VOLUME I

Entrepreneurship for Sustainability

Edited by Amar Razzaq and Deyi Zhou

CBEC

Entrepreneurship for Sustainability

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Foreword

Foreword for the First Issue of Entrepreneurship and Sustainability

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In an era of accelerated industrialization and rising global income, the planet has seen a staggering increase in the production and consumption of non-degradable goods. These products, crafted under high temperatures and pressures, are resistant to natural decomposition, thus amassing in our environment post-use. The mounting pollution from these goods poses a formidable challenge to humanity, one for which a solution remains elusive. The irony lies in the fact that human progress itself has become a harbinger of potential self-destruction.

Moreover, intense competition, both at individual and national levels, exacerbates this issue by driving the scales of production and pollution to alarming heights, suggesting an unavoidable future trajectory.

Remarkably, we live in a world characterized by stark paradoxes: the coexistence of abject poverty and wasteful consumption, rampant unemployment juxtaposed with overproduction, and the stark divide between affluent and impoverished nations.

Our planet, unique in its vast expanses of water and a protective atmosphere that maintains a stable, mild temperature, stands as a bastion of life in the universe. This atmosphere shields us from harmful ultraviolet rays, facilitating the evolution of life. Despite enduring countless disasters over eons, it has shaped an environment where humans could thrive. As of now, we've yet to discover an alternate planet that could sustain life as Earth does. Having endured for billions of years, the Earth now faces the threat of severe damage within mere centuries due to our increasingly indulgent lifestyles.

Out of all life forms, humans are uniquely positioned to shoulder the responsibility of safeguarding the Earth.

As the world shrinks under the influence of economic globalization, the international supply chain and network govern the distribution and production of materials. Innovations within these supply chains could offer potential solutions to offset the effects of our global production and consumption patterns. Although such changes may not wholly achieve sustainability, they constitute an essential step towards it.

This journal seeks to serve as a repository for explorations and endeavors in this direction. We welcome all contributions, whether they're news, narratives, or analyses rooted in economic logic. Each year, we will acknowledge the most innovative solutions and breakthroughs from our pool of publications, highlighting them with certificates of excellence.

Furthermore, the journal aims to foster a community of like-minded individuals dedicated to environmental protection and social sustainability. An annual forum will provide a platform for sharing stories, insights, and perspectives related to these vital themes.

We extend an invitation to you all, hoping that our collective efforts can bring about meaningful change. We look forward to having more and more people join us on this significant journey.

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Editorial

Editorial

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Friends and Colleagues,

It is with great excitement that I present this inaugural issue of Entrepreneurship Sustainability. As a pioneering "free style journal," we embrace diversity of thought, background, and expression. What binds our community is a shared spirit of intellectual curiosity, social responsibility, and bold vision.

The pages ahead showcase contributions primarily from our core team members and long-time collaborators across various countries. In future issues, we hope to publish submissions from our forums and expand authorship to a broader range of stakeholders, including past and future participants, students, businesspeople, academics, and others enthusiastic about ecommerce and sustainability.

This first issue captures the collaborative spirit of our community in many forms—from formal research to informal musings, quantitative data to qualitative narratives, scholarly analysis alongside authentic voices from the field. We believe broad participation across disciplines advances understanding.

Our common purpose also shines through the eclectic mix of contents. Despite disparate styles and subjects, all contributions share a commitment to blending entrepreneurial innovation with social and environmental sustainability. This synthesis is essential as humanity navigates profound technological and societal transformations.

As editor, curating this issue provided inspiring reminders of the meaningful work we undertake together. Memorable moments from past forums and field studies came flooding back, reminding me of the passion and dedication of our community. I am honored and humbled to participate in this journey with you all.

Looking forward, I envision this journal will chronicle the ongoing growth of our community. May we continue learning from each other, pushing boundaries, and translating ideas into positive impact. Many challenges lie ahead, but united by audacious hope and concrete action, we will build a more just, resilient, and enriching world.

Onward!

Amar Razzaq

Managing Editor

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Article

The Origin Story of International CBEC Forums

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ARTICLE INFORMATION

Keywords: Cross-Border E-commerce, CBEC Forum, Alibaba, Rural Development, Belt and Road Initiative, China, Mongolia, E-commerce Education

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ABSTRACT

This article traces the origins of a pioneering cross-border e-commerce collaboration initiated by Professor Zhou Deyi and his team at Huazhong Agricultural University. It outlines Professor Zhou's inspirational vision, early influences, exploratory journeys across China, serendipitous experiences, and diligent efforts that laid the foundations for the first International CBEC Forum held in 2018. A vivid narrative captures how the team's curiosity was sparked, knowledge enriched, and focus crystallized during this genesis phase.

The Spark of an Idea and Bishan Farm Summer Camp

In hindsight, the genesis could be said to begin with Professor Zhou Deyi's unique teaching methods as a professor of economics at Huazhong Agricultural University in Wuhan, China.

In the summer of 2016, Professor Zhou led a group of student volunteers to a small farm in rural Suzhou for a summer camp. This was not an ordinary camp; it was the birthplace of a vision. The vision was inspired by the "Farm Worker's Spirit", a philosophy that Professor Zhou had cultivated over the years. The camp was a melting pot of farming, nature, and education, where students were encouraged to get their hands dirty in the soil while also teaching English to primary school students. This humble beginning, which fused practicality and academia, marked the inception of a journey that would lead to the creation of the International Cross-Border E-commerce (CBEC) Forums.

At the start of 2017, this journey took its first significant step. As a newly enrolled PhD student I increasingly became intrigued by Professor Zhou's unconventional teaching approach. Instead of merely focusing on theoretical aspects, Professor Zhou emphasized the practical application of economics to solve societal challenges. The Professor's unique approach stirred a sense of curiosity and ambition in the students. They were inspired to look beyond their textbooks and imagine the real-world impact they could have.

Figure 1: The Early Moments - Collaging inspirational times at the rural Bishan farm and thought-provoking classroom discussions.

First Revelations at Alibaba

This sense of curiosity was further ignited when Professor Zhou assigned his students a task to study reports from Alibaba Group. Through their exploration of Alibaba's rural Taobao program, the students got a glimpse of how e-commerce was revolutionizing the rural economy in China and reducing poverty. This was the team's first introduction to the power and potential of e-commerce.

By this time, the QQ group of Belt and Road Group for International Students, initiated by Professor Zhou and Li Teng, a prodigy of his, had already been established. The group served as a think-tank where international students from the Belt and Road countries discussed China's technological innovations and their potential global impacts. The group's discussions were instrumental in shaping the team's interest in e-commerce.

In 2017, the team took its first field trip to Alibaba Group's headquarters in Hangzhou, sponsored by

Professor Zhou. This visit was a pivotal moment as it provided the students with a first-hand experience of the inner workings of an e-commerce giant and its transformational impacts on rural economies. The exposure to Alibaba's operations and the rural Taobao program greatly enriched the team's understanding of e-commerce.

Figure 2: A Pivotal Exposure - Professor Zhou and students gaining valuable first-hand insights during their inaugural visit to Alibaba's headquarters in Hangzhou in 2017.

Crossing Paths with E-Commerce in Mongolia

In 2018, this interest took a more concrete shape when a Master's student, Chimka, from Mongolia chose to study online payment systems for her thesis. This decision set in motion a chain of events that would further shape the team's focus. Professor Zhou, accompanied by Li Teng, Chimka, and Altansukh, another student from Mongolia, visited Mongolia.

Figure 3:

Broadening Perspectives - Snippets from Professor Zhou's 2018 visit to Mongolia where he gained cross-border insights by attending a conference and exploring the landscape.

The team attended the 60th Anniversary of Mongolia University of Life Sciences and crossed the Er Ling Hao Tan Border City. The journey exposed them to a different perspective on e-commerce and its cross-border potential.

Hands-on Learnings across China

On their return, the team attended e-commerce training workshops at Huazhong Normal University and in Qingqing. These training sessions deepened their understanding of e-commerce and its implications. The team also visited Gansu province, where they connected with TaoShi, an e-commerce company focusing on alleviating rural poverty. This encounter led to a fruitful cooperation that enabled TaoShi to conduct an e-commerce training session for students at Huazhong Agricultural University.

Figure 4: Enriching Hands-On Learnings - The team attend e-commerce training workshops and visit TaoShi company in Gansu province to expand practical knowledge.

The Turning Point

In 2018, a turning point arrived when Professor Zhou was invited to speak at the China-Pakistan Economic Corridor Conference and visit Kashgar's Free Trade Zone. These experiences solidified his focus and led to the realization that it was time to bring together everything the team had learned into a pioneering initiative – the International CBEC Forum.

Figure 5:

Crystallizing the Vision - Professor Zhou's invited talk at the CPEC Conference and visit to Kashgar's Free Trade Zone cement his focus on catalyzing exchange.

Laying the Groundwork

Laying the groundwork for the first forum was a mammoth task. The team, mainly composed of agricultural economists, had to develop an understanding of the local e-commerce scene before they could organize the

forum. They undertook surveys of various e-commerce companies in and around Hubei, including numerous Taobao villages. These explorations provided them with a comprehensive understanding of the rural e-commerce scene in Wuhan and the rest of China.

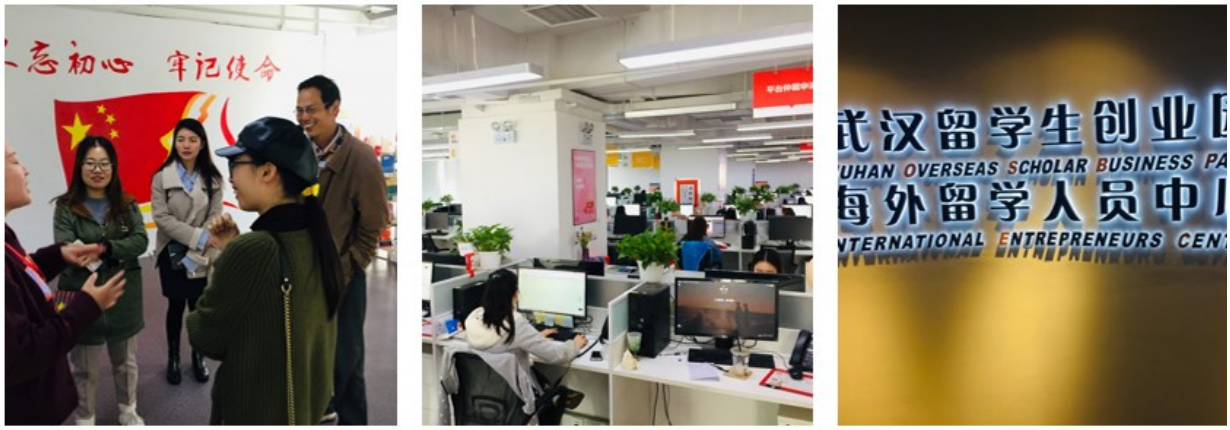

Figure 6: Laying the Foundation - The team undertakes extensive surveys of e-commerce companies and Taobao villages in Hubei to prepare for catalyzing exchange.

The First CBEC Forum and Beyond

In 2018, the first International CBEC Forum was held in Wuhan. The forum, which saw participation from numerous Belt and Road countries, was a resounding success. This success marked the culmination of years of exploration, learning, and hard work.

Figure 7:

A Vision Realized - Participants from China and beyond come together at the inaugural 2018 CBEC Forum in Wuhan, capping a journey of diligence.

Conclusion

The story of the International CBEC Forums is a testament to the power of curiosity, vision, and dedication. It demonstrates how a small spark, when nurtured with the right experiences and efforts, can grow into a powerful force that can revolutionize entire sectors. It is a story of how the vision of one man, coupled with

the dedication of a team, led to the birth of a pioneering initiative in the world of e-commerce.

Figure 8: Exploring E-Commerce Roots and Forging Ties - Surveys of Taobao villages to understand successes and the core CBEC team binds together to make vision reality.

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Article

The Evolution from Formality to Informality: A Journey Through Time

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ARTICLE INFORMATION

Keywords: Cross-Border E-commerce, Training, Informality, Sustainability, Future Cooperation, Micro-finance, Agricultural Ecommerce, Forum Sustainability

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ABSTRACT

This article presents a reflective narrative of the Cross-Border E-commerce Research Group's journey, highlighting its transition from formal to informal approaches in training and forums. It encapsulates the vision for future collaborations, emphasizing action over dialogue, and suggests innovative methods for maintaining forum sustainability.

1. Retrospective: Past Forums and Trainings

Since the inception of the first Cross-Border E-commerce (CBEC) Forum in 2018, held in Wuhan, we have successfully organized four diverse forums in Wuhan, Faisalabad, Bangladesh, and Jinzhou respectively. In addition, three training projects were undertaken during this period.

In 2018, Huazhong Agricultural University initiated the "Belt and Road" China-Pakistan International Forum on Cross-border E-commerce, focusing on the development of cross-border e-commerce and agricultural digital services. The forum was envisioned as a platform for mutual exchanges between governments, universities, enterprises, associations, and research institutions in countries and regions along the "Belt and Road". The goal was to address the developmental challenges of cross-border e-commerce along the "Belt and Road", particularly the China-Pakistan corridor. The forum facilitated academic discussions and exchanges on cross-border e-commerce and aimed to leverage the resources of overseas students from the two places through universities. This approach was designed to address the trust deficit in cross-border e-commerce transactions, thereby improving their efficiency.

This journey of collaboration and mutual learning has been supported immensely by our friends, students, and colleagues, including Rizwan, Azka, Amar, Wangqing, Liteng, Liang Wanqi, Saqib, Lacina, and

countless others. We have devoted significant resources to this initiative, and the outcomes have been gratifying. The largest endeavor was made in 2022, where we invested 150,000 RMB in the ecommerce and micro-finance experiment in Kenya and the training in Pakistan. In 2023, Huazhong Agricultural University and Karakoram International University jointly launched the "2023 6th 'Belt and Road' Cross-border E-commerce International Forum", marking another significant milestone in our journey. However, this is only the beginning of a long journey towards enhancing cross-border e-commerce efficiency and fostering international collaborations. Following is a pictorial review of some of our significant activities.

Figure 1: The inaugural 2018 CBEC Forum in Wuhan.

Figure 2: The 2019 CBEC training for postgraduates.

Figure 3: The 2019 CBEC training for postgraduates.

Figure 4: The 2019 CBEC Forum held in Faisalabad, Pakistan.

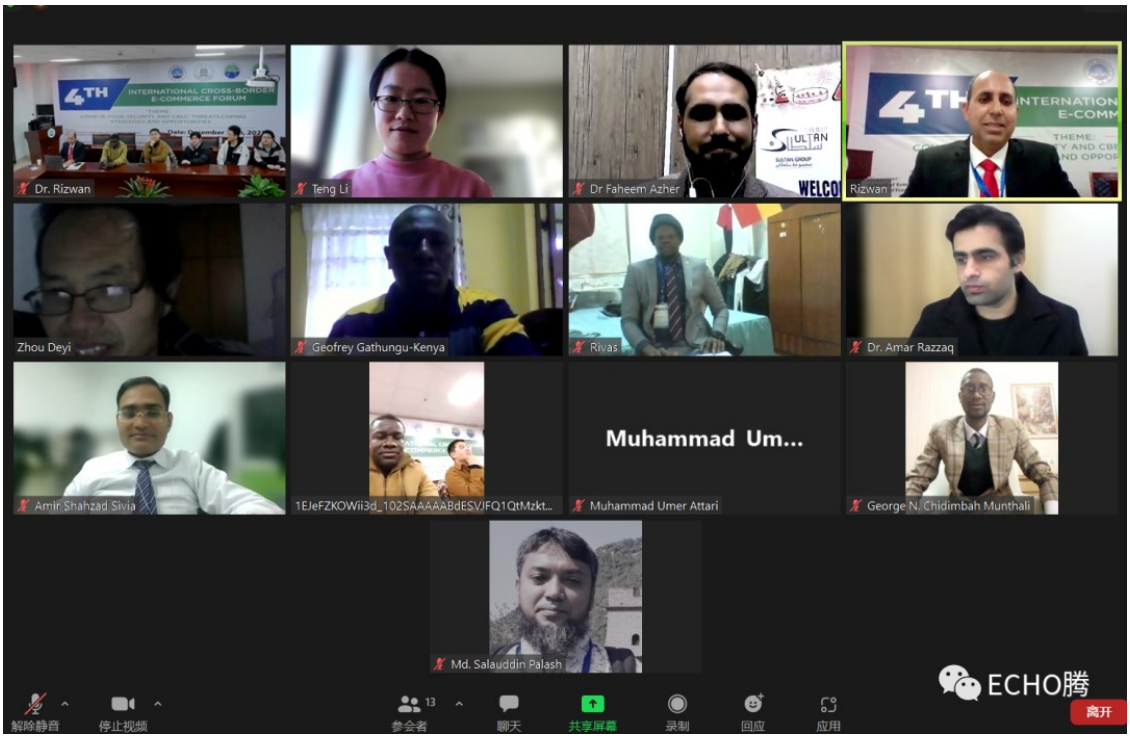

Figure 5: The 2020 CBEC Forum conducted in Bangladesh.

Figure 6: The 2021 CBEC Training Project for trainees from Kenya, Bangladesh, and Pakistan

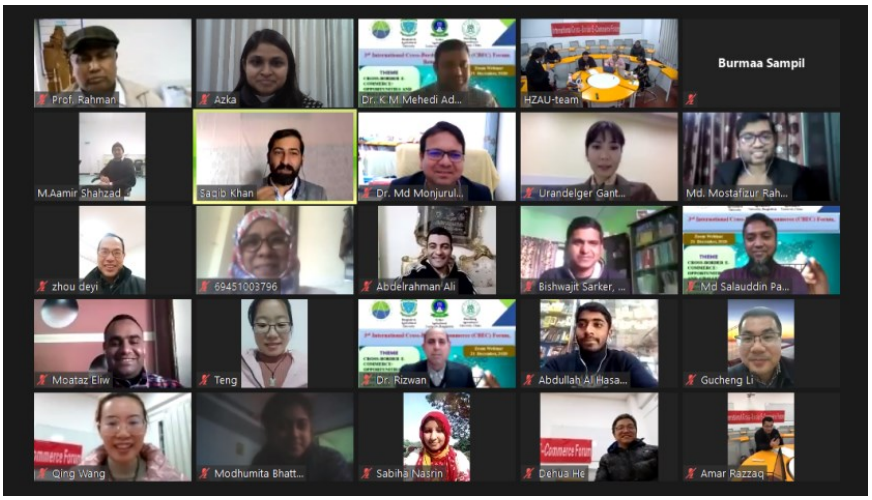

Figure 7: The 2021 CBEC Forum at Changjiang University, Jinzhou.

Figure 8: The 2022 Training Project for trainees from Gilgit, Pakistan.

Figure 9: The 2022 Training Project for trainees from Gilgit, Pakistan.

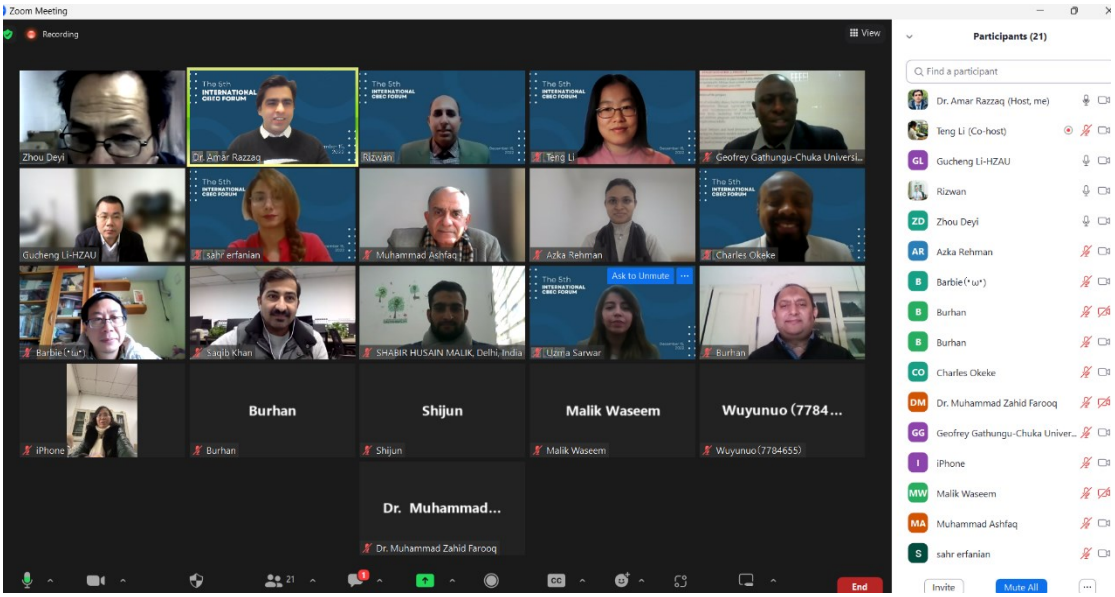

Figure 10: The 2022 CBEC Forum at Wuhan organized by Huazhong Agricultural University and Zhongnan University of Economics and Law

2. Prospects for Future Cooperation

Moving forward, our focus will shift towards more pragmatic actions rather than mere discussions. In 2023, we aspire to make substantial strides in the micro-finance sector in Kenya. Our vision extends to promoting the use of ecommerce for small and sustainable agricultural tools and machinery in Mozambique, Pakistan, and Southeast Asian countries. This initiative aims to aid small farmers in improving productivity, environmental protection, and poverty alleviation.

In a step towards this direction, this year's forum is co-hosted by Huazhong Agricultural University, Kashgar Regional Bureau of Commerce, and Longnan E-Commerce Development Bureau. We're fortunate to receive additional support from co-organizers and sponsors including Karakoram International University and Kashi University. The forum is designed as a platform for academic discussions and deliberations on cross-border e-commerce, particularly focusing on cooperation in Kashgar and its neighboring regions. We're committed to leveraging the potential of overseas students through universities, to bridge the trust deficit in cross-border e-commerce. This collective effort is aimed at enhancing the efficiency of cross-border transactions in the relevant regions.

3. Ensuring Forum Sustainability: Proposing a Shift in Approach

With respect to the forums, we are open to someone taking over and continuing in the formal manner. However, if this does not materialize, I propose a shift from our conventional methods. Instead of formal forums, we could cultivate more informal and engaging interactions among youth in a 'club' setting, built

around shared interests.

In 2023, I have embarked on a personal short video program on Today’s Headlines. We also have the 'Bulletin of International Supply Chain Innovation' journal, which could serve as a platform to document our achievements through videos, pictures, and short essays.

Possible future initiatives include an informal annual forum at the end of the year to share our progress and achievements. We could also leverage our WeChat group for impromptu video meetings as needed.

I urge all participants to contribute their unique insights and ideas to ensure the sustainability of the forum.

In closing, I extend my heartfelt gratitude to everyone for their contributions over the past five years.

Wishing you all the best,

Deyi Zhou

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Article

Tracing the Transformational Journey: A Comprehensive Review of Five Pioneering Cross-Border E-Commerce Forums

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ABSTRACT

This review article traces the inspirational journey of five Cross-Border E-Commerce (CBEC) forums held between 2018-2022 under the leadership of Professor Zhou Deyi. It outlines the forums' genesis, gradual evolution, and expanding impacts across China and Belt and Road countries. Each forum is reviewed in-depth, capturing the meticulous planning, collaborations, and key outcomes that underpinned their success. The article illuminates how the forums have built a close-knit CBEC community and accelerated research, training and entrepreneurship year-on-year through perseverance.

