much work gets done, how interested people are, and when they buy again because special warning signals spot problems. Insights are produced straight away which then directly affect and adjust product assortments so as to keep perfectly aligned with changing promotional paces.

E-commerce platforms act as ecosystem orchestrators and have equally important levers. They can democratize access to strategic data, such as enriched consumer profiles, trending keyword analytics, and cross-border ROI simulators, and establish dual-track support systems such as "cold-start" traffic pools for new merchants and content quality scores. It makes market experiment cheaper and safer.

Cross-border e-commerce platforms have the greatest ability to lead and create large-scale verifiable digital trust. Leading the creation of consortium blockchains will allow them to provide a permanent record of all the important information on the supply chain such as the current state of agriculture, safety certification, constant cold chain integrity and customs clearance through scannable QR codes or NFT certificates. One-click provenance system instantly solves overseas consumers' authenticity worries, strengthens brand value and abides by rules, thus creating a solid foundation for high-end markets and long-term trade development.

5.5 Build a Compound Talent Training System to Fill Capacity Shortcomings

A significant lack of skilled people has become the most important thing stopping cross-border e-commerce from growing for farm things. This capability gap goes beyond just having too few staff members; it means there's a big difference between what the world of computers and numbers needs now and how well we're

teaching people to do those kinds of jobs. To get past this obstacle will need no less than a three-pronged plan that smartly makes use of the different powers of government groups, business companies, and schools to make a strong, quick talent system together.

Governments have a unique position to orchestrate the basic structure that supports talent development. The government's part here is being the architect and caretaker of the enabling infrastructure; it's not just about throwing parties but creating integrated capability platforms. Instead of separate interventions, public efforts should form a continuous support system. It may include organizing local workshops about cross-border livestreaming, making clear how RCEP rules work, and giving step-by-step help to make farm goods uniform. Apart from training, the government has a more strategic role to build and maintain regional talent databases for cross-border e-commerce. These kinds of places wouldn't just have people listed there, they'd actually create communities by letting people share their workers and learn from each other's experiences.

In the enterprise, the paradigm for skill acquisition has to change radically: from sporadic, separate training events to a constant, workflow-integrated learning state. Move past theories and make competencies a natural part of your work flow. This calls for cross-border companies to develop learning systems that can be used right away: drills inside the company for writing live broadcasts and improving how they appear on camera, fast-paced analysis sessions to figure out what makes popular videos so popular, sandbox simulators to deal with unexpected problems in shipping things by boat, and fully immersive role-playing games to get familiar with important overseas cultural customs. And the basic idea is a tight, repetitive cycle of learn-apply-refine, so that cross-border operational and communicative agility isn't just something we're taught but something we do automatically.

Academia has two responsibilities; it must boost its own adaptive rate and erase the line between the classroom and the market. And the university curricula can't stay as still documents, they need to have built-in movement, formal ways to check and adjust what the programs want to do because e-commerce changes so fast. Course content itself needs a direct injection of practical realities:

special sections breaking down cross-border rules, unpacking content marketing plans, and teaching students how to properly evaluate agricultural goods' quality. But the biggest lever of change is a deep, structural industry-academia collaboration. Setting up joint training bases, creating studios together, and putting experienced corporate mentors inside academic programs are all important for turning theory into something you can see and touch. The dual benefits of having a business with a future ready, accurately skilled workforce that solves the problem at its root.

In the end, such a systemically focused talent capacity is not an auxiliary support but a strategic investment. Addressing the existing gaps across borders in logistics operations, content-based marketing, and navigating regulations will turn a major weakness into a lasting strength that drives the ongoing, steady growth of agricultural cross-border commerce.

5.6 Strengthen Government-Enterprise-University Collaboration to Build a Multi-Subject Participation Development Mechanism

Cross-border e-commerce development of agricultural products is situated at the confluence of several interrelated sectors including digital tech, agriculture, foreign trade, supply chains and education. The inherent complexity means that it can't be propelled by just one party, but rather needs to arise through the joint effort of various parties. Therefore, the success of the whole thing depends on improving the synergy in the "government guidance-enterprise leadership-university support" model.

The three parties work together through a planned division of labor and mutual exchange. Governmental part provides the basic enablers: consistent policy frameworks and available public service platforms which reduce obstacles and establish criteria. Enterprises are the main players in the market; they add necessary reality with real business situations and specific, changing ability needs. Universities fill out the system by taking on both jobs of growing flexible workers and making new ideas from studying things. But its full potential isn't reached just because all those pieces exist together, it's when they're actively working together. It is via the strategic sharing of resources – whether data, infrastructure, or expertise – and the intentional use of

complementary strengths that this model rises above a mere coordination framework. And such cooperation is the fundamental basis for guiding the cross-border agricultural e-commerce industry to develop in an orderly manner, standardization, and sustainability rather than haphazardly.

6. Conclusions and Implications

Regional Comprehensive Economic Partnership (RCEP) has brought about a new wave of development for Chinese cross-border e-commerce of agricultural goods. Social commerce is central to this change; especially short video marketing and live sales are reorganizing how things leave the country. These digital tools create a more direct and efficient link between "Chinese fields" and "global tables", thereby shortening supply chains and improving operations. The research has outlined the present situation and major problems in the sector over five connected areas: policy, supply chain, brand, international rules, and personnel. Following synthesis combines the related recommendations into a cohesive strategy.

Policy and Institutional Agility make up the bottom layer. RCEP gives a good institutional setup, but many businesses don't take full advantage of it. It's about turning policy benefits into action benefits. It calls for authorities to do more focused interpretations and simplify customs procedures so that the benefits can go straight onto the companies' books as lower costs and better efficiency instead of just staying on paper in formal agreements.

Operational core is that logistics and supply chains are indispensable. Agricultural products have a short shelf life and are time-sensitive; therefore, system strength is essential. Strategic priorities should encompass expanding cold-chain facilities, speeding up logistics flow, and incorporating digital tech into the supply network. These investments are necessary for guaranteeing stable transactions and dependable order fulfillment – the foundation of cross-border trust.

Building up a lasting brand equity turns into the strategic distinction in a busy worldwide market. Success is not just about how much we can sell, it's about getting noticed and paying more. To achieve this requires concentrating on creating a strong brand position, telling real stories about where things come from, and showing that what you say is true by having proof of good quality.

Here comes the novel means of social e-commerce communication, which provides a lot of ways to talk to people all over the world. To navigate the complicated web of international rules is a key ability for adapting to the market. Enterprises need to have a forward-looking fluency with respect to the rules of origin under RCEP, international food safety standards, and various regional compliance requirements. Enhancing abilities in certification procedures, label standardization, and general regulatory compliance is necessary for making the market entry process smoother and reducing the risk of operations.

Human capital challenge underpins all of them. There's a severe lack of skills for cross-border live streaming, content marketing, supply chain coordination, and regulatory navigation. To fill this gap needs a joint, many parties work together to develop talents. Businesses, governments and schools working together, aligning their courses, creating new ways to train people and sharing what they have will help make a big pool of workers who can keep the industry growing.

To put it simply, developing cross-border agricultural e-commerce is something that has many different parts and takes a long time to do. It depends on these four things changing at the same time: friendly places to work together, smart machines, all the parts working well together, and people who know what they're doing. As the policy environment becomes more mature and digital tools improve, the industry will be able to move from its first objective of "market access" to a more valuable stage of "market excellence". And this development, which allows Chinese agricultural goods to enter the world market with more worth and durability, is expected to give substantial and lasting support to the larger effort of agricultural modernization.

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