Introduction

The annual International CBEC Forums represent pioneering efforts spearheaded by Professor Zhou Deyi and his dedicated team to nurture exchange between China and Belt and Road countries around harnessing e-commerce's potentials. The five forums held so far illustrate an inspirational journey of diligent conceptualization, collaborations, on-ground execution and eventually, national and global impacts. This article comprehensively reviews the genesis, progress and outcomes underpinning each forum.

First CBEC Forum - Laying the Foundation in Wuhan, China

As the inaugural forum held in November 2018 at Huazhong Agricultural University in Wuhan, China, meticulous planning went into curating an immersive experience for participants while laying the foundation for future forums.

The forum was marked by a spirit of knowledge sharing and mutual learning. Participants engaged in robust discussions on various aspects of e-commerce, including its potential to foster innovation, its role in promoting international trade, and the challenges and opportunities it presents. The forum also emphasized the importance of building networks and partnerships among Belt and Road countries to promote CBEC.

Figure 1: Highlights from the First CBEC Forum 2018

The team demonstrated their pioneering spirit by organizing a diverse mix of novel activities. Their efforts to involve subject experts were visible through 8 academic presentations analyzing e-commerce landscapes across countries like China, India, Pakistan, Bangladesh, Africa and Kenya. To balance theory with practice, they arranged hands-on visits to two innovative companies - Loulanmiyu, specialized in Xinjiang dried fruits, and a cultural enterprise applying traditional Chinese values in modern management.

However, the highlight was organizing a field visit to the headquarters of e-commerce giant Alibaba Group in Hangzhou, China. Participants toured selected facilities to gain first-hand insights into operations within a photo studio and customer service department. This provided a unique peek into the processes powering the biggest e-commerce success story. The team also facilitated a tour of Yiwu International Trade City for interactions between participants and local Indian, Pakistani businessmen based there. These visits brought theoretical discussions to life.

As the forum concluded, proposals were put forth for recurring forums, student exchanges and "learning by doing" e-commerce training initiatives, sowing seeds for future growth. The first forum's mix of activities

sparked great enthusiasm amongst participants about the potential for cross-border collaborations.

Key Highlights:

- Expert presentations on e-commerce landscapes
- Visits to experience e-commerce company operations in Wuhan, Hangzhou, and Yiwu
- Proposals for student exchanges and recurring forums
- Declaration of International Farm School Alliance

Second CBEC Forum - Building Partnerships in Pakistan

The second forum organized in Faisalabad, Pakistan in December 2019 demonstrated significant evolution through context-specific planning and forging partnerships with Pakistani universities. Extensive surveys conducted across Pakistan reflected the team's sincerity to deeply understand on-ground realities before formulating an agenda.

The team displayed great effort in embarking on an on-ground survey to engage local communities, especially in the remote Gilgit-Baltistan region. They travelled from Beijing to Islamabad, and then visited Gilgit where they interacted with diverse stakeholders including government officials, university students and villagers. The aim was to assess the feasibility of potentially replicating China's successful Taobao Villages model in Pakistan.

One of the key themes of the forum was the exploration of successful e-commerce models, particularly the Chinese online business model, Taobao. Participants discussed the success factors behind Taobao, including its business model, marketing strategies, and customer engagement practices. They also explored how elements of this model could be adapted and implemented in other countries.

The forum itself witnessed high-quality academic sessions. Experts from partnering universities presented research analyzing e-commerce in participating countries like Pakistan, Mongolia, Kenya and Egypt. The launch of the Sino-Pak CBEC Association marked a historic milestone, formalizing avenues for future collaboration. Interactions were also arranged between international participants and Pakistani university students to involve youth.

In the concluding days, the team met leaders in Islamabad to discuss potential areas for joint initiatives and research projects. This reflected their sincere efforts to translate discussions into actionable policies and programs.

Key Highlights:

- Surveys across Pakistan including remote areas such as Gilgit

- Launch of Sino-Pak CBEC Association
- Interactions with students and policymakers across several Pakistani cities

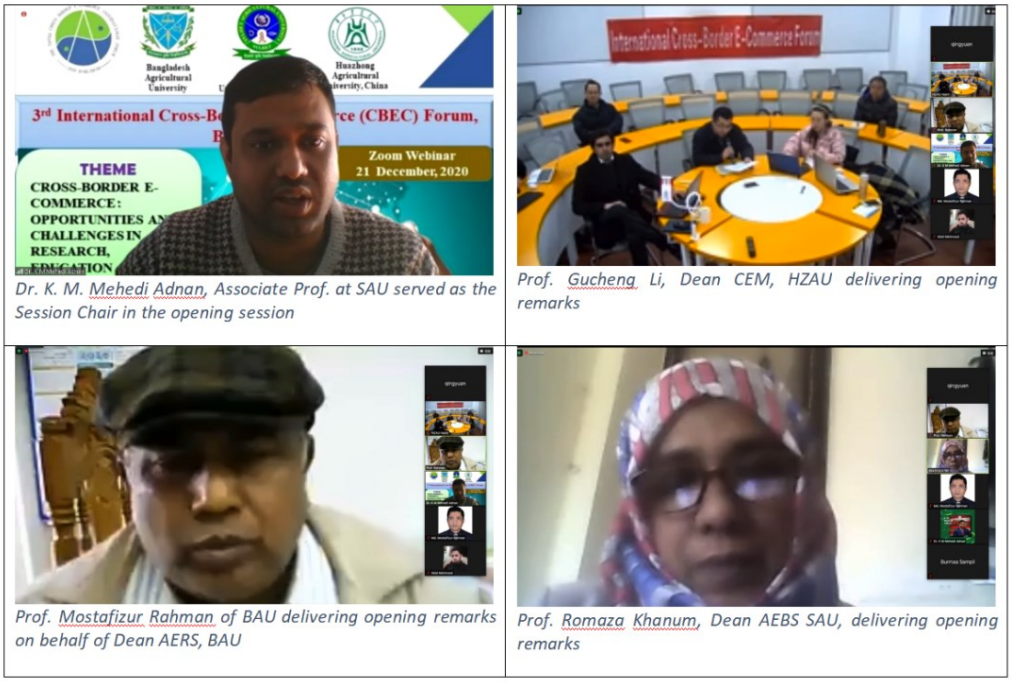
Figure 2: Highlights of the Second CBEC Forum 2019

Third CBEC Forum in Bangladesh - Undeterred by the Pandemic

As the COVID-19 pandemic disrupted physical gatherings in 2020, Professor Zhou spearheaded innovative adaptations by organizing the third forum entirely online in collaboration with partners in Bangladesh. Meticulous planning ensured the 4 hour agenda seamlessly connected over 100 diverse participants across 7 interactive sessions on emerging e-commerce topics.

The forum focused on the potential of CBEC to foster international cooperation and development.

Participants discussed the opportunities and challenges of CBEC, sharing their experiences and insights. The discussions underscored the importance of research and training in promoting CBEC and highlighted the potential of e-commerce to drive economic development in Belt and Road countries.



Dr. K. M. Mehedi Adnan, Associate Prof. at SAU served as the Session Chair in the opening session

Prof. Gucheng Li, Dean CEM, HZAU delivering opening remarks

Prof. Mostafizur Rahman of BAU delivering opening remarks on behalf of Dean AERS, BAU

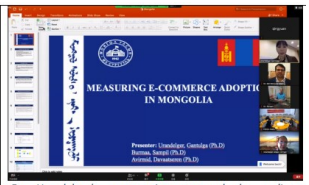
Prof. Romaza Khanum, Dean AEBS SAU, delivering opening remarks

Professor Ding Shijun of Zhongnan University of Economics and Law presenting his research project

Professor Ding Shijun of Zhongnan University of Economics and Law

Mr. Mostafizur Rahman of Bangladesh Agricultural University presenting his research

Dr. Urandelger Gantugla of National University of Mongolia presenting her research paper on e-commerce adoption



Dr. Urandelger's presentation captured the audience attention

Figure 3: Highlights of the Third CBEC Forum 2020

The team demonstrated agility in setting up sessions customized for Bangladesh by involving their

universities. Local experts presented on niche areas like factors influencing e-commerce adoption and women-led e-commerce initiatives, enriching discussions. Participants from China, Bangladesh, Pakistan, Mongolia, Kenya and Egypt shared experiences and ideas across time zones.

Despite the uncertainty posed by the pandemic, the team's commitment shone through their detailed proposals for 2021 activities like training programs and joint research projects. Their perseverance ensured the disruptions did not deter the forum's progress.

The forum also facilitated the establishment of partnerships for future collaboration. Participants, particularly from Bangladesh, expressed interest in partnering with Chinese institutions for research and training in e-commerce. These partnerships promised to offer mutual benefits, promoting knowledge exchange and capacity building in e-commerce.

Key Highlights:

- Virtual event with 7 sessions and 100+ participants
- Context-specific focus on Bangladesh
- Proposed 2021 plans showcasing commitment

Fourth CBEC Forum - Forging Ahead in Jingzhou, China

The return of the in-person forum in Jingzhou, China in December 2021 after pandemic disruptions reflected Professor Zhou's inspirational leadership in guiding the team through uncertainties. His efforts fostered the team's unity and contribution, despite members being spread across China and Pakistan.

In line with emerging needs, discussions centered on how CBEC could address food security challenges and the impacts of COVID-19. Dedicated planning by Professor Zhou resulted in engaging sessions like the academic discussion on supply chain research and the business session where e-commerce enterprises shared case studies.

One of the key outcomes of the forum was the establishment of the Belt and Road Center for Rice Technology Extension and Training (BRC-Rice). This center aims to promote research and training in rice technology, with the ultimate goal of enhancing food security in Belt and Road countries.

The team also displayed commitment to introspect and improve further. They identified key challenges faced such as communication gaps and limitations of virtual collaboration. This demonstrated their maturity to learn from setbacks. Under Professor Zhou's guidance, the team reached greater clarity on working together for upcoming forums.

Key Highlights:

- United team efforts across geography
- Addressed food security and pandemic challenges
- Commitment to introspect on improving collaboration

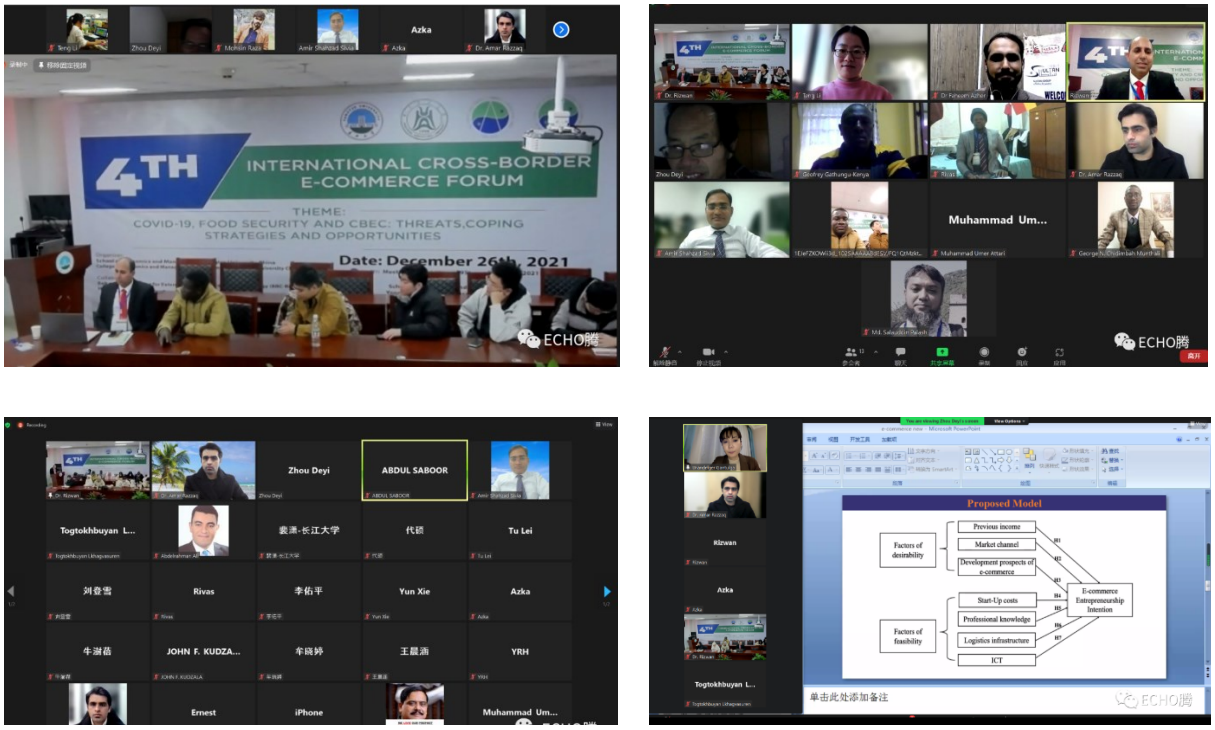


Figure 4: Highlights of the Third CBEC Forum 2021

Fifth CBEC Forum - Expanding Horizons in Wuhan, China

The fifth forum organized in Wuhan, China in December 2022 highlighted the team's success in expanding their collaboration horizons. Joint organization with the prestigious Zhongnan University of Economics and Law illustrated the forum's growing recognition.

Through persistent efforts, Professor Zhou's team put together an impactful one-day agenda focused on food security, poverty and e-commerce in Belt and Road countries. Their expanding network was visible in speakers representing China, Pakistan, Bangladesh, Kenya, Mongolia and more.

The forum also highlighted the potential of CBEC to facilitate South-South cooperation. Participants discussed various aspects of CBEC, including its role in promoting trade, its potential to drive economic development, and the challenges and opportunities it presents. The discussions underscored the importance of international cooperation and knowledge exchange in promoting CBEC and addressing global

challenges.

The team also displayed their evolution from practical learning to research leadership. Alongside industry case studies, they organized paper presentations and panel discussions analyzing field survey findings and latest insights from national policies and global trends.

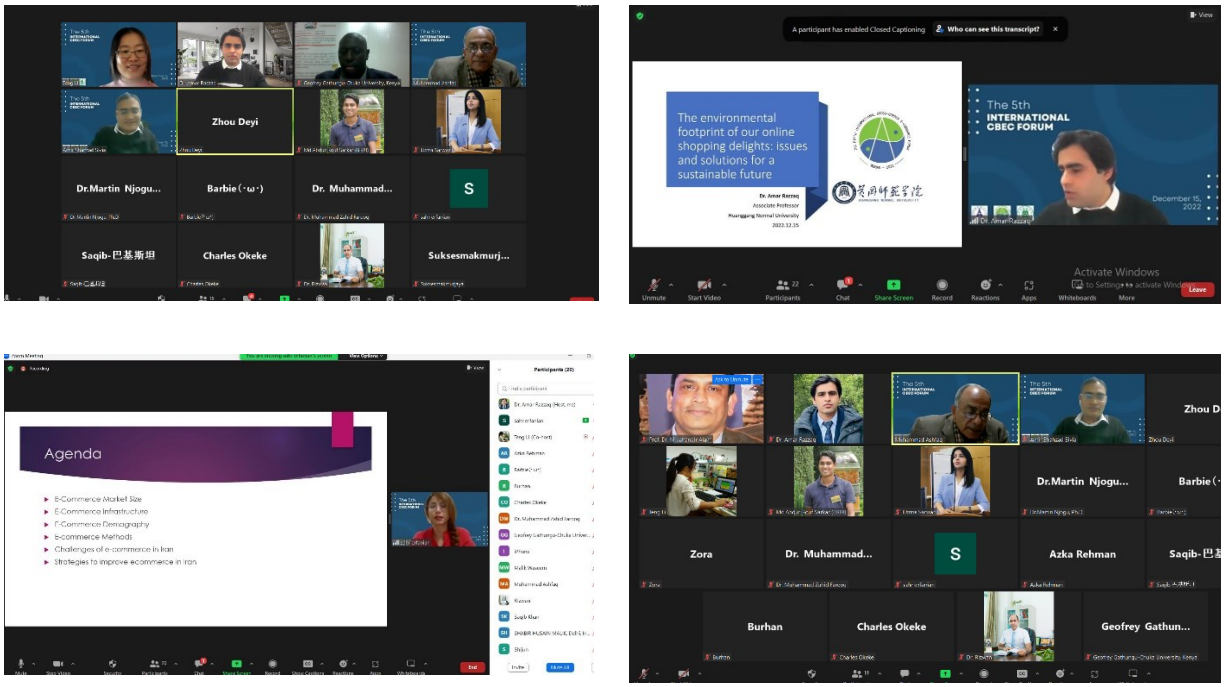


Figure 5: Highlights of the Third CBEC Forum 2022

Moreover, the forums' knowledge impacts were amplified by commitment to publishing select proceedings through the forum's own journal and media platforms. Cumulatively, these efforts highlighted the team's success in unlocking the forums' wider potential.

Key Highlights:

- Partnership with Zhongnan University of Economics and Law
- Focus on research and national policies
- Knowledge dissemination through publications in the Forum's own journal

Conclusion

In conclusion, the journey of five CBEC forums led by Professor Zhou Deyi represents an inspirational story of perseverance, collaboration and evolution amidst uncertainties. The team has progressively nurtured a pioneering platform through their diligence in conceptualizing novel agenda, investing time in meticulous planning, and building expansive partnerships across industry-academia-government-youth.

The forums today have grown into a close-knit CBEC community accelerating research, training and entrepreneurship year-on-year. As more countries look Eastwards for growth opportunities, these forums hold the promise of catalyzing such collaborations for shared prosperity.

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Entrepreneurship for Sustainability

Article

Microfinance Credit and Its Role in Small Agricultural Machinery Adoption: A Case Study from Chuka Sub-County, Kenya

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ABSTRACT

Agriculture plays a pivotal role in poverty alleviation, offering food security and income generation opportunities. However, in Kenya, agricultural productivity is hindered due to inadequate financing, particularly for small-scale farmers. Microfinance availability to these farmers can significantly enhance agricultural output per unit area. This can be achieved through the provision of small-scale, cost-effective agricultural machinery to streamline farm activities such as land preparation, planting, weeding, and postharvest value addition. This study was conducted in Chuka sub-County in Tharaka Nithi County and investigated the demand and preferences for small agricultural machinery among smallholder farmers engaged in agribusiness activities. Data were collected through a meticulously prepared and pre-tested questionnaire. Utilizing the logit model, the study examined factors influencing the decision to procure credit, with the dependent variable being the decision to secure credit for agribusiness enterprises. The findings revealed that membership in a group significantly influences access to microfinance services. However, it was noted that farmer groups struggle to accumulate substantial funds, limiting the amount each member can access and impeding their ability to purchase necessary farm machinery. The majority of respondents saved with their farmer groups on a monthly, individual basis but lacked access to small agricultural machinery. This circumstance led to increased labor in agricultural activities. Despite this, farmers expressed a willingness to finance the acquisition of small agricultural machinery, offering livestock, chattels, and title deeds as potential collateral.

Background Information

Agriculture can help reduce poverty, raise incomes, and improve food security for 80% of the world's poor, who live in rural areas and work mainly in farming (World Bank, 2021) through the provision of food products. The development of any nation requires healthy, sustainable, and inclusive food systems that produce quantity and quality crop yields. In developing countries like Kenya, more than 65-70 percent of the population depends on agriculture for its livelihood. However, the agricultural growth rate has been

constrained by increasing population growth, rural-urban migration, shrinking farming area, climate change, high input prices, and water shortages among other factors. Sustainable agricultural productivity through the closing of the yield gap requires the adoption of new approaches like seed sector reforms, input subsidy, mechanization, revamping extension services, access to credit, increasing research funding, improving postharvest management, value-chain development, and crop zoning among others. Agricultural productivity promotes the economic development of an emerging nation in several ways by increasing the food supply for domestic consumption, providing the raw material for industrial use, expanding the domestic markets for the manufacturing sector, increasing domestic savings and foreign exchange earnings from agricultural exportation (Anyanwu et al. 1997).

In Kenya, agricultural productivity in most parts of the country is still lagging with huge proportions of arable land remaining uncultivated due to lack of agricultural financing resulting to high unemployment. Financing small-scale agriculture through cooperatives, microfinance institutions or the banking system is crucial for the realization of quantity and quality yields. Commercial agriculture requires huge capital and financial investments to purchase inputs like land, machines, fertilizers, pesticides, and seedlings (Ngong et al., 2022) as the availability of these inputs with the right combination of labor increases agricultural productivity (Zakaria et al., 2019). However, the challenging issue is access to agricultural financing required for agribusiness investments to boost and sustain agricultural productivity and meet the current food demand trends. Agricultural financing to small-scale farmers can be provided in terms of microfinance. After quickly expanding, most microfinance institutions are found in Asia, South America, and Africa, with the majority of clients being women and small farmers in rural areas with the main goals being to promote financial inclusion, women´s empowerment, and the development of the rural communities of small farmers (Abella, 2021). Microfinance encompasses many services that include but are not limited to, microcredit, micro-savings, microbanks, micro remittances, micro guarantees, money transfers, and microinsurance (Armendáriz and Morduch 2010). Microfinance possesses the power to alleviate smallholder farmers' poverty by providing agricultural financial services to small-scale farmers who are not favored by conventional financial products available in the banking sector and are at risk of financial marginalization.

Microfinance can make small loans to smallholder farmers that can be repaid in installments after the sale of agricultural products is supported. Microfinance agents or institutions can provide small amounts of money or microloans to poor small-scale farmers in rural, semi-urban or urban areas to enable them to raise finances to facilitate the use of improved farming practices like securing agricultural inputs and result to sustainable farming that raises their income levels and improve living standards. Further, social impact investors who can have private businesses can be early movers to intentionally invest in support of

vulnerable farming communities and provide them with private loans. These informal financial markets can also act as a residual option to provide agricultural finance. Microfinance can be used to assist hundreds of millions of vulnerable small-scale farmers and thus play a key role in stimulating entrepreneurial initiatives, improving agricultural productivity, food security, and poverty alleviation in developing economies, especially in Africa and Asia. The microfinance credit can be to a group or individual farmer. Repayment procedure can be such that where individual farmers are given the credit in case one group member fails to repay their loan, everyone in the group would risk their line of credit, which could be suspended or loaned amount reduced The role of microfinance in financial systems, whether global or local, is to provide financial services and a substantial flow of finance to the economically marginalized populations often neglected by the formal financial sector (Kurmanalieva et al. 2003). Microfinance is thus an important instrument to poverty reduction, job creation, gender empowerment, economic growth, social inclusion, and eventually contributing to social development (De Koker and Jentzsch 2013). Access to microfinance credit can help reduce poverty in the short-term, which disrupts the cycle of poverty by making money available to those not in formal employment and facilitate potential business opportunities.

In recent years China has developed a new model of cooperative finance, which has the following characteristics; Local people (especially ones with financial management skills) constitute as the management team of microfinance, project evaluation, farmer training, project monitoring and assistance, money recovery; Multiple sources of funding where local farmers (especially elder villagers)+ local rich and distinguished entrepreneurs + local government+ external (or international) partners or NGO. But only share of local farmers can have dividends from their share as their pensions; Charge reasonable interest so that the loan can be used by local people (members of cooperatives); Except the cash, other physical capital like houses, lands of farmers, agricultural products can be evaluated and invested as the share of farmers; and Collective mortgage, group meeting are employed to reduce the risk of bad loan. However, limited studies have been conducted in Kenya to determine the feasibility role microfinance credit can have on agribusiness development. Given the time lag in return and repayment of microfinance credit to agricultural investment and the changing factors of production, it is important to determine the impact of provision of microfinance credit on agricultural productivity to supply information to national and county governments, microfinance institutions and farmers.

Microfinance credit may have an arrangement where they “bring the bank to the people”, which involves traveling to the villages themselves and meet with people to provide them with their services and also visit current borrowers in order to check the state of their businesses (Abella, 2021). However, microfinance credit has become riskier and defaults are more frequent, with just a few of the microfinance institutions being able to use restrictive measures to their advantage. The aim of the study was be to examine the impact

of microfinance on agricultural productivity in smallholder farms in selected sub-Counties in Kenya. The study assisted in answering the following questions; Why microfinance is needed and its role in reducing poverty? Could it be that smallholder farmers who participate in microfinance credit are more efficient than those who do not participate in agribusiness development? Could it be that smallholder farmers who participate in agricultural finance through microfinance credit are more efficient than those who participate through mainstream commercial banks/institutions? What are the determinants of agribusiness development for smallholder farmers in Kenya? What transaction costs, information between borrowers and lenders (the content of the credit deal), or risks come with the provision of microfinance credit? The answers will help in the development of comprehensive and complementary microfinance credit policy direction in different regions of Kenya through suggestion of productive lending schemes.

Objectives

i) To assess farmers' need for small agricultural machines in Chuka Sub-County

ii) To assess farmers' preference for microfinance credit for small agricultural machinery

Research Questions

i) What is the level of farmers' need for small agricultural machines in Chuka Sub-County?

ii) What is the level of farmers' preference for microfinance credit for small agricultural machinery?

Methodology

Study Site

The study was conducted in smallholder farms in Chuka Sub-County, Kenya.

Population, Sampling Frame, Sampling Procedure, and Data Collection

The target population of the study was the smallholder farmers who have a registered group that specializes in agribusiness activities in Chuka Sub-County, Kenya. The beneficiaries of microfinance (microcredit) were considered together with non-beneficiary smallholders. A multi-stage sampling technique was employed. The first stage involved the stratification of farmer groups according to the type of agribusiness activity like horticultural crops, poultry, dairy goats, rabbits, and so on. The second stage followed the purposive selection of microfinance participants (micro-borrowers) with the assistance of the baseline survey data from the microfinance service providers. Third, farmers in each stratum were randomly selected and interviewed using a structured and researcher-administered questionnaire. Both microfinance beneficiaries from microfinance credit and commercial banks together with non-beneficiaries of microfinance in the selected areas were interviewed. The sample included at least 150 smallholder farmers

clustered into 100 beneficiaries and 50 non-beneficiaries in each sub-County for comparison purposes. The study used a stratified random sampling procedure to provide a better representation of the target population by ensuring that every agribusiness group within the total sample is properly represented, for better coverage of the population.

Research Tool

A detailed questionnaire was prepared and pre-tested for data collection. The questionnaire included questions about household characteristics microfinance (microcredit) participation, input (land, labor, fertilizer, seed, and irrigation), and output information of farm activities and their prices.

Data Collection and Analysis

This study used an ex post facto (after the event) research design utilizing secondary data from small-scale groups that have received microfinance credit for agricultural finance and data collected was analyzed using descriptive statistics where the mean, maximum, minimum and standard deviation values were applied to check the results.

The Analytical Framework

In studies where the dependent variable (Yi) is dichotomous in nature, different regression models can be used like the Linear probability model, logit, and probit. According to Mohammed and Ortmann (2005), the logit model is based on the logistic cumulative distribution function and its results are thus not sensitive to the distribution sample attributes when estimated by maximum likelihood. This study used the logit model to analyze the factors that influence the decision to procure credit in that it provides the advantage of predicting the probability of a farmer procuring credit or not. The dependent variable is the decision to procure credit for agribusiness enterprises. The dependent variable is binary thus, 1=Procuring credit (Beneficiary of microcredit) and 0= Procuring credit (Non Beneficiary of microcredit). Therefore, the logit model is presented as

$$p_t = \frac{1}{1 + e^{-z_i}} = \frac{1}{1 + e^{-(\alpha+\beta_1 x_1+\beta_2 x_2+\cdots+\beta_n x_n)}}$$

Where p_t denotes the probability that a farmer procures credit for agribusiness enterprises. z_i is the weighted sum of farmer characteristics ($\mathbf{X}_i$).

The Impact of Microfinance on Agricultural Productivity: Endogenous Switching Regression Model (ESRM)

This research investigated the impact of farmers' access to credit on agricultural productivity. ESRM in this study specifically corrects for any possible sample selection bias which may arise from other

interventions that provide multiple services to farmers in addition to credit. The model specifies a decision process and the regression models associated with each decision option, and it is used to address issues of self-selection and the estimation of treatment effects when there is a non-random allocation of subjects to treatment and non-treatment.

Table 1: Variable Definition and Description

Variable	Definition
AGE	The age of the household heads in years
AGE2	Square of the age of household head
CREDITACCESS	Dummy = 1 if farmer has access to credit
RENTEDLAND	Dummy = 1 if the farmer rented the land for farming
LANDPRESS	Pressure on the farm land calculated as total farm size divided by the household size
HHSIZE	The total household size (number)
ACCINFOASSET	Dummy = 1 if the farmer has radio, mobile phone or television set, 0 otherwise
LAND	Land size
DEPENDRATIO	The ratio of dependents to the total household size
TTLU	Total livestock unit/ Crop unit
EDU	Years of formal education, 0 otherwise
GENDER	Dummy = 1 if the household head is male

We first specify the binary decision choice of farmers' access to credit conditional on observed covariates using a Probit model as follows:

$P_i^* = \beta Z_i + \varepsilon_i$

$P_i = 1$ if $P_i^* > 0$

$P_i = 0$ if $P_i^* \leq 0$

Due to the selection biases, the farmers are believed to experience two regimes as follows:

Regime 1 (Beneficiary of microcredit): $G_{1i} = \lambda_1 H_i \phi_1 C_{1i} + \nu_{1i}$

Regime 2 (Non Beneficiary of microcredit) $G_{2i} = \lambda_2 Hi \phi_1 C_{2i} + \nu_{2i}$

where G_{1i} and G_{2i} are the productivities of the farmers in regimes 1 and 2, respectively. H_i represents a vector of exogenous variables which are hypothetically assumed to determine the productivity function. ϕ_1 , and ϕ_2 are the parameters to be estimated, and ν_1 and ν_2 are the error terms. The error terms are believed to have a trivariate normal distribution, with zero mean and non-singular covariance matrix.

The empirical equation of the ESRM to be estimated is the demand of credit function, which is a Probit regression and production function. The access to credit decision equation is specified as follows:

CREDITACCESS = f (AGE, AGE2, EDUC, NFINC, HHSIZE, GENDER, DEPENDRATION, TTLU,

LAND, ACCINFOASSET, OFFFARMINC, INSTITUTEREL)

The dependent variable is binary taking the value of 1 if the farmer has access to credit and 0 otherwise.

The separate productivity function for the farmers that have access to credit and those that did not have access to credit is as follows:

Ln (PRODUCTIVITY) =f (AGE, AGE2, EDUC, NFINC, HHSIZE, GENDER, DEPENDRATIO, TTLU, LAND, ACCESSINFOASSET, OFFFARMINC)

This information is provided in Table1.

Results

Empirical Analysis

The survey sought to establish the socio-demographic characteristics of the respondents in terms of age, education, and experience. The survey established that the majority of the respondents were old farmers with a mean age of 57.125 (Table 1). The youngest respondent interviewed during the survey was aged 31 years, while the oldest was aged 90. Hence, the survey findings showed that the youngest people do not engage in farming enterprises. Table 2 also disclosed that the mean years of schooling of the respondents was 8.23, with the minimum number of years of schooling being 0 and the maximum being 18 years. Most respondents had a high experience with a mean of 30.54, with the farmer with the least years of experience being 2, while the highest experience was 62 (Table 2).

Table 2: Socioeconomic Characteristics of the Farmers

Variable	Frequency	Mean	Min	Max
Age	56	57.125	31	90
Education	56	8.23214	0	18
Experience	56	30.5357	2	62

Table 3: Membership of Group by Ward

	Current ward			
Farm group	Karingani	Magumoni	Mugwe	Total
Yes	12	25	19	56
No	0	0	0	0
Total	12	25	19	56

The survey sought to establish group membership among the respondents from Karingani, Magumoni, and Mugwe wards. The finding of the survey established that all (56) interviewees were members of a group

(Table 3). The majority (25) of the respondents were from the Magumoni war, while the survey interviewed 19 and 12 from Mugwe and Karingani, respectively (Table 4).

Table 4: Group membership by ward

	Current ward			
Name group	Karingani	Magumoni	Mugwe	Total
Gitareni Mustwise	0	0	10	10
Kinoru progressive	0	17	0	17
Kiramba self-help group	12	0	0	12
Nthima NAALAP	0	0	9	9
Young Mbuti	0	8	0	8
Total	12	25	19	56

The survey interviewed Gitareni Mustwise, Kinoru Progressive, Kiramba Self Help group, Nthima NAALAP, and Young Mbuti from the three wards. Kinoru Progressive and Young Mbuti were from the Karingani ward, with the survey interviewing 17 and 8 respondents, respectively. Gitarren Mustwise and Nthima NAALAP were from Mugwe ward, where the survey interviewed 10 and 9, respectively. Finally, there were 12 respondents from Kiramba Self-Help group who were residents of Karingani ward (Table 4).

The survey sought to establish the characteristic of the farm enterprise held by the respondents. The results showed that the majority (91.1%) were practicing both profit and subsistence farming, 5.4% were conducting pure subsistence, while 3.6% were only for profit-oriented enterprise (Table 5). The survey also aimed at determining the respondents' access to the product market. The findings indicated that 51.8% of the respondents had no access to the product market, compared to 48.21 who indicated they had access (Table 5). The respondents indicated that they lacked market information hence selling their produce to brokers.

Table 5: Characterization of the Farm Enterprise

Farm enterprise	Frequency	Percent
Profit oriented	2	3.57
Subsistence oriented	3	5.36
Both Profit & Subsistence	51	91.07
Total	56	100
Product Market		
Yes	27	48.21
No	29	51.79
Total	56	100

Table 6 shows the distribution of respondents in the three wards with respect to access to the product market. The survey results established that most of the respondents who indicated that they had access to the market were from Kinoru Progressive (9) and Young Mbuti (5). Kimba Self-help and Nthima NAALAP had the majority of the respondents who indicated that they had a challenge in accessing the market for their produce at 7 and 6 respondents, respectively. The survey established that most of the products sold by the respondents were in raw form. Only two respondents for Gitareni Mustwise and Kiramba were processing their farm produce prior to taking them to the market. Selling the raw produce explains why most of the farmers were earning a low income.

Table 6: Access to Product Market by wards

Product Market	Gitarren Mustwise	Kinoru Progressive	Kimba Self help	Nthima NAALAP	Young Mbuti	Total
Yes	5	9	5	3	5	27
No	5	8	7	6	3	29
Total	10	17	12	9	8	56
Sell of Produce						
Raw products	9	17	11	9	8	54
Processed products	1	0	1	0	0	2
Total	10	17	12	9	8	56

The survey established that the mean distance to the market is 3.57. Further, the survey established that the longest distance covered by the respondents was 10 km, while some sold their produce at the farm level (Table 7). Table 8 shows the distribution of the distance as indicated by the respondents in the different groups. The majority of the respondent from Gitareni Mustwise (3) covered a distance of 1km, with the one selling the produce at home, whereas the respondent who covered the longest distance took the produce to a market that is 6km. The survey also indicated that most of the respondents at Kinoru Progressive (4) 2 sold their produce at the farm gate. The respondent who covered the longest distance was practicing contract farming and took their produce to a market 10km from the farm.

Table 7: Distance to the Market

Variable	Observations	Mean	Std. Dev.	Min	Max
Market distance	56	3.571429	2.44657	0	10

Most (5) of the respondents in Kiramba Self-help group covered a distance of 4km to the market. The respondents who covered the short distance went to a market that was 2km from their farm, while one covered a distance of 7km. Respondents in Nthima Nalaap did not take their produce to a market that was beyond 5km, with the shortest distance being 1km. The survey established that two respondents in Young Mbuti took their produce to a market that was 10km from their farms despite the existence of one who sold

their produce at the farm gate (Table 8).

Table 8: Distribution of Market Distance by Groups

Market Distance	Gitarren Mustwise	Kinoru Progressive	Kimba Selfhelp	Nthima Nalaap	Young Mbuti	Total
0	1	2	0	0	1	4
0.5	2	0	0	0	0	2
1	3	3	0	1	0	7
2	1	1	2	2	1	7
3	1	4	0	3	0	8
4	0	2	5	0	2	9
5	1	3	2	3	1	10
6	1	0	2	0	1	4
7	0	1	1	0	0	2
10	0	1	0	0	2	3
Total	10	17	12	9	8	56

The survey sought to establish the mode the respondents in the study area used to sell their produce. The majority of the respondents, 94.6%, indicated that they sold their produce on cash bases, while 5.4% of the respondents used credit terms (Table 9). The survey also sought to establish the frequency with which the respondents did their marketing. The result indicated that the majority of the farmers, 42.9% marketed their produce monthly, 21% of the respondents weekly, 17.9% on the quarter year, and 12.5% yearly, while 5.4% market their produce daily (Table 9).

Table 9: Mode of Selling Products and Frequency of Marketing

Product Sale	Frequency	Percent
Credit	3	5.36
Cash	53	94.64
Total	56	100
Frequency of Marketing		
Daily	3	5.36
Weekly	12	21.43
Monthly	24	42.86
Quarterly	10	17.86
Yearly	7	12.5
Total	56	100

According to the findings, most of the respondents from the five groups were applying the cash method. The only groups that had members using credit were Gitareni Mustwise and Nthima NAALAP (Table 10).

Table 10 shows the distribution of frequency by which respondents marketed their produce. The findings indicated that most of the farmers who market their products on a daily basis were from Nthima NAALAP,

the majority of the farmers at Kinoru Progressive, while the majority of the respondents in Young Mbuti indicated they marketed their produce on a monthly basis. Further, the majority of the respondents at Kiramba Self-Help group marketed their produce on a quarterly and yearly basis (Table 10).

Table 10: Mode of Selling Products and Frequency of marketing in different Farmers Groups

Sale of Produce	Gitarren Mustwise	Kinoru Progressive	Kimba Selfhelp	Nthima NAALAP	Young Mbuti	Total
Credit	2	0	0	1	0	3
Cash	8	17	12	8	8	53
Total	10	17	12	9	8	56
Frequency of Marketing						
Daily	1	0	0	2	0	3
Weekly	2	7	2	1	0	12
Monthly	4	5	3	5	7	24
Quarterly	3	3	4	0	0	10
Yearly	0	2	3	1	1	7
Total	10	17	12	9	8	56

The survey findings reported that the majority of the respondents 91.07% did not have an account record/ record book for their activities. This was represented by 51 respondents while a few farmers 8.93% had account or record books for their activity as shown in Table 11.

Table 11: Accounting records/ book for the farm activities

Account record/record keeping	Frequency	Percentage
No	51	91.07
Yes	5	8.93
Total	56	100
Summary accounting acts/records		
Sales records	1	1.79
Sales , expenditure and income records	2	3.57
Expenditure records	1	1.79
Income records	1	1.79
Total	56	100

The survey findings further showed that 1.79% of the respondents had sales records, 3.57% had sales, expenditure, and income records, 1.79% had expenditure records, and income records were represented by 1.79%. While investigating on training in accounting or record keeping, it was observed that 8 respondents from the Gitareni Mustwise group had not received training while 2 respondents had received training.

The findings from Kinoru Progressive group recorded the majority of the respondents 14, had received training, only 4 respondents reported that they had not accessed any training in accounting or record

keeping. Kiramba Self-help group recorded 8 untrained respondents and 4 trained respondents. The study further showed that Nthima NAALAP group had 5 trained members and 4 trained members. Lastly, the survey findings showed that 4 respondents were trained while 4 respondents were untrained (Table 12).

The study further aimed at analyzing the groups on business training where the groups recorded the following results; Gitareni Mustwise had 6 untrained respondents and 4 untrained members, Kinoru Progressive reported that 5 members were untrained while 12 members had accessed business training and this recorded the highest number of trained farmers in all the interviewed groups. Kiramba self-help group had 8 untrained members and 4 trained members, Nthima NAALAP recorded 4 untrained and 5 trained members. Young Mbuti group had 4 trained farmers on business and 4 of the respondents were untrained (Table 12).

Table 12: Results of training for accounting, record keeping, and business

Training in accounting/ record keeping	Gitareni Mustwise	Kinoru Progressive	Kiramba Self Help Group	Nthima NAALAP	Young Mbuti	To tal
No	8	4	8	5	4	29
Yes	2	13	4	4	4	27
Total	10	17	12	9	8	56
Business Training						
No	6	5	8	4	4	27
Yes	4	12	4	5	4	29
Total	10	17	12	9	8	56

The majority of the respondents 48.25% had not received training from other sources related to business management (Table 13). Table 12 indicated the training sources that the respondents obtained.

The survey further aimed to look at the farmers' saving frequency. The findings in Table 4 showed that the group members saved on different frequencies, that is, per day, week, and monthly. On per day basis, Gitareni Mustwise group, Kinoru progressive, Nthima NAALAP, and Young Mbuti recorded 1, 2, 1, and 4 respondents, respectively. Based on the weekly saving basis, respondents who saved per day Gitareni Mustwise group, Kinoru progressive, Kiramba self-help group, Nthima NAALAP, and Young Mbuti recorded 7, 5, 1, 2, respectively hence a total of 16 respondents. It was observed that the Gitareni Mustwise group, Kinoru progressive, Nthima NAALAP, and Young Mbuti recorded 2, 10,11,8 respondents who saved monthly, hence a total of 36 respondents (Table 14).

Further, the survey investigated how the farmers saved their money. The majority of the farmers, 66.07%, as explained by the percentage of cases, saved their money at the bank. Of a few respondents, 17.86% saved their money at home, and 57.14% saved their money with informal money collectors. None of the respondents saved their money in the form of a tontine (Table 15).

Table 13: Farmers training from other sources

Variable	Frequency	Percentage
None	27	48.25
Business Management	1	1.79
Chuka University training	2	3.58
Chuka town-invited as an individual	1	1.79
Farming training	2	3.58
Goat production	1	1.79
Group training on Profit and loss evaluation	1	1.79
Group training on financial management	1	1.79
How to produce and market soya	1	1.79
I have attended no business training	1	1.79
I have from the group	1	1.79
Innofood training	1	1.79
Innofood training on Cowpea production	1	1.79
Innofood training on record keeping	1	1.79
Innofood training, Kinoru farmers group	2	3.57
Kinoru group training and Innofood	1	1.79
Livestock Training on records keeping	1	1.79
Maendeleo ya wanawake group	1	1.79
Marketing of products by the group	1	1.79
Ministry of agriculture	2	3.57
Runyenjes- was invited as an individual	1	1.79
Soya beans production and goat rearing	1	1.79
Training from Innofood and other trainers	1	1.79
Training on poultry management	1	1.79
Training on thoroko production and management	1	1.79
Women funding and how to access funds	1	1.79
Yes from group	1	1.79
Total	56	100

Table 14: Respondents saving money frequency

Saving frequency	Gitareni mustwise	Kinoru progressive	Kiramba self-help group.	Nthima NAALAP	Young Mbuti	Total
Per day	1	2	0	0	1	4
Per week	7	5	1	1	2	16
Per month	2	10	11	8	5	36
Total	10	17	12	9	8	56

Table 15: Money-saving methods and the average savings for the respondents.

Variable	Frequency	Percent of responses	Percent of cases
At home	10	12.66	17.86
At bank	37	46.84	66.07
with informal money collectors	32	40.51	57.14
in the form of a tontine	0	0	0
Total	79	100	141.07

The survey results showed that the respondents had an average savings of KES 724.82 with a minimum of Ksh 0 and a maximum of Ksh 10000 (Table 16).

Table 16: Respondent's average savings

Variable	Observations	Mean	Standard Deviation	Min	Max
Average Savings	56	724.82	1535.381	0	10000

The survey further aimed at looking at the respondents' access to Agricultural microfinance credit, and it was observed that the majority of the respondents, 37 saved as individuals, while 19 respondents saved as a farmers group (Table 7). It was observed that Gitareni Mustwise group, Kinoru progressive, Kiramba self-help group, Nthima NAALAP, and Young Mbuti recorded 5, 12,5,9,6 respectively of the respondents who accessed agricultural microfinance as individual farmers. The survey findings further indicated that Gitareni Mustwise group, Kinoru progressive, Kiramba self-help group, Nthima NAALAP, and Young Mbuti recorded 5, 5,7,2, respectively, of the respondents who accessed agricultural microfinance as farmers' group. (Table 17).

Table 17: Respondents' access to Agricultural microfinance credit

Variable	Gitareni Mustwise	Kinoru progressive	Kiramba	Nthima NAALAP	Young Mbuti	Total
As an individual farmer	5	12	5	9	6	37
As a famer group	5	5	7	0	2	19
Total	10	17	12	9	8	56

Thematic Analysis

Thematic data analysis was used to analyze the respondents' financial literacy data. From the study findings, it was observed the majority of the farmers gave out some of the recurred definitions of saving. Some of the responses given by the farmers from different groups included:

Mustwise Group

"The profit obtained from the sale of agricultural products."

"The amount that one can utilize in case there is an emergency."

Gitareni Group

"The amount set aside after earnings to use for further needs or achieve a certain set goal."

"Are the assets in-store"

Kinoru Progressive Group

"The amount of money that one sets aside to use in the future or when the need arises."

"It's the amount that one sets aside for future use or when needs arise."

Kiramba Group

"Amount of money to cater for one's need in the future"

"A portion of the total amount that is set aside for use in time of need or uncertainty"

Nthima NAALAP

"Is the asset that you keep for yourself to help you in the future"

"Some of the money kept after expenditure."

Young Mbuti group

"Amount set aside, and that can be used to pay loans according to savings level of an individual or group."

"Refers to the amount of money deposited in small amounts occasionally to enable later on get a loan"

The study further sought to understand how different defined credit. The major theme established in the term was "amount of loan a debt ."Some of the responses given by the respondents included:

Mustwise group

"The amount of loan obtained from a table banking group with respect to the amount of savings one has"

"Be given money; you have to pay back with interest and remain with some profit"

Gitareni group

"Money given to farmer groups to boost business activities"

"The amount of loan obtained from a table banking group with respect to the amount of savings one has"

Kinoru Progressive group

"Debts used to fund current needs and ought to be paid within a specified period and with interest rate."

"Is the amount of money lent to do a certain project payable with a certain interest"

Kiramba Group

"Amount one lends from institution."

"No idea"

"Amount of money taken from financial lenders, it is given within a specific period and has an interest rate."

Nthima NAALAP

"Is the amount of money applied for to help in a certain project or problem and is to be paid later on"

"Debt given by a financial institution can be a bank, individual or group for example to purchase a water pump and it is to be paid later."

Young Mbuti group

"Is the loan amount one acquires to fulfill certain projects".

"Amount agreed, given out. Some credit must not have an interest rate. Credit have profit"

The definition of collateral or guarantee and the themes that included "assets to loan, a person guaranteeing and security" was used. Some of the responses given included:

"An asset of worth that can be taken to repay the loan if the farmer is unable to repay on time."

"Something that can be used to replace the loan received when one fails to cover the loan."

"A person who may pay in case I am not able to pay credit or item that can be sold."

"Collateral is a security asset for acquiring the loan. Guarantors person you trust to stand for while taking the loan."

"Is the person who stands in to help pay the loan in case of failure"

The survey further reported some of the responses given by the farmers regarding interest rates and the themes such as "money borrower returns, added amount in loan, and returns on credit" were mentioned:

"The amount of money paid to borrow money."

"Money the borrower gives back after be given a certain amount of money. For example 1000 ksh, the interest rate is 100 ksh per month"

"The amount of money that one has to add on the loan amount given in the repayment."

“The returns one has to give back with the loan”

“Additional money on income”

The respondents also gave some of their definitions of repayment period and themes such as "numbers of days, timeframe, time to pay, and limited time" came across. Some of the responses given by the respondents included:

"The number of days that one is supposed to pay back the lent money"

“The grace period given by lender so as to know when to pay back the money”

“Timeframe between the time of taking loan and payment day”

“Is the limited time given to have cleared the loan by the group”

“Time to pay a loan”

The survey established that the mean interest rate per annum in which the respondents accessed agricultural credit was 7.75%, with the maximum being 15% per annum, as shown in Table 18.

Table 18: Mean interest rate charged for the agricultural credit accessed

	Frequency	Mean	SD Error	Min	Max
The interest rate charged per annum	56	7.75	3.413	0	15

The mean size of land under crop farming for most of the respondents was 1.323 acres, while the mean size of land under livestock production was 0.343 acres, as shown in Table 19.

Table 19: Mean area of land of the respondents under crop and livestock cultivation

Land operated	Frequency	Mean	SD Error	Min	Max
Crop land size in acres	56	1.323	1.112523	0.25	6
Livestock land size in acres	56	0.343	0.586	0	3

The survey found that most of the respondents (44) had no access to small agricultural machinery and only 12 respondents out of the interviewed 56 agreed to have access to a small agricultural machine (Table 20). In Gitareni Mustwise 9 respondents had no access to the machinery, while only one of the respondents agreed to have a small agricultural machine. In Kiramba 10 respondents did not have access to an agricultural machine, while 2 respondents had the machine. In Nthima NAALAP 5 farmers had no access to agricultural machinery, but 4 respondents agreed to have access to a small agricultural machine as shown in Table 19. In Young Mbuti 7 respondents had no access to small agricultural machinery while only one of the respondents agreed to have the machine.

Table 20: Whether respondents had access to agricultural machinery

Access to agricultural machinery	Gitareni Mustwise	Kiramba	Nthima NAALAP	Young Mbuti	Total
No	9	10	5	7	44
Yes	1	2	4	1	12
Total	10	12	9	8	56

The respondents who agreed to have access to a small agricultural machine for crop production included 4 respondents (7.14%) who said to have owned a water pumping machine, one respondent who had a sprinkler (1.79%) while 44 respondents (78.57%) could not understand and were not aware of a small agricultural machine. However, 4 respondents did not respond (7.14%), whereas the question did not apply to some other 3 respondents (5.36%) (Table 20). The survey also established that the respondents who owned a small agricultural machine for livestock production included 8 respondents (14.81) % who had a chaff cutter, whereas 44 respondents (81.48%) were not aware of the machine, and one farmer had no response whereas the question did not apply to one farmer (Table 21).

Table 21: Machine accessed by the respondents for crop and livestock enterprises

Crop cultivation machine accessed	Frequency	Percent
Water pumping machine	4	7.14
Sprinkler	1	1.79
Did not know /not aware of any machine	44	78.57
Not applicable	3	5.36
Did not respond	4	7.14
Total	56	100
Livestock cultivation machine accessed		
Chaff Cutter	8	14.81
Did not know /not aware of any machine	44	81.48
Not applicable	1	1.85
Did not respond	1	1.85
Total	56	100

The survey also established that 78.57% of the respondents did not have a viable source of financing for funding their agricultural machines (Table 21). They, therefore, might have no access to a small agricultural machine. However, the other 12 respondents each had their response on the source of financing. For instance, Table 22 shows various respondents' financing sources; a family relative financed one farmer, the other from the sale of a cow, another from group financing, and another one from an individual. One farmer also had no source, with one farmer not being sure of the financier's name. One respondent was financed by Nthima NAALAP self-help group and the women's fund by the government. The other respondent was financed by their own business and another three from the proceeds of sales of agricultural products and own savings, with another one from the group and Sacco.

Table 22: Respondents' source of financing for the agricultural machinery

Source of financing for the agricultural machinery	Frequency	Percent
Not aware/ did not know/not applicable	44	78.57
Family relative	1	1.79
From farm produce (sale of a cow)	1	1.79
Group	1	1.79
Individual	1	1.79
None	1	1.79
Not sure of the financer's name	1	1.79
Nthima Nalaap group and women group	1	1.79
Own Business	1	1.79
Own savings and agricultural sales	1	1.79
Sacco and Group	1	1.79
Sale of goat	1	1.79
Sales from farm output	1	1.79
Total	56	100

Apart from the many farmers that were willing to be financed to acquire small agricultural machines such as chaff cutters, water pumping machines with others requiring an incubator, there were other group of respondents that suggested they would like to be financed to acquire variable inputs such as seedlings and fertilizers.

Table 23: The agricultural machine respondents were willing to be financed

Agricultural machines willing to be financed	Frequency.	Percent
Water Pumping machine	15	25.00
Chaff cutter	11	19.65
Chaff cutter, knapsack sprayer	1	1.79
Farming is on a small scale, no need of machinery	1	1.79
Maize shelling machine	2	3.58
Did not respond	3	5.36
Not willing	1	1.79
Plough	1	1.79
Posho mill	1	1.79
Not applicable	12	21.43
Pump and incubator	1	1.79
The farmer needs the variable inputs.	1	1.79
The farmer would like financing on fertilizers and other variable inputs	1	1.79
To think about	1	1.79
Water pump and sprinklers	1	1.79
Water pump, chaff cutter	3	5.36
Water pumps, sprinklers, knapsack sprayer	1	1.79
Total	56	100

In addition, one of the farmers suggested that they do small-scale farming (Table 23), and therefore agricultural machines would not be of greater significant effects to their farming like the variable inputs would do.

The survey also established that if farmers were financed to acquire the agricultural machinery of their choice, most of the respondents (67.86%) would have their production of the crops double, 10.71% would have crop cultivation tripled, and 16.07% would have a minor improvement in their crop's cultivation. However, there were 5.36% of the farmers suggested that despite the financing to acquire the machine, there would be no improvement in the cultivation of their crops (Table 24). The study also established the efficiency of the magnitude of livestock cultivation if the farmers were financed to acquire small agricultural machinery. Most of the respondents (60.71%) suggested that the cultivation would be doubled and 7.14% suggested that the cultivation would be tripled, while 19.64% suggested that there would be a minor improvement while 12.5% of the respondents suggested that there would be no improvement (Table 23).

Table 24: Efficiency of the magnitude of crops and livestock cultivation

Efficiency of the magnitude crop cultivation	Frequency	Percent
It will be double	38	67.86
It will be triple	6	10.71
There will be a minor improvement	9	16.07
There will be no Improvement	3	5.36
Total	56	100
Efficiency of the magnitude of livestock cultivation		
It will be double	34	60.71
It will be triple	4	7.14
There will be a minor improvement	11	19.64
There will be no Improvement	7	12.5
Total	56	100

The survey established that the mean amount of labour savings per day in crop enterprise would be approximately Ksh. 1020 if the respondents had been financed to acquire the small agricultural machinery (Table 25). In the case of livestock cultivation, the labour savings per day if financed to acquire the machine would be roughly Ksh. 995 (Table 25).

Table 25: Mean labour savings in crop and livestock enterprises

Labour savings per day	Mean	Std. Dev.	Min	Max
Labour savings per day in crop enterprise	1021.429	1870.315	0	7500
Labour savings per day in livestock enterprise	994.643	1879.112	0	7500

Table 26 shows the distribution of the respondents in their respective groups that were willing to be financed

to acquire agricultural machinery. Out of the 56 respondents, 50 expressed the desire to be financed for agricultural machinery but the other 6 might have no desire to be financed or would like to be financed to acquire other things such as variable inputs, including seeds and fertilizers. The mean amount of those willing to be financed was Ksh.44620 with the maximum being Ksh. 100000 (Table 27). Different respondents from different groups had their varying preferred payment terms (Table 28). Most of the respondents (62.5%) suggested that they would like to settle the credit by monthly repayment period whereas the other 37.5% preferred interest rate per annum as shown in Table 28. Most of the respondents (51) suggested that the enterprise started would support the terms with which the credit would be granted to them (Table 29)

Most of the respondents (91.07%) suggested that they were unaware of other sources of income that would be used to support the repayment of the microfinance credit. However, one respondent suggested having a business whose proceeds would assist in loan repayment (Table 29). The findings also established that the mean value of the collateral that most of the respondents were willing to give was Ksh.209254.50, with a maximum amount being Ksh.3000000 (Table 30). The majority of the respondents were willing to offer livestock, including cattle, pigs, and goats, as collateral of the loan acquired, while others would give the title deeds of their parcels of land (Table 31). In addition, some respondents were willing to offer their business properties such as dressmaking machines as collateral, while others would give individuals as guarantors, as shown in Table 31. The survey also established that there were others who would offer chattels such as television sets as collateral.

Table 26: Respondents' willingness to be financed, payment terms, and enterprise support terms

Willingness to be financed	Gitareni mustwise	Kinoru	Kiramba	Nthima NAALAP	Young Mbuti	Total
0	0	2	3	0	1	6
1	10	15	9	9	7	50
Total	10	17	12	9	8	56
Preferred payment terms						
interest rate (%pa)	2	7	5	5	2	21
repayment period (months)	8	10	7	4	6	35
Total	10	17	12	9	8	56
The enterprise support terms						
No	0	1	3	0	1	5
Yes	10	16	9	9	7	51
Total	10	17	12	9	8	56

Table 27: Mean amount respondents are willing to be financed

	Frequency	Mean	Std. Dev.	Min	Max
Amount willing to be financed	50	44620	23449.37	10000	100000

Table 28: Respondents preferred payment terms

Preferred payment terms	Frequency.	Percent
interest rate (%pa)	21	37.5
repayment period (months)	35	62.5
Total	56	100

Table 29: Respondents' other sources of income

Other sources of income	Freq.	Percent
Did not know	51	91.07
Not applicable	1	1.79
Business	1	1.79
None	2	3.57
Not willing	1	1.79
Total	56	100

Table 30: Mean value of the collateral to be given

	Frequency	Mean	Std. Dev.	Min	Max
amount willing to offer as collateral	56	209254.5	548824.2	0	3000000

Table 31: Collateral respondents were willing to provide

Collateral willing to provide	Frequency	Percent
10 toggenberg goats	1	1.79
3 toggenberg goats	1	1.79
A person and crop (trees) and macadamia	1	1.79
Animals	2	3.57
Cattle	6	10.73
Chaff cutter, chattel, Cattle	1	1.79
Chattel	1	1.79
Clothes Business	1	1.79
Chattel and Livestock	1	1.79
Chattel, cattle	1	1.79
Chattels, chicken and goat	1	1.79

Coffee	1	1.79
Cow and 2 goats 3 sheep	1	1.79
Cow and sheep	1	1.79
Cows, goats, 7 hen Macadamia 50 trees	1	1.79
Freshian cow	3	5.36
Freshian cow and goat	1	1.79
Gitareni mustwise		
Dressmaking machines	1	1.79
Goat and cattle	1	1.79
Goats	1	1.79
Goats and Chattels	1	1.79
Goats and pigs	1	1.79
Livestock	8	14.29
Livestock (cows and goats)	1	1.79
Livestock and motorbike	1	1.79
Livestock and title deed	1	1.79
Livestock, sewing machine	1	1.79
Livestock, tittle, furniture	1	1.79
None	2	3.58
Not willing	1	1.79
Personal shares at Gitareni mustwise	1	1.79
Pigs and chattels	1	1.79
Pigs (2 mature), chattels	1	1.79
Sewing machine, two cattle, chattels	1	1.79
Sheep and saloon business	1	1.79
Title Deed	4	7.15
Total	56	100

Discussion

The study's findings may imply that being a member of a group is an essential factor that influences access to microfinance services. Further probing established that the respondents were able to acquire microfinance services such as microcredit, microbanks, micro-savings, micro remittance, and money transfers which are essential in agribusiness development among farmers. This implies that membership in a group plays a major role in accessing microfinance credit which can be used to acquire farm machinery. The study's findings concurred with Chikwira et al. (2022), who noted that microfinance plays a major role in empowering vulnerable groups in reducing poverty. The findings are also in line with Tchuigoua et al. (2017) who established that microfinance goals are geared towards poverty alleviation among vulnerable groups. However, there was a common finding in all the groups that they were not able to pool a large amount of funds together, and therefore members could only access little funds not enough to purchase the requisite farm machinery.

The findings indicated that most of the respondents needed to keep accounting records. This implied that it was hard to track their farm production, which was essential in determining the amount of credit one could access from microfinance. This suggests that microfinance officers come up with other measures that determine the amounts a farmer should receive. The findings imply that training farmers on recording-keeping skills is essential. The study's findings concurred with Malauri et al. (2021) who established that most farmers in Tanzania do not keep farm records, making it hard for microfinance to track the performance of farming enterprises. The findings of the survey imply that most of the members in the various microfinance groups were not trained on booking keeping and did not have any account records.

The findings are in line with those of Kariuki et al. (2022) who established that though both men and women are poor in record keeping, women may be the worse in keeping records. The results are inline with Ahmad et al. (2020) who found that most of the groups are domiciled by women who are said to be poor in record keeping. In addition, the study established that most of the farmers were not educated on the various terminologies used in microfinance and only had a grasp of what various terms on loans entail. Most of the respondents saved with the farmers' group mainly on a monthly and individual basis. Most of the respondents had no access to small agricultural machinery and therefore could put a lot of work in agricultural activities that increased labor use. As per Rakhra et al. (2022) adoption of agricultural machinery would ease physical labor and improve productivity. However, farmers were willing to be financed to acquire a chaff cutter, knapsack sprayer, and water pump. The collaterals that borrowers would provide included livestock, chattels, and title deed.

Conclusion

Microfinance groups are important initiatives among farmers as they help propel their farming toward increased production and profitability. The loans acquired from microfinance groups and savings made help in the financial management of the farmers as the farmers are ably encouraged to save and borrow from the microfinance group when in need of investment like small agricultural machinery. However, the survey can conclude that most of the groups fail to have adequate lending funds and the farmers acquire only small funds that fail to assist acquire the farm machinery. In addition, farmers in the groups are not educated on loan terms and lack general financial literacy. The survey also noted that most of the groups are dominated by women implying the need to involve men in microfinance.

Recommendations

i) The microfinance institutions within which the farmer groups operate should offer intensive education to their members on the need to invest in loans and loan terms used.

ii) The microfinance institutions should seek an increase in funding from the government or non-

government institutions to guarantee the farmers of adequate loans that would assist acquire small agricultural machinery.

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Entrepreneurship for Sustainability

Article

The Earth on the Turning Point

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ABSTRACT

This paper explores the crucial turning points that the Earth is currently facing. It discusses the transition from an organic to an inorganic world, the shift from linear supply chains to a circular economy, and the evolution from separate nation-states to a unified global community. These transformations are investigated in the context of biological evolution, economic development, technological advances, and socio-political structures. The paper also presents potential strategies to mitigate the negative impacts of these transitions, emphasizing the importance of sustainable practices, global cooperation, and conscientious consumption.

Our planet stands at a moment of profound transformation. As we grapple with the consequences of our past actions and the uncertainties of our future, we find the Earth transitioning in three critical dimensions. These shifts, driven by our evolving relationship with the environment, our economic practices, and our socio-political structures, mark a pivotal juncture in the Earth's history. The path we choose from here will significantly shape the trajectory of life on Earth.

1. From an Organic World to an Inorganic World

Our Earth, with its 4.57 billion years of history, is a unique entity in the universe. It's the only planet suitable for life, providing the perfect conditions for bio-molecules like RNA, DNA, and protein. These molecules would break down under less favorable conditions. Around 3.5 billion years ago, Earth's temperature dropped enough for the first life or bio-molecule to appear. This event triggered a fantastic biological evolution. More complex life forms and ecosystems emerged, and the composition of the air and the Earth's surface became more suitable for life, including the formation of soil, oxygen, and the ozone layer. Despite possible impacts from small planets and the occurrence of major catastrophes, Earth's ecosystem has always bounced back, resiliently recovering to its peak community.

In the early days of human beings, we were just one species among many, co-existing with others by consuming energy/food from plants or animals and releasing waste that served as sustenance for other species. This was a perfectly cyclical economy.

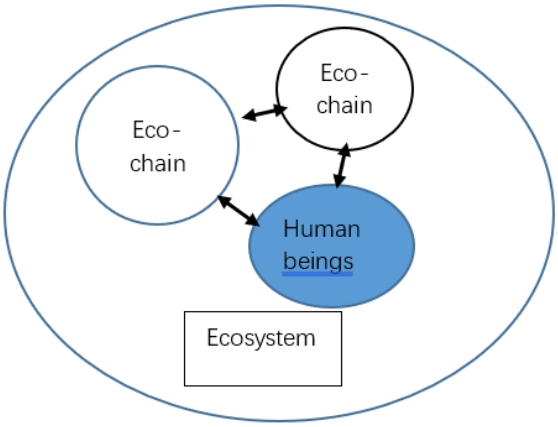

Figure 1: Early Natural Ecosystem

Nevertheless, Homo sapiens are distinct due to their intelligence and curiosity. They began to create tools, harness fire, domesticate plants and animals, and eventually start agriculture. This marked the beginning of humans stepping out of the ecosystem and standing against the natural world. Humans began altering the world to serve their needs. However, in the early days, when human technology was rudimentary and relied on organic energy, these changes had minimal impact on Earth.

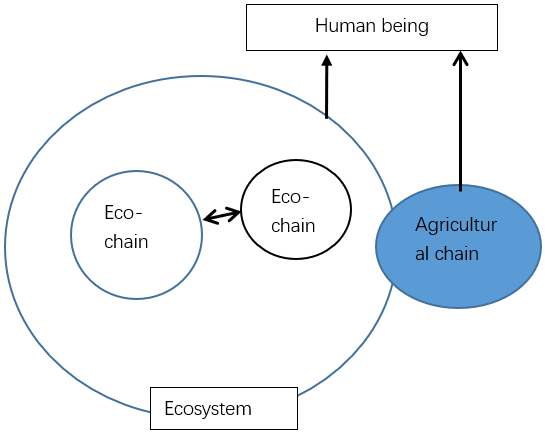

Figure 2: Ecosystem with Agriculture

The significant turning point arrived when humans learned to harness inorganic energy, creating machines and new materials. The power of this new human society relentlessly wore down its natural counterparts.

It consumed various kinds of energy and materials for survival and reproduction, claimed the space of other species, and discarded non-degradable industrial wastes. These wastes, produced under high temperature and pressure, were incompatible with the molecular structures of the organic world.

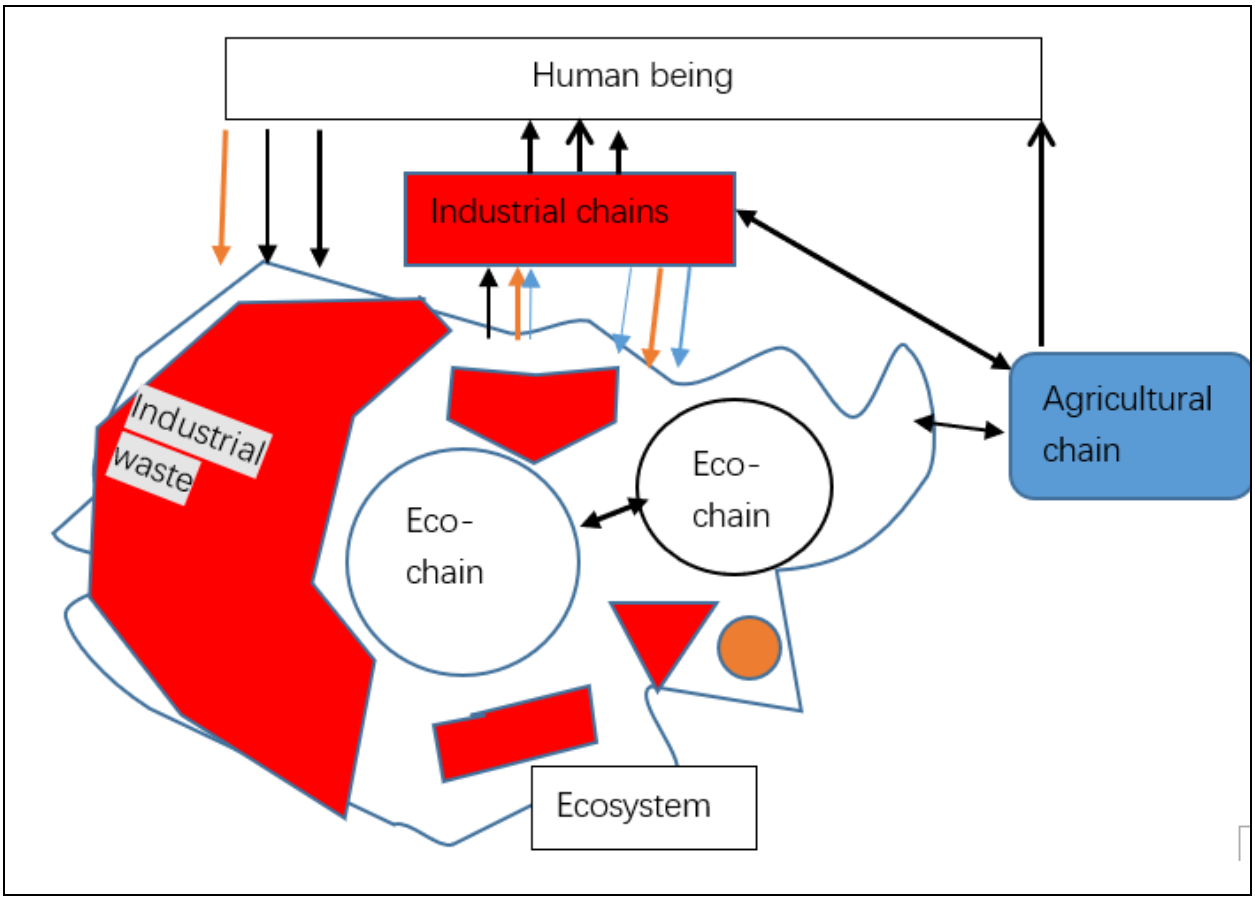

Figure 3: Ecosystem with Agriculture and Industries

As more countries industrialize and more people inhabit cities, ecosystems are being damaged and depleted at alarming levels. Deforestation, desertification, species extinction, climate change, and ocean pollution are now clearly evident. For the first time in Earth's life evolution, one species has the capacity to drastically change or even destroy the Earth's environment, which provides not only resources for human survival but also the spiritual inspiration for human psychological health and creativity.

As the world population continues to surge, individuals strive for higher living standards. There is little doubt that the Earth's environment will rapidly deteriorate in the near future based on current trends. Paradoxically, this so-called "development" could ultimately destroy all life on Earth, including humans.

Due to unequal development, wealth disparity among individuals and nations continues to widen. A tiny fraction of the population controls the majority of the Earth's wealth, wealth that couldn't be consumed in their lifetime or even over several generations, while many people and nations live in extreme poverty.

Machines replace laborers to cut costs and enhance competitiveness, making unemployment a characteristic of the industrial economy. Ultimately, machines will always be more efficient than laborers.

Competition among individuals and nations and unemployment force governments to adopt positive macro-economic policies to stimulate unnecessary consumption, to keep production lines running and improve production technologies. The purpose of production is no longer to meet consumption needs, but to drive more consumption. As a result, the world requires more natural resources and produces more non-degradable consumer goods.

The overabundance of supply and production has freed humans from energy and food scarcity. For the first time in Earth's history, a species faces an oversupply of energy. This has resulted in a loss of basic motivation in life. The quest for life's meaning and different answers to this quest have caused divisions in the world. In the so-called post-modern society, the prevalent slogan is "everything is okay."

The world now faces an ecological, economic, and social crisis, marking a turning point in Earth's history. We must find a meaningful way to live in this age.

2. From Linear Supply Chains to Circular Economy

Traditional economies often dispose of waste into natural systems, assuming nature can decompose this waste into reusable basic components for the next cycle. This assumption might hold true for agriculture, as its waste consists of natural organic materials that can be used by other species as resources or can be eroded by natural forces such as wind, rain, or sunlight. However, this assumption does not apply to most manufactured goods from industrial sectors. These goods are produced in unnatural environments with novel materials that are indigestible by natural species. Even when these wastes have been eroded into minimal particles (like plastic particles) or basic elements (such as heavy metal ions), they remain harmful to the ecosystem.

In contrast to traditional linear supply chains that move from resources to final consumer products, we need to establish 'reverse' supply chains. These would collect consumed goods and transform them back into resources, moving from final consumer goods back to resources. The resources in industrial products can be decomposed and reused via artificial procedures (such as high-temperature, high-pressure processes in chemical containers). This could not only help maintain a clean environment but also create job opportunities (like waste collection) for less privileged individuals.

To enable reverse supply chains, governments should impose an environmental tax on consumer goods. This would allow for the establishment of a waste fund to cover the costs of waste collection and processing. Ideally, the environmental tax on any product that can't be decomposed naturally should be equal to the recycling cost in the reverse supply chain. This would ensure that the product's price reflects its total

environmental cost. While the environmental tax could increase product prices and potentially discourage initial purchase behavior, reducing consumption, it would also promote a 'quality economy' characterized by high-quality, durable, high-priced, and less-produced goods, which is more environmentally friendly than a quantity-focused economy.

Due to higher income levels and highly efficient production, many consumer goods are discarded while they're still functional. Apps could be developed to encourage and facilitate the circulation or sharing of second-hand goods. In this regard, e-commerce can play a vital role. Non-profit organizations could collect these products and distribute them to those in need. This should not be viewed as discriminatory or stigmatizing, but as an environmentally friendly consumption behavior.

These strategies are not the ultimate or comprehensive solutions to the current environmental, social, and economic crises, but they can certainly mitigate the issues and contribute to a healthier planet.

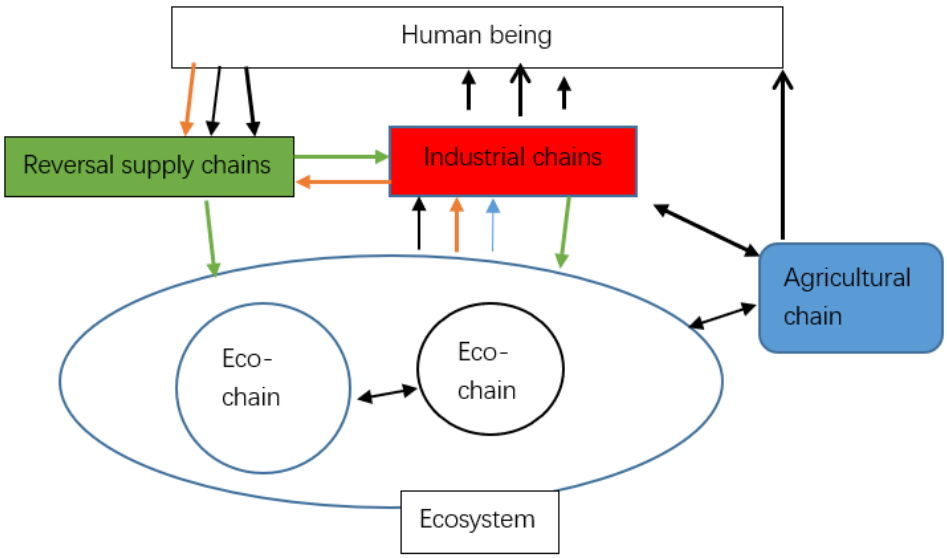

Figure 3: Ecosystem with Agriculture, Industries, and Reverse Supply Chains

3. From Separate Nation States to a Unified Global Community

The concept of the nation-state has its roots in early family structures, which evolved biologically as a group of people from the same area shared similar genes and developed shared habits or culture. This frequent interaction and familiarity fostered an affectionate bond, and different groups competed for resources. While this mechanism may have helped select the fittest genes during early evolution, it now poses challenges to the sustainability of the Earth.

The citizens within a country come together by chance, not by choice, meaning they may not necessarily

share the same ideologies or spirit, which are now pivotal sources for cultural evolution. Often, the ideology of many people within a country is shaped by government propaganda. A community formed through independent thinking and free choices is undoubtedly more potent and meaningful.

The nation-state has been a significant driver of arms races and wars among countries. Under the guise of patriotism, more human and material resources are mobilized for wars, which, in turn, destroy more resources, including natural animal habitats.

In modern times, the destructive potential of individuals or states is greater than ever before, making global cooperation crucial. We need to promote a new ideology that transcends our evolutionarily ingrained selfish genes, which are vital for competitive survival, and weakens narrow-minded patriotism in favor of the common good of all humans.

There is only one Earth and one shared future. Environmental challenges require the collective efforts of all humans. We should nurture a global community that shares the same ideology. The Earth's wealth should be shared in some way by all its inhabitants. We should promote charitable work, education, and technology sharing. Arms races and territorial disputes should be managed. The ecosystem is not only the material foundation for human survival but also the spiritual source for human psychological health, creativity, and aesthetics.

Conclusion

As the Earth reaches a critical turning point, it is evident that our past practices and systems need to evolve to ensure the sustainability of our planet. The shift from an organic to an inorganic world, the transformation from linear supply chains to a circular economy, and the transition from separate nation-states to a unified global community are all key aspects of this evolution. These changes necessitate a global cooperation unprecedented in human history and a concerted effort to develop and promote sustainable practices. While the challenges are significant, they also present opportunities for technological innovation, economic restructuring, and cultural evolution. Ultimately, the Earth is our shared home, and its future depends on our collective action. By embracing these transformations, we can ensure a healthier and more sustainable planet for generations to come.

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Entrepreneurship for Sustainability

Article

Exploring the Phenomenon of Taobao Villages: A Grounded Theory Approach

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ARTICLE INFORMATION

Keywords: Taobao Village, e-commerce, online focal point, offline focal point, institutional economics, China, rural entrepreneurship, online market

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ABSTRACT

This article explores the emergence and sustenance of Taobao villages in China, which are rural communities significantly engaged in e-commerce. We posit two fundamental questions regarding why people in these villages engage in online sales and why a particular village becomes an online focal point. Drawing from institutional economics, we propose a theoretical framework that considers various factors such as village industry, product attributes, human resources, logistics, internet accessibility, and market attributes to explain the shift from offline to online focal points in the market. We argue that a successful Taobao village necessitates a stable online focal point that outcompetes both offline and other online focal points in the e-commerce space. The paper outlines the advantages and challenges of this shift and provides insights into the dynamics of e-commerce in rural China.

Introduction

One of the fundamental challenges in commerce involves obtaining adequate compensation to cover both production and transaction costs. This issue becomes especially pertinent when considering the emergence of Taobao villages in China. Consequently, this article seeks to answer two essential questions:

1. What motivates individuals to engage in online sales, and does trading based on online focal points offer any advantages in cost-saving or value creation compared to offline focal points?
2. Why is a particular village chosen as the online focal point compared to other potential locations?

Understanding the Concept of a Taobao Village

In layman's terms, a Taobao village refers to a rural community that experiences a surge in product sales due to e-commerce adoption. Thus, the essence of a Taobao village lies in its online product sales. For analytical purposes, a Taobao village can be defined based on the percentage or total amount of products sold via e-commerce. In this study, we interpret the phenomenon of Chinese Taobao villages by setting the

dependent variable 'y' as the percentage of e-commerce sales in a village.

E-commerce and the shift of focal points

A market is considered a focal point where buyers and sellers engage in coordination games or "battle of the sexes" games. Traditionally, offline markets have served as this focal point due to factors such as local knowledge, location specificity, and historical memory. However, these offline focal points have their limitations, including restricted space, limited customer traffic, and finite warehousing capacity, thereby confining them to local customers.

The advent of e-commerce heralds the transition from offline to online focal points. The latter offers several advantages over the former, such as no physical size limit and the ability to accommodate an unlimited number of customers simultaneously. This shift expands the market, inviting competition from other online and offline focal points. While this makes the competitive environment more comprehensive, it also makes it less stable. Furthermore, maintaining online focal points involves higher costs.

For a Taobao village to be successful, it must establish a stable online focal point that outperforms both offline and other online focal points in the e-commerce domain. This study explores the formation of online focal points as an intermediate variable in explaining the Taobao village phenomenon in China.

Factors Influencing the Shift and Maintenance of Focal Points

To establish and maintain a stable online focal point, it must excel in reducing transaction costs compared to other online and offline focal points. This accomplishment may be influenced by several factors, with insights from institutional economics potentially elucidating the evolution of institutional practices within a Taobao village. The factors considered in this study are:

1. Village Industry

The industrial history and clusters within a village can boost the development of online and offline focal points. In many instances, online focal points benefit from the traffic directed to their platforms from offline stores.

2. Product Attributes

Online sales (B2C) have the advantage of economies of scale (larger quantity), but have the disadvantage of single packaging and delivery, which leads to diseconomies of scale in logistics. If the logistics cost makes a high percentage of the total cost, the online focal points cannot compete with the offline focal points that can simultaneously transport a large number of products. However, if the product has a larger monopoly and higher bargaining power, or if it has higher value, then the percentage of logistics costs can

be reduced.

The online focal points can be maintained through reputation and uniqueness, so psychological impacts and memory are important, while offline focal points can be maintained by location specificity alone. Therefore, the marketing costs for online focal points are higher. To make up for these costs, huge sales are needed. Therefore, large-scale market and high-capacity mobilization capabilities are necessary for the profitable operations of online contact points.

Agricultural products are rarely successful in e-commerce because of their high logistics costs (heavy and perishable) and small transaction volumes. In addition, individual sellers cannot control the price of agricultural products. Successful agricultural products are products with uniqueness and monopoly power, which are produced in large quantities and have high value.

Some products are not available in the local market due to low or uncertain demand. We refer to these products as niche markets (compared to the mass market). They are particularly suitable for e-commerce because for these products, the storage cost or waste in an offline store can be much higher compared to the packaging and delivery costs in e-commerce

Some products and services are difficult to find from offline markets, such as hotel services and stores in large wholesale markets. The search cost for these products and services is higher in the offline market. Therefore, these products and services are suitable for online markets.

Similarly, for some products, manufacturing costs are too high, which makes their storage costs in offline stores high. So, these products are also suitable for the online market.

3. Human Resources

To some extent, the success of Taobao Village depends on the entrepreneurial thinking of its people, the experience and familiarity with Internet technology and smartphones, historical business skills and the unique labor skills of the villagers.

In order to maintain contact points, personal interaction is necessary. This is a labor-intensive job. Therefore, women, especially housewives who often have enough free time, are suitable for this kind of work.

The shift in focal points has also changed different business practices and lifestyles. The younger generation and women are quickly adapting to this new technology.

4. Logistics and Internet

Logistics services and Internet accessibility are of course an important infrastructure for promoting online

focal points.

5. Market Attributes

On the consumer side, large number of e-commerce customers accustomed to e-commerce shopping (such as younger generations and young women in China) can help pay for fixed costs of e-commerce (such as logistics, internet, platforms, etc.). However, if the domestic e-commerce market is small, small countries must use free trade to take advantage of large external markets. There may be a size threshold above which the marginal cost is reduced, i.e. one or several production bases will dominate the world.

A framework for explaining Chinese Taobao phenomenon

Informed by the above discussion, we propose a theoretical framework to elucidate the e-commerce and Taobao village phenomenon in China. All the factors mentioned above are considered as independent variables in our proposed theoretical framework.

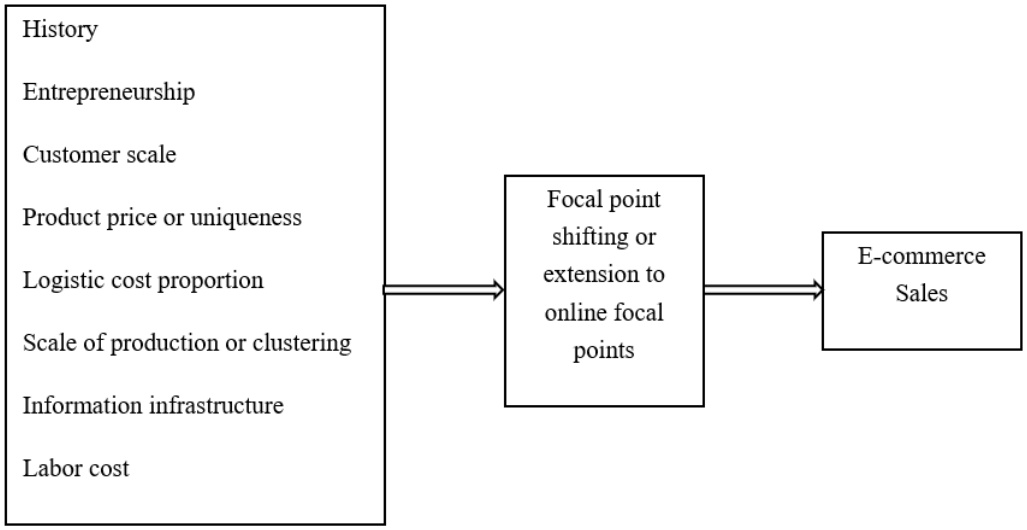

Figure 1: A tentative framework for explaining TaoBao phenomenon

Conclusion

In conclusion, the emergence of Taobao villages in China can be understood as a significant shift in market focal points from offline to online, influenced by a plethora of factors. Our study underscores the role of industrial history, product attributes, human resources, logistics and internet infrastructure, and market attributes in this transformation. We highlight the pivotal role of online focal points in these villages' economic success, despite higher maintenance costs than their offline counterparts. However, the unique

advantages of a potentially unlimited customer base and no physical size limitations make the online marketplace an attractive option. We recognize that the dynamics of the online marketplace demand high-capacity mobilization and large-scale market presence to offset the higher costs associated with maintaining online focal points.

While our framework provides a comprehensive understanding of the Taobao village phenomenon, it is essential to note the contextual specificity of our findings. Each Taobao village has its unique attributes, and the framework should be adapted to reflect these differences. Further research could explore the interplay of factors in different contexts and refine our understanding of rural e-commerce in China and potentially, globally. Future work could also examine the socio-cultural implications of this significant shift to online commerce in traditionally agrarian communities.

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Entrepreneurship for Sustainability

Article

An Evolutionary Analysis of the Rapid Development in Chinese Ecommerce: A Tentative Framework

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ARTICLE INFORMATION

Keywords: Ecommerce, China, Transaction Cost Economics, Network Economics, Evolutionary Theory, Internet Development, Logistics, Payment Systems, Online and Offline Integration, Consumer Behavior.

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ABSTRACT

This paper presents a tentative conceptual framework for understanding the rapid development of ecommerce in China, despite the country not possessing the most developed internet infrastructure. It identifies universal principles and unique Chinese characteristics that have contributed to this growth. The theories of transaction cost economics, network economics, and evolutionary theory are utilized to explain the ecommerce evolution. The transition from traditional trade to ecommerce, particularly in the Chinese context, is explored in detail. The paper concludes with several propositions and predictions about ecommerce development and its potential implications for other countries. It underscores that while the Chinese ecommerce story is unique, the underlying principles may hold true elsewhere, offering valuable insights for other nations.

1. Introduction

Over the past few decades, Chinese ecommerce has experienced unprecedented growth, establishing China as a global leader in this sphere, despite its less advanced internet infrastructure. To illustrate the magnitude of this development, consider this: in 2018, the total sales for a single day on Tmall, one of China's largest ecommerce platforms, amounted to 213.5 billion RMB or $30.748 billion. This sum rivals the annual GDP of smaller nations such as Latvia ($30.264 billion, 2017) and Nepal ($24.472 billion, 2017).

This rapid growth prompts a set of intriguing questions: How has Chinese ecommerce managed such exponential growth despite the country's less advanced internet infrastructure? Is this phenomenon an anomalous aberration shaped uniquely by China's conditions, or are there universal principles underpinning this story? Can other nations replicate China's success in their own ecommerce sectors? What insights can less developed countries glean from China's experience? This paper aims to propose a preliminary conceptual framework to better understand this extraordinary trend, even in the absence of extensive

empirical data.

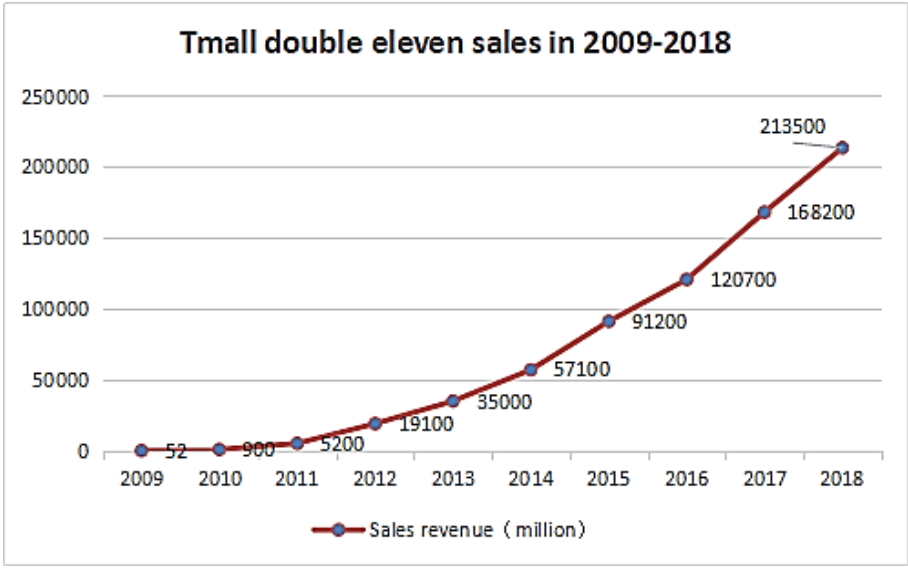

Figure 1: Sales on Tmall on Singles Day from 2009 to 2018.

2. The Relevant Theories

To comprehensively understand the rise of ecommerce in China, three vital theories can be called upon.

2.1 Transaction Cost theory

The Transaction Cost Theory is a pivotal tool for explaining the surge of ecommerce in China. This theory posits that the total cost to society comprises two components: production cost and transaction cost. The former pertains to costs associated with production processes and interactions with nature, while the latter refers to coordination costs among individuals involved in production and transactions.

In a simplistic one-person world, such as Robinson Crusoe's island, only production costs exist due to the absence of coordination or transaction with others. The economics of such a world are straightforward and can be comprehended within an hour. However, when a second person, like Friday, enters the scene, the world becomes considerably more complex. The economics of this two-person world remain ambiguous.

Although we can define transaction costs in this context, operationalizing this concept is complex due to its entanglement with production costs. Owing to the anthropocentric nature of costs, all costs are essentially transaction costs, and all transaction costs are intrinsically information costs. Definitions vary based on researchers' convenience, and we will present our convenient definition below.

Trade or transaction fundamentally involves the exchange of money for goods or services, encompassing both production and transaction costs. The consumer surplus from a transaction equals the value of the

products for the consumer (Vc) minus the payment (Pb) and the transaction cost incurred (Tc). Here, Tc encompasses costs such as information searching, price negotiation, travel time, quality checking, and more.

Conversely, the seller surplus from a transaction equals the price (Pb) minus the transaction cost incurred (Ts) and the purchasing price from the suppliers (Ps). Here, Ts includes costs such as sellers' waiting time, shop rent, negotiation, transportation of products, etc.

The total social surplus of the transaction is given by Vc - Pb - Ps - Tc - Ts. Under this framework, a new technology or business model can only prevail if it reduces costs and generates more social surplus.

2.2 Increasing Returns from Network and Technology (Knowledge) Application

The second theory revolves around network economics, which is more intricate and encompasses knowledge, economies of scale (diminishing marginal cost), and economies of scope.

In the internet era, networks are vast. As information costs decline, it becomes easier for people to connect with strangers, possibly leading to spontaneous coordination and the creation of massive "internet waves."

An empirical law posits that the value of a network equals the square of the number of connections (people) within it. With China boasting 800 million smartphone users, it hosts the world's largest network.

Why does a larger network generate more value?

One reason could be network externalities, analogous to the telephone network. Each new user enhances the value of the phone for every other person in the network by providing additional connection channels. Another perspective on network externality is if all your friends use WeChat, you may feel compelled to use WeChat instead of Facebook, even if the latter offers superior services.

Another reason could be tied to diminishing marginal costs, relating to economies of scale and scope. Once the network infrastructure is in place, each additional user or function incurs minimal cost. The old adage, "there's no such thing as a free lunch," meaning that everything has a cost, is being supplanted by a new internet logic: "the wool may come from the pig's back"—implying that sometimes, someone else may pay for what you receive, and free lunches may occasionally exist. This phenomenon could be attributed to economies of scope.

The first and second reasons might be interconnected—two sides of the same coin.

A third reason for the value of networks might be the diverse and heterogeneous knowledge contained within them. Networks serve as repositories of varied knowledge, adhering to the law of increasing marginal returns. A larger network can offer more information, knowledge, and physical resources.

Networks can be logistic, social, or internet networks. In an internet-based economy, networks are broader and more influential. The competition of the 21st century is essentially a contest among networks, platforms, and ecosystems.

2.3 Evolutionary Theory

The third theory that may be pertinent is the Evolutionary Theory. This theory's logical system isn't as mature as classical economics, but it introduces key concepts such as mutation, creative destruction, habit, and path dependence. Large networks are likely to generate mutations, which can be interpreted as novel knowledge. Specifically, the coexistence of complementary knowledge and resources within large networks can lead to unique combinations that may not have been possible otherwise. The primary focus of evolutionary economics is knowledge innovation.

Habit represents a specific and often more important type of knowledge. The variability of habits on the internet is a crucial factor in understanding consumer behavior online.

3. Understanding Ecommerce Development in China

How can we apply these three theories to explain the development of Chinese ecommerce? We may begin by analyzing the process of trade.

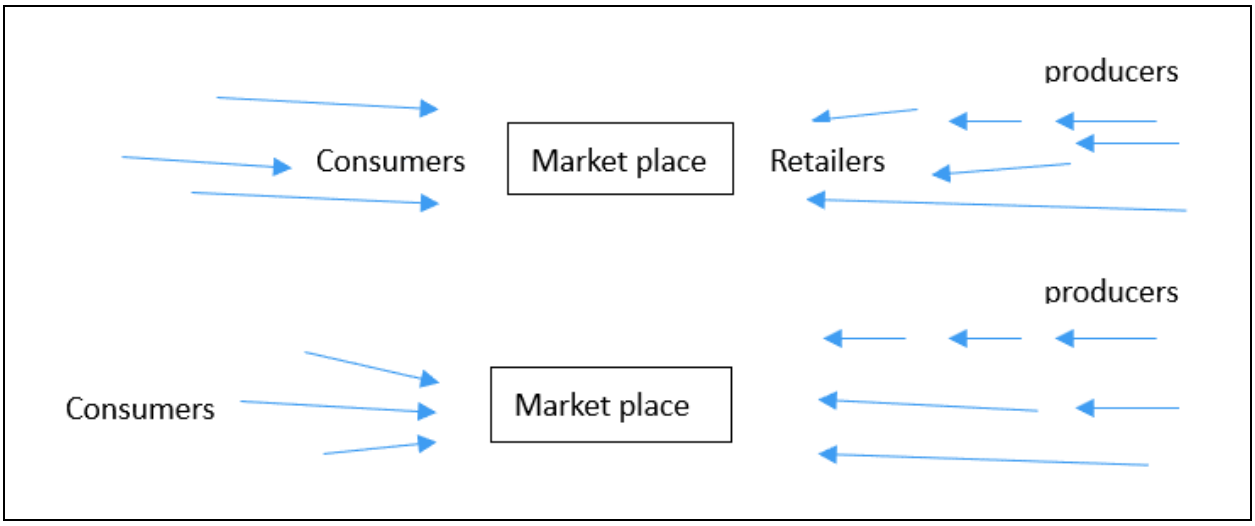

Figure 2: The Process of a Typical Traditional Trade

3.1 Traditional Trade

Traditional business operations can be summarized by the principle "commodity first, information second," and involve multiple stages from production to consumption. Physical constraints limit the accessibility of consumers to market products and services.

Retailers procure products from suppliers at various stages of the supply chain. They first place commodities on the market, awaiting consumers.

Based on this business model, we can categorize transaction cost into two components: consumer transaction cost and seller transaction cost.

Consumer transaction cost (Tc) encompasses information searching costs (distance/time, transportation fares, congestion discomfort, physical energy), negotiation and trust (quality, payment), service and product delivery time, among others.

Supplier transaction cost (Ts) comprises middlemen's transaction cost and retailer coordinating cost, which includes time, labor, rent, capital flow, trust, and transportation expenses.

Retailers serve as coordinators for diverse customers across different times and places. They also gather consumer information and relay it to their suppliers through orders. Retailers with prime locations attract more consumer attention. Middlemen act as coordinators for both suppliers and buyers across different times and places. The costs associated with price negotiation, payment conditions, and quality assessment are substantial.

For a new business model to emerge, it must decrease the total transaction cost.

3.2 The Evolution of Ecommerce in China

3.2.1 First generation of Ecommerce (Taobao generation)

Taobao, translating to "searching for treasure," serves as an internet platform or e-supermarket. Ecommerce primarily hinges on three basic elements: Alipay, logistics, and the internet. Ecommerce can be defined by the principle "information first, commodity second." The logistics system facilitates one stage or fewer stages of delivery, replacing the multiple stages of the traditional supply chain and eliminating intermediary transactions. With the advent of ecommerce, physical barriers no longer hinder internet users' access to products and services online.

Why does ecommerce outperform the traditional business model? The primary reasons are two-fold: economies of scale and direct sales, which reduce middle transaction costs.

The introduction of the internet (a mutation) has significantly cut information costs. This reduction disrupts the cost structure equilibrium and prompts the adaptation of logistics and reengineering of the traditional business model. Ecommerce alters the sequence of trade and even production. The internet serves as a medium to coordinate the demands of various customers across different times and places. Buyers and sellers can negotiate and reach an agreement first, with the transportation and delivery of commodities following. In some manufacturing firms, like Xiaomi, consumers can even participate in product design. A

new logistics system is developed to adapt to the changed business pattern. Middlemen have been eliminated and retailers' stock has been substantially reduced. Consumers' trips to the market and the commodity transportation have been replaced by the new logistics system, decreasing the consumers' travel costs to the market. Individual packages are sent directly from producers to consumers.

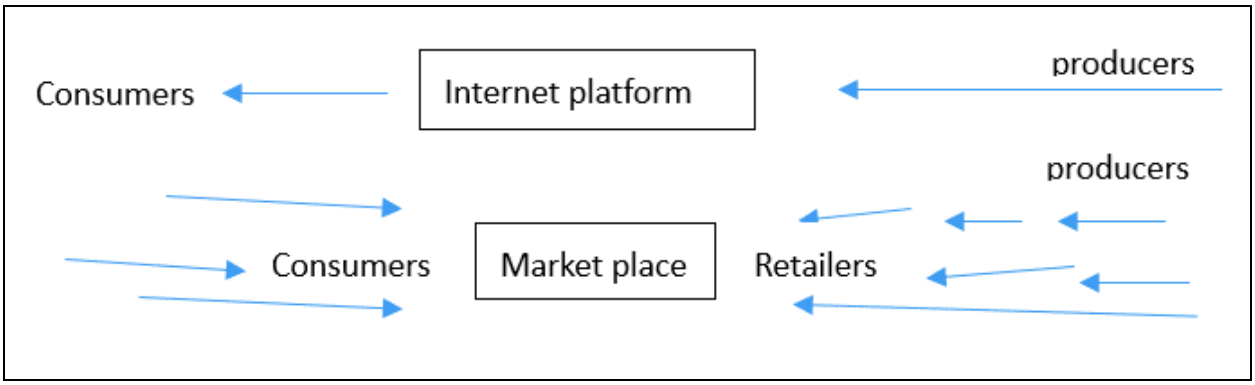

Figure 3: The First Generation of Supermarket

Just like the substitution of production factors that uses cheaper factors to replace the expensive ones, the reengineering of the business process is a response to the reduction in information costs. The essence of ecommerce lies in utilizing internet information and the time delay of product or service delivery to cut stock costs and middlemen, thereby enjoying economies of scale due to the accessibility of a larger number of consumers.

However, this reengineering process and economic logic are general and should hold true globally. So, what makes Chinese ecommerce more successful and unique? The seven elements below are most important.

Huge internet user network. China has the largest internet user base in the world. These users are potential customers for businesses. Even a small proportion of them, with a small profit from each, will generate substantial wealth. This not only motivates companies to enter and remain in this area, but also provides them with resources to improve their technologies. Moreover, the logistics system itself has a significant fixed cost that should be shared by many customers. There is a diminishing marginal cost, making larger networks more competitive.

Zhai generation. Due to the one-child policy, the younger generation, especially the so-called '90s generation, possesses two key traits. They have purchasing power, as all family savings and an overflow of parental affection are directed towards them. They are also eager to learn and proficient in internet skills. They dislike physical work (including shopping) and prefer to stay home with their computers and mobile phones all the time ("Zhai girls" or "Zhai boys" in Chinese). Further, due to the intense Gaokao (university entrance examination), most of them lose interest in studying. Purchasing is a way to relieve stress and a

hobby, balancing the monotonous study routine at school. Online shopping provides them an easy way to fulfill their distorted desires. Moreover, ecommerce companies "burn" money to shape the purchasing habits of this young generation.

Shopping ladies. Chinese housewives are unique. They are open to new information technologies, love shopping, and are the "financial ministers" of the family, controlling most of the family income and being responsible for family purchases. The easy purchase process of ecommerce makes them very active on the internet ("Mai mai mai" in Chinese, or "Buy Buy Buy" in English). There's a saying: "Behind every successful man, there is always a great woman." But now it's become "behind every great man (like Jack Ma), there are 10 family-bankrupting or spendthrift women."

While the shopping ladies and Zhai generation form the basic scale of the network for ecommerce, the older generation are free riders taking advantage of the decreasing marginal cost of the network, driving the cost of ecommerce even lower. As a collective society, people love to discuss and share their shopping experiences, thereby rapidly expanding the network.

High rent of shop. Due to the unique land policy of the Chinese government, city housing is very expensive. This situation makes offline businesses less competitive and provides a unique opportunity for ecommerce to thrive.

Alipay system. The level of trust in Chinese society is rather low, and even offline face-to-face trades often face issues with price and quality deceit. People expend costs searching and negotiating to avoid being cheated. When it comes to ecommerce, because of the physical separation between sellers and buyers, it's imperative to solve the trust issue in terms of quality and payment. The Alipay system is a creative solution to the trust issue in ecommerce.

Alipay is a third-party-based payment system. Only when consumers pay the bill to the third party (kept by the third party) will sellers send out the products. And only when consumers confirm acceptance of the products can sellers retrieve the money from the third party. This payment system is a unique Chinese governance mechanism for a trust-deficit business environment. It provides a punishment (or threat) mechanism against the sellers. If the quality or price of products is not satisfactory, consumers will return the products. In this case, both parties lose in terms of logistic fees, packaging fees, and time spent. The delivery time also gives consumers the chance to rethink their purchase decision and avoid impulsive purchasing. During Singles Day, there is a high percentage of sales returns (6% from Tmall in 2018). The Alipay solution generates an even higher trust level and makes online trade more reliable than face-to-face deals in offline shops.

Lower cost of logistic system. The logistic system is an indispensable part of ecommerce. In the 1990s,

the Chinese government started allowing private companies to provide logistic services, which were monopolized by China Post. Since there was already a massive logistic and transportation system in the industry, many logistic giants like Shunfeng, JD, Yuantong, Shentong, etc., flourished a few years later, and the network expanded to all towns in China. The logistic system uses labor time to replace the consumers' time, cutting the consumers' transportation to the market. Kuaidi boys (logistic men) are usually hard-working and provide relatively low-cost logistic services.

Governmental support. In recent years, the Chinese government has been encouraging innovation initiatives, especially those based on the internet. Consequently, Alipay and the logistic system have been able to thrive.

These Chinese factors, combined with general principles, may help to create the unique ecommerce miracle in China.

3.2.2 Second Generation of Ecommerce (Tmall Plus Taobao Plus Community Ecommerce)

The first generation of ecommerce is unable to provide an on-the-spot experience and personalized service. Meanwhile, due to the open internet access for everyone and a fixed number of internet users, the supply side expands much faster than the demand side. The internet becomes "crowded", internet traffic (clicks) becomes scarce, and consumer attention and stickiness become more crucial. This leads to the so-called second generation of ecommerce, which competes for customers' attention.

Trust and Tmall: Since the low-quality and cheap products on Taobao can't meet the demands of customers with higher income, Alibaba opened a new platform called Tmall with an additional governance mechanism for product quality assurance. It requires all online shop owners to pay a certain amount of money as a deposit, thereby setting a threshold. Only larger shopkeepers can enter the Tmall platform. In this way, product quality on Tmall is much better than that on Taobao. The new governance mechanism is efficient in reducing the transaction cost related to quality issues.

Community or Fans Economy: Now, there is internet traffic but no customers. In the competition for customer attention, platforms or online shops use various methods to attract internet traffic. They refer to this as "community" construction. The strategies include using internet celebrities (a new occupation), integrating online and offline operations, creating apps, and increasing customer stickiness like Mr. Hippo (Hema Xiansheng) and OFO. An app is an important tool for shaping customers' habits. Since consumers take time to learn and adapt to new app operations, the company usually needs to "burn" money until consumers are locked in, after which the company may start to profit in some way. Didi is a good example. Some consumers act as middlemen, using their social networks to promote group purchases. This type of consumer is called a consumer merchant.

Network-based competition pushes all networks to optimize their operations, such as automation and integration, and extend their logistics.

Pinduodu (PDD Holdings): This is a unique, interesting, and successful case of community construction. It uses low prices to attract customers to make purchases together, significantly reducing packaging and logistics costs. Community construction and logistics cost-cutting work hand-in-hand.

Diminishing Marginal Cost and Scope Economy: Ecommerce now involves nearly all businesses in some capacity. Alipay has become a bank and credit evaluation institute. Cainiao has integrated the distribution ends of almost all logistics companies and acts as a station for consumer information collection and coordination, receiving orders from their customers for group purchases. The formerly competitive ecommerce market has evolved into a monopsony market (e.g., WeChat group business) or an incomplete market (Jingdong and Alibaba). To convert internet traffic into real purchasing power, precision marketing is crucial, thus creating demand for big data mining. Data has value. Once data exists, customized personal services and large-scale personalized production become possible.

In general, the second generation of ecommerce faces stiff competition for customers' attention and provides more customized services and quality products. While the first generation emerged from competition between online and offline shops, the second generation of ecommerce is the result of competition among online shops and offline shops. However, the underlying logic is not vastly different. The scale and scope economy of the network, network-based innovation, information-based transaction cost reduction, habit shaping and evolution, these forces work together in various ways to generate different forms of ecommerce.

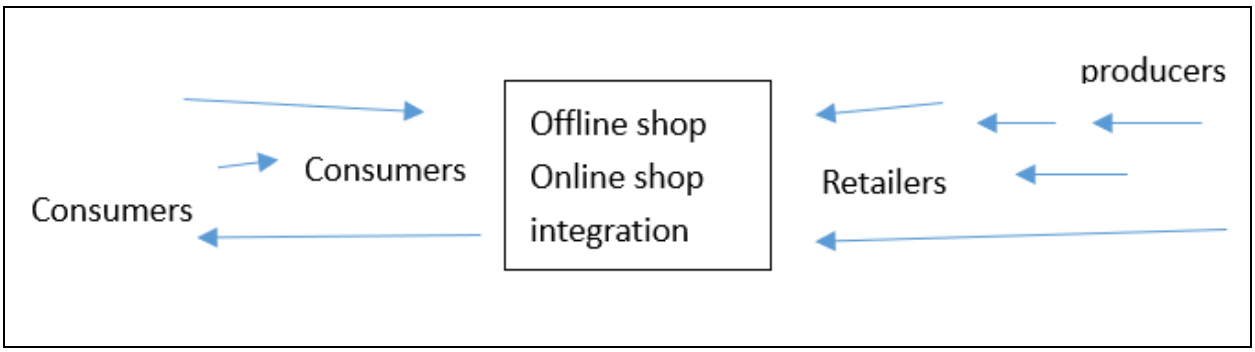

Figure 4: New retailer: online off-line combination

4. Propositions, Predictions, and Hypotheses

Returning to our initial questions, our answers are as follows: The phenomenal growth of ecommerce in China is driven by a combination of universal principles applicable globally and unique characteristics inherent to Chinese society. We summarize our analysis and explanations below:

(1) Information-related transaction cost reduction and the reengineering of traditional business processes (coupled with delayed delivery) are important driving forces for ecommerce development. All businesses can potentially become ecommerce ventures, as all businesses involve information. In the future, online and offline will be more integrated. If the information cost in a transaction is higher, that transaction becomes more suited for ecommerce. Pioneers of products or services in ecommerce typically do not have urgent delivery requirements or no delivery at all (just information transfer services like books, tickets, money transfers, distance education, etc.).

(2) The scope economy and scale economy of a large network are additional driving forces for Chinese ecommerce. High population density and a large population give China a competitive advantage. With decreasing marginal cost, the bigger becomes bigger. As a result, fewer companies will dominate the area, and industry concentration becomes more intense. With ecommerce, globalization will accelerate and become more complete. In some areas, the entire world can only accommodate one network. "Made in Internet" becomes the norm, and the winner takes all.

(3) Individuals or countries in different networks may lead to different futures. The information gap may transform into a development gap. The increasing return of information technology propels China into an information society (as compared to agricultural society, industrialization society), where data, information, knowledge, and attention are scarcer than energy, material, and capital. Consumers' lifestyles and production modes become significantly different, sometimes difficult to understand from other societies' perspectives.

(4) The enthusiastic "Zhai" generation and active shopping ladies, high offline shop rents, huge and uniform market and internet users, governmental support, developed and inexpensive logistics systems are unique Chinese characteristics that accelerate the growth and expansion of ecommerce.

(5) Habit and path-dependent evolution play a crucial role in internet-based ecommerce. Together with the diminishing marginal cost of the network, path-dependent evolution may lock the whole world into a state of low efficiency.

These propositions should be subjected to further empirical examination.

5. The implication for other countries

(1) Internet development, logistics, and payment systems are three key technical requirements for ecommerce development.

(2) Packaging and Environmental Issues: The individual package and delivery logistic system may generate more value, but it may not necessarily reduce society's transportation costs. Its net effect on energy use,

CO2 emissions, and road congestion is unknown. Packaging pollution from ecommerce is a disaster in China.

(3) Starting from products that make ecommerce cut a significant share of transaction costs is a good strategy. Choose businesses relevant to information with less logistical requirements, like ticket booking, payment services, and ebook reading services. Ecommerce is more important for high-value standardized commodities without an urgent delivery requirement.

(4) Online and offline integration: Group purchase-based ecommerce may develop easier in burgeoning countries.

(5) Focus on the younger generation and female purchasing power who are more vulnerable to the internet.

(6) Larger economies with massive networks can develop their own ecommerce, while smaller economies may introduce or connect with mature networks from other countries. The scale threshold requirement of the network is hard to satisfy in small countries, and ecommerce development in these countries should be introduced.

(7) Never forget the original goal and rethink our final destination, considering humanity as a whole.

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Entrepreneurship for Sustainability

Article

Managing Consumer Expectations: Shopping Disappointments, Surprises, and Addiction in E-commerce

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ARTICLE INFORMATION

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ABSTRACT

This paper examines the dynamics of consumer expectations and experiences in online shopping environments. It proposes that shopping disappointments are more prevalent than surprises initially, but consumers adapt expectations over time. It also argues that certain factors make online shopping more habit-forming than offline shopping. Analysis of shopping addiction behaviors reveals the need to incorporate subjective utility and expectation adjustments into welfare economics. Findings suggest balancing disappointment and surprise factors while expanding diagnostic criteria for maladaptive online shopping.

Note: This paper is based on an Independent Thinking Seminar led by Professor Zhou Deyi with his students and colleagues.

Introduction

The rapid growth of ecommerce has brought convenience but also changed shopping psychology. Three interconnected phenomena – shopping disappointment, surprise, and addiction – illustrate evolving consumer relationships with online retail.

Shopping disappointment refers to a product failing to meet inflated expectations, resulting in a subjective experience of dissatisfaction despite objectively receiving the advertised item. Shopping surprise is the opposite case where subjective satisfaction exceeds expectations. Shopping addiction indicates excessive purchasing and preoccupation beyond rational needs.

This paper puts forth four propositions about these consumer experiences in ecommerce:

1. Shopping disappointments are more common than shopping surprises due to distorted expectations.
2. Disappointments are most prevalent early in consumers' online shopping learning curve.

3. Structural factors make online shopping more habit-forming than offline shopping.
4. Shopping addiction can coexist with periodic disappointments.

Analysis of these propositions provides implications for consumer welfare, marketing practices, and public policy.

Shopping Disappointment in Ecommerce

Multiple factors distort consumer expectations in the online shopping process, resulting in frequent disappointments. First, limited information reduces expectations compared to physical inspection. Consumers compensate through positive imagination and assumptions (Nenggan, 2019). Second, seller descriptions and photos portray products in the best possible light, further inflating expectations (Wang, 2019).

When products fall short of imagined perfection, consumers feel disappointed, although they objectively received the advertised item. Complaints often involve size, fit, color, materials, and other sensory details missing from online information.

However, research shows that consumer disappointment diminishes over time as expectations adjust based on experience (Xie, 2019). While distortions persist, consumers learn to discount exaggerations and anticipate imperfections. They shift focus from idealized fantasies to pragmatic tradeoffs between online selection convenience and sensory uncertainty.

Shopping Surprise in Ecommerce

While shopping disappointments are common initially, surprises also occur when products exceed expectations. Improvements in manufacturing and logistics make this increasingly likely (Cao, 2019). Scrutinizing reviews can further help set realistic expectations and identify exceptionally satisfactory purchases.

The overall mix of disappointments and surprises drives repeat purchase behavior. Too much disappointment discourages future purchases. But frequent surprises paired with easy returns for disappointments increase customer loyalty.

Shopping Addiction in Ecommerce Beyond individual purchase satisfaction, certain structural and psychological factors make online shopping intrinsically habit forming. Immediacy provides convenience and gratification missing from offline shopping. Browsing for deals offers ongoing novelty and stimulation (Wang, 2023).

Checkout frictionlessness enables instant gratification without financial pain. Cognitive biases distort

perceptions of money spent versus value received (Xie, 2023). Receiving delivered packages activates reward centers (Li, 2023).

For certain personality types and product categories, these factors create compulsive shopping habits and emotional dependence beyond rational utility (Cao, 2023). Addictive dynamics resemble those in gaming and social media usage.

Discussion

Analysis of shopping addiction necessitates modifying welfare economics. The consumer surplus model assumes value derives from acquiring products. But compulsive shoppers obtain utility from the shopping process itself (Cao, 2023). This challenges assumptions that purchasing always improves welfare.

Policy solutions may include interventions like friction, delays, and reminders to disrupt addictive patterns, as well as better diagnostics and treatment of clinical cases. But consumer education and reasonable expectations also play a role. Further research should identify products, retailers, and groups most at risk for unhealthy dynamics.

Conclusion

Increasing online shopping makes managing consumer expectations an emerging challenge. Disappointments can discourage purchases, while surprises encourage loyalty. But shopping also carries addictive risks that distort welfare assumptions. Balancing these dynamics will be an ongoing priority for consumer psychology, marketing ethics, and public health.

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Article

Ecommerce: From Basic Principles to China's Success and Its Global Impact

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Keywords: e-commerce, offline business, transaction cost, online business, logistics, product suitability, market competition, technology improvement.

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ABSTRACT

This paper provides an in-depth analysis of ecommerce, with a special focus on its implementation in China and its global implications. The study first elucidates the principles of ecommerce, its pros and cons, and the balance between online and offline businesses. It then discusses the key factors that have led to the remarkable success of ecommerce in China, including innovative entrepreneurs, efficient logistics, robust internet infrastructure, and a large market. Finally, the paper examines the impact of China's ecommerce on the rest of the world, highlighting aspects such as technology transfer, cross-border ecommerce, and its role in sustainable agriculture and poverty alleviation.

1. Understanding the Logic of E-commerce

Understanding the logic of e-commerce involves answering a critical question: Which products are better suited for e-commerce and which for offline business? The fundamental concern of any business is the transfer of products from producers to consumers while ensuring monetary returns.

Offline businesses traditionally address this concern by initiating the process from factories' products, moving through branding, channels, terminals, and finally reaching the consumers. This process incurs a considerable transaction cost, accounting for over 70% of the final price. This cost comprises transportation and information costs, the latter including expenses from product stock, shop rent, staff, window-shopping, face-to-face negotiation, and middlemen commissions.

The advent of the internet has significantly reduced information costs. E-commerce reverses the traditional business process by prioritizing consumers and eliminating intermediary steps. This shift allows for quicker response to consumer demand, eradication of middlemen, removal of the need for stock, reduction in labor costs, savings on shop rent, and an increased exposure to a broader consumer base. It enables local producers to reach consumers nationwide, intensifying competition and making internet influencers a scarce

resource. This transition sharpens the competitive edge of economies that have embraced e-commerce.

However, e-commerce isn't without its disadvantages. The individual packaging and deliveries involved in e-commerce incur significant transportation costs and contribute to pollution. These high transportation costs limit the range of products sold by e-commerce and establish the boundary between e-commerce and offline business. Offline business has the advantage with products that require instant delivery, have low demand uncertainty, and high transportation costs (e.g., heavy, cheap, volume cargo). Conversely, online businesses are better suited for products with high demand uncertainty and low transportation costs, typically niche or "long tail" products that are expensive, high in value, and do not require immediate delivery.

As the efficiency of logistic systems improves with the automation of parcel sorting systems, integration of parcel pick-up stations, self-service machines, freelance delivery systems, group purchases, and big data predictions, the equilibrium boundary line is gradually shifting towards offline business. The continuous evolution of e-commerce is bringing a broader range of products and services into the online market, thereby satisfying the nuanced and diverse demands of customers.

Since e-commerce transactions take place over the internet where consumers and producers are often far apart, it can lead to information asymmetry on product quality and trust issues on payment. This necessitates the emergence of third-party payment systems, unconditional return policies, and consumer review systems. Given that the internet retains memory and reputation holds more value for e-commerce shops due to economies of scale, online product quality and post-sale service could potentially be better, except for products that are difficult to return and verify (e.g., chicken fur removing machine).

With further improvements in e-commerce technology, particularly the automation of production and transportation, it is expected that more products will become niche products. This shift could potentially lead to the dominance of e-commerce, possibly replacing offline businesses entirely in the market. Consequently, nationwide competition via e-commerce could enhance the overall competitive advantage of economies in the international market.

2. The Success of Chinese E-commerce

Chinese ecommerce stands out as the most successful not only among developing countries but also globally, even though it originated in the West. Why is this so? The following six factors are crucial to understand this success.

First, the role of ecommerce platform entrepreneurs cannot be underestimated. Chinese Ecommerce platforms were initially emulated by Alibaba, taking inspiration from the USA. Jack Ma, upon encountering the internet in the USA, was completely taken aback by its potential value for business. As a result, he

developed the Taobao platform and introduced the Alipay system, modelled after Paypal. This move was designed to attract business people to carry out their transactions on the Taobao platform, largely for free. Alibaba didn't make any profit from the platform for a considerable period, but Ma believed in its value, as it empowered numerous businesses to make money. As more and more business people began conducting transactions on Taobao, Alibaba gradually monopolized the ecommerce landscape, marking a significant success. To enhance the quality of the products sold on the platform, Alibaba created the Tianmao platform for premium products. Ecommerce operators must pay a deposit to obtain a Tianmao account. The success of Alibaba has drawn other platforms like Jingdong, Pingduoduo, and Tiktok, leading to multiple ecommerce platforms competing with each other, thereby enhancing ecommerce business models, technologies, and overall efficiency.

Second, the contribution of a large number of ecommerce entrepreneurs and live streamers is significant. Numerous young ecommerce entrepreneurs, capable of skillfully utilizing the platform and making money through self-exploration, have also contributed to the success of Ecommerce platforms. Today, a vast number of live streamers and ecommerce shop operators are competing with each other and innovating a multitude of skills. One of the most famous live streamers, Li Ziqi, a countryside girl, has attracted a significant fan base by showcasing the traditional countryside lifestyle.

Third, there are numerous entrepreneurs in logistics. An efficient logistic system is a key element for the competitiveness of ecommerce over traditional businesses. The traditional logistic system, monopolized by China Post, was slow and expensive. The first private logistic system, Shentong, was founded by Chen Dejun, a 23-year-old with a middle school education, who spotted a business opportunity when he realized he could make 200 RMB by sending a document from Nanjing City to Shanghai, only 300 kilometers apart. He established Shentong in 1993. He passed away in a car accident when he was 25, and his sister took over the company, which now has a net worth of 15.675 Billion RMB. Later on, its employees duplicated the model and established different logistic companies, like Yunda, Yuantong, Zhongtong, T-Express (Tiantian Kuaidi), and Best Express (百世汇通). All of these company founders hail from Tonglu County, Zhejiang province. Later, other logistic companies, like Shunfeng, emerged. The competition among the logistic companies has decreased the logistic cost and improved the logistic system. Three important developments in the logistic system include automatic sorting machines, a freelancer system for deliverymen, and the integration of parcel pickup stations. The automatic sorting machine in the logistic center (usually in big cities) can allocate the parcels automatically and swiftly to different destinations according to the barcode of the parcels. People with e-bikes can voluntarily join the platform as partner deliverymen who earn income based on the number of parcels delivered. The integration of pickup stations, such as supermarkets or grocery stores, built jointly by some logistic companies, simplifies the process for

customers to collect their orders by themselves according to the messages they received. The reduced logistic cost of individual packages makes ecommerce increasingly competitive, and more and more products can be sold through ecommerce channels, gradually eroding the market share of traditional businesses.

Table 1: Some examples of Industry Clustering in China

Location	Product	Production quantity
Danyang County, Jiangsu province	Glass lens and frame	50% of world glass lens (400 million pairs), 100 million spectacle frame a year
Caoxian county, Shandong Province	Japanese coffin and Han Cloth (an ancient Chinese style cloth)	90% of Japanese Coffin and 1/3 of Han Cloth in China.
Hui-an County, Fujian	Tombstone	80% of Japanese tombstones.
Shaodong County, Hunan province.	lighters	70% world lighters
Chuji County, Zhejiang province	pearl	73% world pearl
Hengxian county, Guangxi Zhuang Nationality Autonomous Region	Jasmine flower	60% world arabian jasmine flower.
Changle County, Shandong province	Guitar	1/3 of world Guitar
Panyu district, Guangdong province	Claw machine/UFO catcher	90% world claw machines/UFO catcher
Xuchang, Henan province	periwig	80% world periwig/hairpiece
Jinjiang county, Fujian province	Sports shoes	30% world sports shoes

Fourth, the internet infrastructure provided by the government plays a critical role. The robust internet infrastructure in China not only provides consumers and producers with cheaper access to the internet, but

also a high speed of data transfer that enables live streaming and other ecommerce models to be feasible.

Fifth, the enormous market in China plays a significant role. A defining feature of ecommerce is the economy of scale. China has a vast population of young people who are eager to try new internet technologies and have substantial purchasing power. This market scale provides the foundation for the development of various ecommerce models or technologies.

Sixth, the county-based production clustering is a significant factor (see Table 1). China, often referred to as the world's factory, produces almost every product at a very low cost. How is this possible? The secret lies in industry clustering. Typically, one country specializes in one product. The coordination of the entire supply chain, the competition, and the technology sharing among the network in the cluster, along with the economy of scale, reduce the product cost. The cheaper products and efficient supply chain provide a variety of products for ecommerce. The limiting factor of the Chinese economy lies not in production, but in marketing. The development of ecommerce serves the role of large-scale marketing. Ecommerce and industry clustering complement each other.

These six factors, all attributing to the entrepreneurship and hardworking spirit of Chinese people, are unique in the world. Compared to developed countries, China has low-cost products and a low cost of labor force as deliverymen. In comparison with developing countries, China is an industrialized country with good infrastructure, a vast market purchasing power, high innovation capacity, high production capacity, and an efficient logistic system. These are probably the reasons why China's ecommerce is the most successful in the world.

3. The Ecommerce Technology Transfer and Investment

What are the effects of China's ecommerce on the rest of the world, particularly in developing countries?

3.1 The Ecommerce Technology Transfer and Investment

Currently, China's TikTok has made such a profound impact in the United States that the former US President, Donald Trump, even attempted to ban TikTok in the country. Recently, it was reported that WeChat is being emulated by the new Twitter owner, Elon Musk.

Shein Company, established in 2014, is a cross-border B2C fashion retailer. It has a market value of USD 100 billion in 2021. Leveraging China's flexible clothing supply chain and manufacturing capabilities, Shein can deliver quality fashion clothing at very affordable prices and high speed. It's experiencing rapid growth in Europe.

Chinese ecommerce platforms and their mature business models are also being replicated in Southeast Asian countries. Sea Limited in Singapore, founded by Forrest Li from Tianjin, China, in 2009, has become

the number one internet company in Southeast Asia, worth USD 117.47 billion in 2021. It runs three business divisions: Shopee, Garena, and SeaMoney.

Alibaba is promoting its eWTP (Electronic World Trade Platform) hub in China's Yiwu County, as well as in Belgium, Ethiopia, Rwanda, and Malaysia. Alibaba also has significant ownership stakes in Daraz (used in Pakistan), Lazada (used in Southeast Asia), and Miravia (used in Spain).

Due to its early development and accumulated experience, applying the Chinese ecommerce model may reduce learning costs for the rest of the world and help build an international ecommerce ecosystem. This presents a considerable potential for cooperation.

3.2 Cross-Border Ecommerce and Ecommerce-Based Innovation in Sustainable Agriculture and Poverty Alleviation

It is expected that the world market might feel the impacts from China through ecommerce. The rapid development of cross-border ecommerce promotes Chinese products globally, resulting in China earning a trade surplus with almost all its trading partners. Despite the challenges, the high penetration power of ecommerce makes it difficult to avoid these impacts. Of course, ecommerce can also provide opportunities for importing products from other countries.

Ecommerce, especially beneficial for long-tail products, can be used to import sustainable, smaller, and cheaper agricultural machinery or tools. This can help small farmers improve their production efficiency and protect the environment.

Internet-based ecommerce can provide flexible organizational arrangements and cooperation models for Chinese and international ecommerce talents.

4. Conclusion

In summary, the emergence of e-commerce in China has transformed business practices domestically and globally. The success of Chinese e-commerce platforms like Alibaba and innovative business models can be attributed to pioneering entrepreneurs, a massive market, robust infrastructure, and clustered manufacturing.

Chinese e-commerce innovations are now spreading worldwide through platforms like TikTok and Shein, benefiting developing countries by reducing costs. The mature Chinese e-commerce ecosystem also provides opportunities for international collaboration and investment to build a shared e-commerce infrastructure.

For agriculture and poverty alleviation, e-commerce enables access to markets, technologies, and flexible

organizational arrangements. Cross-border e-commerce can promote exports but also facilitate imports of sustainable equipment to aid smallholder farmers. While bringing some challenges, e-commerce penetration can drive inclusive growth.

Overall, China's e-commerce revolution has transformed its economy and is now propagating worldwide. With prudent regulation, e-commerce can be harnessed for innovative solutions to promote sustainable development, reduce inequality, and raise standards of living globally. The lessons from China's e-commerce success can guide international efforts to construct an integrated and inclusive digital economy.

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Entrepreneurship for Sustainability

Article

The Puyuan Miracle: Dissecting the Fabric of a Global Sweater Empire

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ABSTRACT

This article investigates the Puyuan phenomenon, a unique model of industrial success originating from a small town in China, globally recognized as a major sweater production base. The study underscores the various underlying mechanisms that contribute to this phenomenon, including entrepreneurship propelled by scarce resources, technological innovation, low labor costs, knowledge sharing, reputation within the network, family-based management, large market scale economy, and flexible payment systems. The analysis also underscores the significant role played by Zhejiang Province's entrepreneurship and customer service. The investigation further reveals that the core mechanisms among all are technological innovation driven by population pressure and the hardworking nature of the people. The paper highlights the fading of Puyuan-style entrepreneurship with the advent of a new generation in China, raising questions about the future of this industrial model. This exploration offers valuable insights not only for understanding the Puyuan or Chinese miracle but also for global development.

Introduction

Puyuan, a small town nestled in the Tongxiang city of Jiaxing City, Zhejiang province, is home to a population of 50,000 locals and 150,000 migrant farm workers. Despite its modest size, Puyuan is the world's largest sweater production base. In 2013 alone, the town sold 700 million sweaters, approximately two sweaters for every Chinese citizen, valued at 30 billion RMB. This Puyuan miracle is a part of the larger Yiwu miracle, which in turn contributes to the broader narrative of China's rapid industrialization.

The Phenomenon of Industry Clustering in China

A remarkable and shared feature of China's industrialization is the phenomenon of industry clustering, whereby small-scale producers can capitalize on the benefits of economies of scale. Each town or village specializes in the production of one product, claiming a significant share of the country's total output. These industrial clusters are marked by family-based mini-production units, fine job divisions, large-scale

production, the use of informal social networks, and low costs - a phenomenon we label the ANT tribe strategy.

The Multi-Logic Nature of the Puyuan Phenomenon

Several questions come to mind when considering the Puyuan miracle. How did this phenomenon occur? What are the underlying logics and principles? Can other countries replicate this model? Why did it take place in Puyuan and not elsewhere in China? These are some of the questions this article intends to explore.

The Puyuan phenomenon is not a straightforward scientific phenomenon with a single logic. Instead, it comprises multiple logics or mechanisms that collectively shape its reality. To understand the Puyuan miracle, we first need to comprehend its historical and geographical conditions.

1. Historical and Geographical Context

Puyuan, nestled in Southeast China, is part of one of the most densely populated regions in the country's long history. The area has scarce land resources, engendering high competition pressure. The region's warm weather facilitates the cultivation of two rice seasons and many other crops. Consequently, the survival pressure drives technological innovation.

2. Economic Advantage of Market Size

Alongside the historical and geographical factors, the sheer magnitude of the market contributes to this phenomenon. The large scale of trade means that a factory can reap substantial profit by earning a marginal amount from each unit of the product, thus making them competitive.

3. Family Commitment and Internal Management Cost

The strong commitment of family provides a long-term view and minimizes the internal management cost. Family is seen as the unit for production and life, with the couple being both business and life partners. Chinese women, known for their hardworking nature and relative independence, shape the work ethics of Chinese culture.

4. Historical Craftsmen Skills and Technology Adoption

The historical craftsman skills in the region make it easy for Puyuan people to master the technology of sweater production and improve them quickly. Historically, Puyuan was renowned for its silk production, which required a careful mind and precise control of hand operations.

5. Entrepreneurial Skills and Industry Clustering:

To run a small workshop, individuals need to deal with internal production control, employee management,

and external coordination with consumers, wholesalers, and other workshops. Due to the long history of business, these skills have become ingrained in the people of the area.

6. Social Network and Coordination Cost:

The social network reduces the coordination cost arising from the fine division of jobs. The whole process of sweater production involves 33 steps, and more than 70% of sweaters are produced by small family workshops. The wholesalers in the market play a role in coordinating different shops or steps.

7. Farmer Worker Spirit and Resource Constraints

Due to very limited resources, Chinese farmers (excluding the one-child generation) struggle for survival. This struggle makes them work hard, be practical, and be willing to accept low wages. Their life is secular and focuses on economic aspects only, making the production cost much lower.

8. Flexible Payment System for Workers

In Puyuan, the payment is based on a "per piece" model. This system makes the management much easier and allows workers to be shared among different workshops. If one shop has no order, they can work for other shops. When the market is sluggish, workshops can easily stop the loss by closing the shops.

Personal Interpretations and Observations

These explanations are personal interpretations or imaginations, which have not been proven yet. However, some comments and facts suggest they may contain some truth. For instance during our visit to Yiwu in 2018, an Indian entrepreneur in Yiwu attributed Yiwu's success to the ease of doing business there, while a Pakistani entrepreneur mentioned the affordability of the products.

Final Thoughts on the Puyuan Miracle

To sum up, the Puyuan miracle is a unique phenomenon that encapsulates a blend of several underlying mechanisms. These include the entrepreneurship induced by scarce resources, technological innovation, low labor costs, knowledge sharing, reputation within the network, family-based management, the economy of scale offered by a large market, and a flexible payment system. These mechanisms are prevalent across China, yet some, like entrepreneurship and customer service, stand out especially in Zhejiang Province. The core mechanisms among all are the innovation in technology driven by population pressure and the hardworking nature of the people. These mechanisms coalesce in a distinctive manner, giving rise to the unique Puyuan miracle and the general trend of industry clustering in China.

This phenomenon warrants further investigation. Understanding the Puyuan miracle, and indeed the larger Chinese miracle, is not just significant in its own right, but it also provides valuable insights for global

development. In the context of the Puyuan miracle, it is suggested that we need to investigate the network effect of the Chinese economy on neighboring countries and the future integration of economies among China, India, and Pakistan, considering factors such as internet accessibility, infrastructure, logistics systems, and business community connections.

However, it is important to note that the Puyuan miracle is experiencing a shift. The new generation in China exhibits a reluctance to work as hard, leading to a fading of the Puyuan-style entrepreneurship. Puyuan or Yiwu no longer earns income predominantly from production, but rather from trade or acting as a focal point for the trade of sweaters or other small commodities among traders. This evolution of the network and industry clustering is intriguing and it raises the question - who will be the next cluster to follow this path?

For more detailed information on the Puyuan case, please refer to our case description in the first CBEC forum.

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Entrepreneurship for Sustainability

Article

Empowering Agricultural Progress Through Microfinance: The Broad Vision Experience in Kimandi Village, Kenya

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ARTICLE INFORMATION

Keywords: Microfinance, Small-Scale Farming, Sustainable Development, Rural Economy, Kenya, Broad Vision, Agriculture, Community Empowerment

ABSTRACT

This article provides an in-depth analysis of the successful implementation of a microfinance initiative in Kimandi Village, Gatanga constituency, Murang'a County, Kenya. Initiated by Broad Vision, a group of local farmers, the project began in 2013 with a small grant which was used to kick-start a diverse range of agricultural and non-agricultural ventures. Despite initial setbacks, the members leveraged the grant to create a variety of sustainable businesses, from seedling cultivation and livestock rearing to opening cosmetic shops. The group also implemented a communal saving strategy, which facilitated investment in larger projects such as land acquisition and sunflower oil extraction. The Broad Vision case study underscores the potential of microfinance as a catalyst for grassroots economic development and self-reliance in rural farming communities.

Broad Vision is a collective of farmers from Kimandi village, located in Gatanga constituency, Murang'a County, Kenya. Their story, spanning from 2013 to the present, is a testament to the transformative power of microfinance and community-led initiatives in driving rural development and fostering self-reliance.

In 2013, one Broad Vision member received a grant of Kshs. 25,000, which was invested in rabbit rearing. However, the venture encountered challenges due to disease and predation. Undeterred, the members continued to explore other avenues.

The turning point arrived on December 24, 2014, when Professor Zhou Deyi from China visited Kenya. During his visit, Broad Vision members received a microfinance grant, which was equally divided among them. Each member received Kshs.9,000, which became the seed money for various small-scale farming ventures.

The ventures ranged from growing seedlings, rearing livestock, to growing horticultural fruits. Despite initial success, some members shifted their focus to dairy farming due to market fluctuations. One member even started a successful cosmetic shop from the profits of chicken rearing.

In another success story, a member utilized a grant of Kshs. 65,000 to start a utensil-selling business. Although the business was initially affected by COVID-19 related movement restrictions, the member strategically invested the profits in purchasing a plot of land, thereby expanding their asset portfolio.

Recognizing the importance of collective saving, Broad Vision members agreed to save Kshs. 200 per month. This fund facilitated the purchase of organic manure, which significantly boosted their farming activities. Moreover, the group collectively grew avocado seedlings, which have recently started yielding fruits.

Broad Vision's activities expanded beyond individual ventures. Their collective savings have allowed them to purchase a piece of land, on which they have planted sunflowers. Their future vision includes buying an oil press machine to extract sunflower oil, which will provide a new source of income and encourage more local farmers to plant sunflowers.

Broad Vision has thus set a clear path forward for its future endeavors. As a collective, the group aims to secure the best possible market prices to maximize their profit. After each sale, they plan to begin making partial repayments on their loans, demonstrating a sustainable approach to their development strategy and a commitment to financial responsibility. This strategy not only ensures the group's continued growth but also strengthens the case for similar microfinance initiatives elsewhere.

The experience of Broad Vision illustrates the potential of microfinance to empower farming communities, enabling them to diversify their income sources, improve their living standards, and foster a spirit of collective action and self-reliance. Their success provides valuable insights for similar initiatives in other rural areas around the world.

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Entrepreneurship for Sustainability

Article

An Experimental Microfinance Initiative in Kenya

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ARTICLE INFORMATION

Keywords: Microfinance, Sustainable Development, Agriculture, Poverty Alleviation, Kenya, Small-Scale Farmers, Industrialization, Belt & Road Initiative, China, International Organizations, Chuka University, Policy Implications

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ABSTRACT

This paper provides an in-depth account of a microfinance experiment conducted in Kenya, aimed at supporting small-scale farmers and enhancing local agricultural production. The initiative, influenced by China's successful industrialization and Belt & Road initiative, was implemented by a team of Chinese researchers in collaboration with local Kenyan contacts and researchers from Chuka University. Despite challenges in beneficiary selection, project management, and loan recovery, the project showed potential in supporting the acquisition of small agricultural machinery and optimizing agricultural production. The study also explores the potential for future scaling of the microfinance project through collaboration with agricultural companies and governmental agencies. The success of this experiment could provide useful policy implications for China and other international organizations interested in promoting agriculture and alleviating poverty in Africa.

Owing to its significant strides in industrialization and the establishment of the Belt & Road initiative, China has demonstrated its ability and obligation to aid other developing nations, particularly small-scale farmers, in the realms of food security and poverty alleviation. Similarly, various international organizations harbor interests in these areas but often lack the efficient mechanisms and policies required to achieve their objectives. The microfinance model, initially launched in Bangladesh, has been shown to be a successful strategy in assisting small-scale farmers. Thus, it's plausible to adopt similar mechanisms albeit with different lending institutions.

In 2013, a group of Chinese researchers had the opportunity to visit Kenya, facilitated by local liaison Mr. Wanjiku Kagira-Kargbo. Following this visit, the team allocated USD 800, which was distributed between two small-scale entrepreneurs for rabbit rearing and charcoal production. This sum was intended to be refundable, thereby allowing its reutilization by other community farmers. Management of this fund was entrusted to Ms. Wanjiku Kagira-Kargbo. However, due to the failure of one project and the rejection of another, the funds were not returned.

During a subsequent trip to the community in 2014, the team granted USD 1000 to a local farmer group known as Broad Vision, located in Kimandi, Gatanga sub-county, Kiambu County. This money was divided among eight members, with the expectation of its eventual refund. Ms. Josephine Maina, the daughter of the group leader, served as the local point of contact. Although all funded projects reportedly succeeded, the money was not reimbursed, attributed to the absence of a local manager. Further small amounts of money were later disbursed as per the community's request. Despite these efforts, a significant challenge remained: the lack of a local manager to select beneficiaries, guide project selection and implementation, and oversee loan recovery, thus posing a threat to the sustainability of the microfinance initiative.

Addressing this issue, the team decided to collaborate with local researchers from Chuka University to carry out an experiment involving approximately USD 7100 of experimental funds. The local researchers were made responsible for selecting beneficiaries, choosing projects, and recovering loans. The funds were designated to finance a preliminary baseline survey to assess the utilization of small agricultural machinery in agricultural production. This survey was conducted among farmer groups in Chuka sub-county. The primary objective was to fund farmer groups to procure small agricultural machinery such as weeders, extractors, or processors, thereby enhancing efficiency and optimizing agricultural production. If successful, this experiment could potentially be scaled up with formal public funding. Should this model prove effective, the team may provide policy recommendations to the Chinese government and international organizations interested in promoting agriculture and reducing poverty in Africa.

Looking forward, to expand the scale of microfinance, it is suggested that the project could be financed by agricultural companies that produce agricultural inputs and machinery. This could potentially integrate the microfinance projects with the marketing of their products. Concurrently, it is essential for relevant governments to collaborate and facilitate these initiatives.

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Article

Experiential E-commerce Learning: A Series of Workshops and Training Programs Facilitating Global Collaboration

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ARTICLE INFORMATION

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ABSTRACT

This paper provides a comprehensive overview of several workshops and training programs focused on e-commerce that were conducted collaboratively with universities and e-commerce companies. The programs were designed to provide hands-on experience to students and professionals in various aspects of e-commerce operations, including platforms like Taobao, eBay, Amazon, and Shopee. The training initiatives offered unique opportunities to understand the complexities of e-commerce, gain practical experience, and navigate challenges. The programs also explored the potential for cross-border collaborations, offering a mutually advantageous solution for both Chinese companies and individuals from Belt and Road countries. The overall aim is to facilitate cross-border trade and provide employment opportunities for youth.

Introduction

E-commerce has emerged as a powerful force reshaping the global economy, presenting both opportunities and challenges. Recognizing its growing significance, our group initiated a series of workshops and training programs aimed at bridging the knowledge gap in e-commerce operations. This paper chronicles our journey through various workshops and training programs conducted in collaboration with universities and e-commerce platforms, where participants gained hands-on experience in different facets of e-commerce operations. Our initiatives spanned across several platforms including Taobao, eBay, Amazon, and Shopee, with a particular focus on facilitating cross-border collaborations and enhancing employment opportunities.

Workshop 1: Exploring the Basics of E-commerce: A Hands-on Workshop on Taobao Operations

Our inaugural workshop, titled "A Hands-on Workshop on Taobao Operations" took place at Huazhong Agriculture University in February 2019. The goal of this workshop was to deliver a practical learning

experience in e-commerce to students, leveraging real-life examples and field expertise.

Workshop Overview

Led by Professor Zhou of Huazhong Agriculture University, the workshop saw participation from over 100 Taobao sellers who shared their first-hand experiences and insights with the students. Throughout the three-day event, a diverse cohort of international and Chinese students were introduced to the fundamentals of e-commerce and the modus operandi of online stores. The syllabus included activities like registering a Taobao account, identifying suppliers, and understanding backend operations.

A standout feature of the workshop was the practical experience students acquired by creating their own Taobao accounts. In a noteworthy achievement, one student established an English Taobao store, simplifying the online shopping process for non-Chinese speakers in China. This comprehensive workshop provided students with a thorough understanding of e-commerce, its dynamics, and operations.

Conclusion

The "Our First Interaction with E-commerce" workshop was a resounding success, offering students valuable insights and hands-on experience in the e-commerce sector. Participants gained a firm grasp on e-commerce fundamentals and learned how to establish an online store, further enriched by interactions with real-world examples and industry experts. This workshop served as a beneficial learning experience for all participants.

Workshop 2: Navigating Cross-border E-commerce on eBay

The second workshop, "Cross-border E-commerce on eBay," took place in April as a joint effort between Huazhong Agriculture University and other educational institutions. The focus of this workshop was to equip students with the practical skills required to manage an eBay store, spanning from product selection to customer service.

Workshop Overview

The workshop was facilitated by Galleon CBEC Company and saw attendees from Huazhong Agriculture University and other universities. Over the course of two days, students received extensive training on operating an eBay store, including aspects like product selection, listing creation, order management, and customer service.

A highlight of the workshop was the practical exposure students gained from working on live eBay stores. This hands-on experience was so impactful that some groups even received orders during the training. Post-workshop, several groups continued their association with the company on a profit-sharing basis, gaining real-world work experience.

Conclusion

The "Cross-border E-commerce on eBay" workshop was a remarkable success, providing students with valuable practical experience in the realm of cross-border e-commerce. Participants learned the intricacies of managing an eBay store, from product selection to customer service. With its emphasis on practical, hands-on learning, the workshop equipped students with valuable real-world experience and insights. This workshop was a beneficial learning experience for all participants.

Training 3: Amazon Operation Training and Remote Work Collaboration

Our third training venture focused on the practical operations of Amazon and remote work opportunities for Chinese firms. Conducted in partnership with Taoshi CBEC, a Chinese entity operating on Amazon, the training aimed to equip students with hands-on experience in managing Amazon accounts, offering a viable solution for Chinese firms striving to maintain their competitiveness amidst escalating labor costs.

Training Overview

The training was split into two phases. The initial phase was a two-month, practice-oriented internship during which approximately 40 students from Pakistan received online training. They were granted access to actual Amazon accounts and were taught the fundamental operations of Amazon, including an introduction to the Amazon Seller Center, exploration of Amazon business models, product hunting, listings, keyword selection, optimization, order management, and customer service.

Throughout the first phase, the students were also introduced to the concept of cross-border e-commerce and the challenges faced by Chinese firms. The training rendered a profound understanding of the e-commerce ecosystem and the complexities of operating an online business, and students were urged to apply their theoretical knowledge in practical scenarios.

Performance Evaluation

Throughout the two-month training period, the trainees' performance was closely monitored. The 14

highest-performing trainees were chosen for the second phase of the training, which involved remote work for Taoshi CBEC, where they were tasked with product selection and listing optimization.

In this phase, the selected trainees were assigned a specific task to optimize product listings on Amazon for Chinese companies. They were given access to the company's Amazon account and were trained in the specific requirements for the company's listings. The trainees were closely supervised and provided with performance feedback.

Significance of the Model

The model of employing Pakistani students for remote work with Chinese firms holds considerable implications, especially considering China's rising labor costs. This training aimed to evaluate the feasibility of this model and deliver a mutually beneficial solution for both parties. The training offered students real-world experience while providing Chinese firms a strategy to uphold their global market competitiveness.

Conclusion

The "Amazon Operation Training and Remote Work for Chinese Company" training proved to be a success, offering students practical experience in operating Amazon accounts and providing a feasible solution for Chinese companies to maintain their competitiveness. The training underscored the viability of employing Pakistani students for remote work and emerged as a valuable learning experience for all participants. The

training also underscores the potential for further collaborations between Chinese firms and students from Pakistan.

Training 4: Aliexpress Simulation and Shopee Training

In March 2020, we conducted a training program in collaboration with Cross CBEC Technology Company, a firm operating on the Shopee platform, and Aliexpress Simulation Platform. Our prior training on Amazon had encountered issues, where trainees provided with real accounts were not familiar with e-commerce platform operations and rules, leading to account suspensions due to their oversight. To circumvent such issues, we opted to first train them on a simulated platform, where they could learn the basics of e-commerce platform operations and rules before being provided with actual accounts.

The training attracted participants from various countries, including Pakistan, Bangladesh, and Kenya. Each trainee was given access to an individual Aliexpress Simulation Platform account, where they learned how to operate an online account. This included product selection, creating listings, keyword optimization, order processing, customer services, inventory management, store decoration, banner creation, and more. The simulated training allowed trainees greater freedom to experiment with strategies to attract more orders to their stores.

Upon completion of the simulation training, eight exceptional trainees were selected for the next phase of the program, which involved four months of remote work for the operations department of Cross CBEC

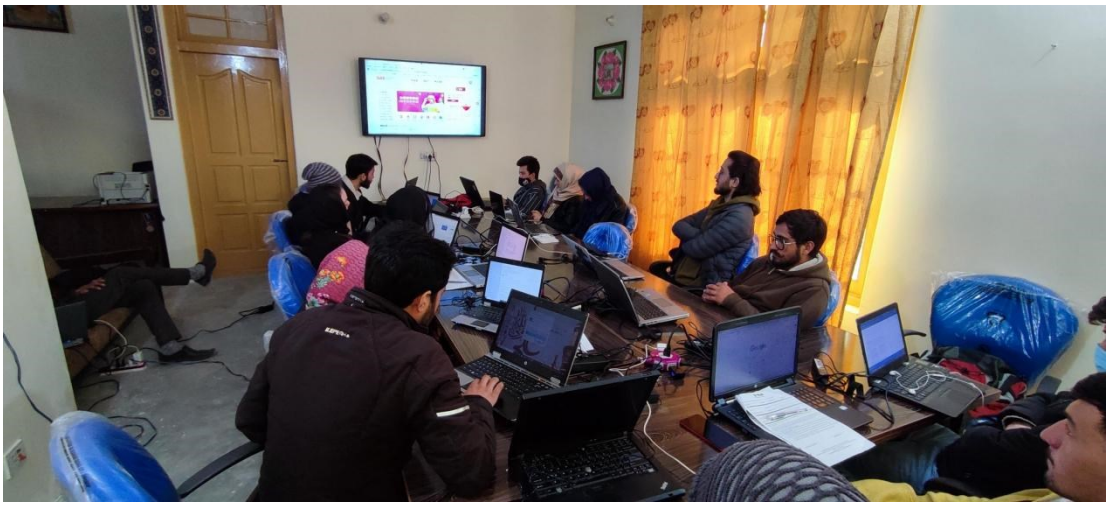
Technology Company. These trainees were tasked with the full operation of the company's Shopee store, which included listing and order processing, store decoration, customer services, and return management.

The training program was a resounding success, with trainees effectively operating the store, gaining practical experience of remote work for a company, and earning income. Simultaneously, the company benefitted from improved basic operations conducted at a reduced cost, creating a win-win situation for both parties.

Our objective is to establish a model for Chinese companies to remotely employ talented youth from Belt and Road countries. These individuals, who have a solid foundation in English and are in need of work, can be utilized by Chinese companies to expand their cross-border businesses while providing opportunities for youth in these countries to gain practical experience and earn income.

Gilgit Project 2022

The Gilgit Taobao Project, launched in March 2022, represents a collaborative effort between a Hangzhou-based Chinese e-commerce company and Di-Hub, a Pakistani e-commerce enterprise. The project's primary objective is to equip Di-Hub employees with the skills required to operate on Taobao, China's largest domestic e-commerce platform.



The initial phase of the project tasked Di-Hub with order processing and inventory procurement for five Taobao stores. The project's subsequent phase entails Di-Hub assuming full operational responsibility for the English Taobao stores provided by the Chinese company. However, linguistic barriers pose a significant challenge, necessitating Chinese language training for Di-Hub employees to surmount this hurdle.

Project Overview

The Gilgit Taobao Project is a collaborative initiative between a Hangzhou-based Chinese e-commerce

company and Di-Hub, a Pakistani e-commerce enterprise. The project's goal is to train Di-Hub employees in operating Taobao, the most extensive domestic e-commerce platform in China. The Chinese company provided Di-Hub employees with fundamental training, encompassing operation of Taobao accounts, creation of listings, management of orders, and inventory procurement.

In the project's initial phase, Di-Hub was charged with order processing and inventory procurement for five Taobao stores. A team of five Di-Hub employees was tasked with managing the operations of these stores. This phase spanned several months, during which Di-Hub employees familiarized themselves with the Taobao interface and grappled with language and communication barriers in their interactions with Chinese store owners.

The project's second phase will see Di-Hub assuming full operational control over the English Taobao stores provided by the Chinese company. However, the language barrier continues to present a significant challenge, and Di-Hub employees will need Chinese language training to overcome this obstacle. If successful, the project could expand to additional areas, and more Chinese companies could be invited to participate.

Conclusion

The Gilgit Taobao Project offers a valuable opportunity for Pakistani e-commerce companies to learn from their Chinese counterparts and expand their cross-border businesses. Despite facing several challenges, particularly language barriers, the right training and support can enable Di-Hub employees to overcome these obstacles and assume full operational control over English Taobao stores. If successful, this project could serve as a blueprint for collaborations between e-commerce companies from Belt and Road countries, facilitating cross-border trade and creating employment opportunities for young people.

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Article

On the Taobao Villages: Insights from Xiaying's E-commerce Revolution in Rural Hubei Province, China

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ABSTRACT

This paper encapsulates a visit to the Taobao village of Xiayingcun in Yunxi County, Shiyan, Hubei, China, and explores the transformative power of e-commerce in rural China. It provides an overview of the inception and growth of Taobao Villages, discusses the role of e-commerce in promoting entrepreneurship, job creation, and poverty alleviation, and delves into the unique experience of Xiaying Village. The village, home to a vibrant e-commerce ecosystem, tourism sector, and agricultural practices, serves as a microcosm of rural China's economic evolution. The paper concludes with key insights highlighting the role of government support, the learning opportunities within the e-commerce environment, and the potential for rural residents to compete in the online marketplace.

This article chronicles the observations and findings from a visit to a Taobao village in Xiayingcun, Yunxi County, Shiyan, Hubei, China, underscoring how e-commerce has revolutionized the rural landscape of China.

1. What is a Taobao village?

The concept of a "Taobao Village" took root in 2009, referring to clusters of rural online entrepreneurs who set up shops on the Taobao Marketplace. As per AliResearch, a village qualifies as a Taobao Village if it exhibits the following features:

1. Residents spontaneously ventured into e-commerce, primarily leveraging the Taobao Marketplace.
2. The total annual e-commerce transaction volume amounts to at least RMB10 million (approximately $1.5 million).
3. At least 10% of village households are actively involved in e-commerce, or the village hosts at least 100 active online shops.

2. The Expanding Footprint and Evolution of Taobao Villages in China

The scale and development of rural e-commerce in China has grown rapidly in recent years, as seen in the growth of "Taobao Villages". According to the China Taobao Village Research Report 2020, the number of Taobao Villages in China reached 5,425 in 2020, up over 1,100 from the previous year. There are also 1,756 "Taobao Towns". Taobao Villages and Towns are now spread across 28 provinces and 27 provinces respectively.

The transaction volume of Taobao Villages and Towns exceeded 1 trillion RMB in 2020. There were nearly 3 million active online stores in Taobao Villages and Towns, creating over 8 million jobs. This shows how e-commerce is providing new entrepreneurship and employment opportunities in rural areas.

The development of Taobao Villages is notable in less developed central, western and northeastern regions. In 2020, the number of Taobao Villages in these regions nearly doubled from the previous year to 341. The number of Taobao Towns grew 76% to 393. Over 100 Taobao Villages and Towns emerged in national-level impoverished counties, playing an important role in poverty alleviation.

E-commerce has catalyzed the growth of industry clusters in rural areas, with labor-intensive industries transforming through integration with technology. There are also new trends emerging, such as e-commerce hubs relocating to towns, the rise of livestreaming e-commerce, and digitally-enabled services thriving in Taobao Villages.

3. A Journey through Xiaying Village: A Hub of Rural E-Commerce

3.1 Setting the Scene in Xiaying

In December 2018, we visited Xiaying, a quaint village nestled within the mountainous region 100 kilometers northwest of Shiyan City in Hubei Province, hosts a population of 1,441 across 300 households. Remarkably, around half of these households engage in e-commerce, involving approximately 600 individuals. This bustling online activity led to an impressive online transaction volume exceeding 100 million yuan in 2017.

The village boasts essential amenities including kindergartens, pharmacies, clean drinking water, robust road and network infrastructure, and even a sewage treatment plant supporting organic farming. A cozy local restaurant offers a taste of the local cuisine. Public toilets are conveniently situated throughout the village. The village governance comprises a committee, with its leader serving a five-year term. Enhanced 4G and fiber optic internet connectivity ensure smooth online operations. Aided by government support, an e-commerce training center worth 1.5 million yuan is currently under construction.

Upon entering Xiaying, we were warmly greeted by Mr. Liu Shuanxi, the village committee leader, and

Mr. Jiang Kaming, a renowned young e-commerce entrepreneur. Their introduction to the village, set against a traditional Chinese tea ceremony, was both insightful and welcoming. The office space, equipped with Wi-Fi and a security camera surveillance system, bustled with activity. Our hosts radiated enthusiasm and openness towards potential future collaborations, a sentiment echoed by other village residents.

"Diligence + Honesty + Communication + E-commerce = Success"

– Mr. Liu Shuanxi's mantra for Xiaying's success

The village Committee office

The Sewage Treatment Plant

View from the Village Restaurant

3.2 Exploring Xiaying's Economic Pillars

Xiaying's economy thrives on the triad of e-commerce, tourism, and agriculture. I'll delve into the distinct features of each of these pillars:

3.2.1 E-commerce: The Birthplace of Innovation

About four years ago, Xiaying's e-commerce journey began when two young locals, Jiang Kaming and Tuo Tao, ventured into selling turquoise on the Taobao marketplace. This move sparked an aggregation of e-

commerce practitioners. Turquoise, a gemstone with a thousand-year presence in the village, had long been a part of traditional sales. However, e-commerce introduced a transformative shift in the village's economic landscape.

Ecommerce industry demonstration zone

The village features an e-commerce industry demonstration area, akin to shopping streets, lined with family-run stores. These stores serve as selling points, workshops, and e-commerce centers. Showrooms displaying turquoise jewelry occupy the ground floor, while the upper floors house machinery for processing and cutting raw turquoise. The raw stone is procured directly from miners.

While Mr. Jiang's father is involved in the processing and sales of turquoise within the village, Mr. Jiang himself has launched a shop in Shiyan City. He has further innovated by creating a system to offer customers traceability of the turquoise stone. To achieve this, he plans to employ cutting-edge blockchain technology, where each stage of turquoise production can be documented, allowing customers to trace the stones back to their origin. Mr. Jiang is of the belief that this will significantly enhance his brand's reputation and sales.

We also visited another turquoise vendor, Mr. Tuo Tao, a seasoned player and one of the village's e-commerce trailblazers. To date, he has been interviewed and showcased by national television stations

(CCTV) and a plethora of local and national print media, thus earning him a celebrity status. A former outstanding soldier, who was named "Excellent Soldier" four times, he returned to his village after five years of service and built his business from the ground up. From product selection to photography, from design to customer service, he runs all aspects of his store. Despite initial challenges, his sales have surged from a few thousand yuan per month to 200,000 yuan in a span of four years.

"I reached out to Taobao in 2014. One day, my classmates mentioned that our local turquoise was doing well on Taobao. That conversation changed my life and my circumstances. That same year, our village was honored with the title of "China Taobao Village" by the Ali Research Institute, becoming the first Taobao Village in Hubei Province. In the four years since, I've learned everything from product selection, photography, shelving, to customer service. The turnover grew from a few thousand yuan per month to the current 150,000-200,000 yuan."

– Mr Tuo Tao, a budding e-commerce entrepreneur in Xiayingcun

During our visit to the e-commerce industry demonstration area, we noticed numerous cars parked outside the stores. Mr. Liu informed us that these individuals had amassed wealth through e-commerce and acquired their own vehicles. We observed two young sisters who had purchased a car through their online entrepreneurship, a testament to the transformative power of e-commerce.

Another popular product sold by villagers through e-commerce is red tea. The tea is locally produced and branded. They have successfully launched several brands with distinctive traits. For instance, "Sleeping Beauty" tea, unlike traditional tea, promotes sleep. We were privileged to sample some of these tea brands, the flavors of which were delightful. This tea is sold both online and offline, but the bulk of the income is generated from online sales.

The Local Tea Shop

During our visit to the local tea shop, we were joined by two officials from the township party committee, Mr. Chen Shi and Mr. Bao Yu. Mr. Liu had extended the invitation, and they were more than happy to accompany us on the tour of the village. These individuals were incredibly hospitable and enthusiastic. Their presence also denotes efficient collaboration between the village and town administration.

3.2.2 Tourism: Embracing Nature and Tradition

Xiayingcun boasts pristine natural landscapes that take your breath away. A river meanders through the village, elevating its inherent charm. The village annually organizes a summer music festival by the enchanting lotus moonlight pond, attracting enthusiasts from afar. Our visit fell in winter, void of lotuses in the pond, yet the scene retained its captivating allure.

Adjacent to the modernized Xiaying lies an area steeped in antiquity, home to approximately 52 households. Stepping into this neighborhood was akin to time-traveling into the past. Mud houses and vintage public toilets populate the area. The community seemed devoid of young people, likely engaged in work. This unique locality is preserved as a tourist magnet. Thus, the village thrives on a harmonious ecosystem of turquoise selling and tourism. High-quality tourist services entice visitors, who are also offered turquoise for purchase. Given the chance, I would relish the opportunity to revisit this place.

The Ancient Village

3.3.3 Agriculture: Honoring Roots

Despite the affluence brought by e-commerce, the village remains tethered to its agricultural roots. Given its mountainous terrain, they've carved terraced farmland into the mountainsides. Every available patch of soil is put to use for agricultural production, growing vegetables and corn primarily for household consumption. As previously mentioned, they also cultivate red tea, which is sold online. Free-range chicken farming is another agricultural venture they undertake.

The farmers exhibit commendable innovation, employing their resources to maximum effect. I observed stacks of firewood neatly arranged, and corn cobs perched on handcrafted wooden shelves for sun drying.

4. Conclusions

From our visit, we can distill the following key insights:

- Governmental support plays a pivotal role in establishing the fundamental infrastructure necessary to catalyze rural e-commerce in a village.

- Villages like Xiaying, dubbed as 'Taobao villages', serve as breeding grounds for businesses. This environment enables many to learn from their neighbors and establish their own startups.
- Despite educational limitations, rural residents can swiftly acquire and innovate skills to compete in the online marketplace.
- Rural e-commerce spawns both direct and indirect job opportunities.
- Once the revenue stream starts to flow, e-commerce exerts an agglomerative effect. The success of a few individuals paves the way for others, as the Taobao market offers an avenue for low-cost innovation and information gathering.
- Over time, villagers have adopted ingenious protective measures such as implementing blockchain technology.
- Rural e-commerce opens doors for villagers to amplify the sales of local specialty products.
- The advent of rural e-commerce has a positive economic ripple effect.

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Article

Poverty Alleviation and Rural Development Through E-Commerce: The Taobao Village Strategy in Zhijiang, China

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ABSTRACT

This paper analyzes the rural e-commerce model in Zhijiang, China. Zhijiang has adopted a Public-Private Partnership approach to promote e-commerce in villages by inviting experienced companies to train villagers and provide market access. The government offers incentives to further facilitate adoption. Field visits to four "Taobao Villages" reveal key success factors including government support, public-private collaboration, and customized incentives. Zhijiang's experience demonstrates that rural e-commerce can thrive without a monopoly advantage using the PPP model. The paper concludes that Zhijiang offers valuable lessons for developing countries to enable digital participation of rural populations through contextualized e-commerce models. Further research on tailored village-level models is needed to replicate the success across diverse settings.

1. Overview of Zhijiang City

1.1 Geographical Location and Significance

Situated in the west of Hubei province, People's Republic of China, Zhijiang is a county-level city within Yichang City. Until the 1990s, it functioned as a county. Positioned on the northern shore of the Yangtze River, downstream from Yichang's central city, it serves as a critical hub in the open development of the Yangtze River Economic Belt. The city's economy has evolved impressively, ranking as one of the advanced counties and cities. It holds the 76th spot among the top 100 counties and cities nationwide, taking the lead in the province.

1.2 Economic Base and Development

Zhijiang's economic prosperity can be traced back to the strong industrial and agricultural base of the province. The city has successfully established four pillar industries, namely high-end food manufacturing, new chemical materials, medical supplies, high-end textiles, and advanced equipment manufacturing. As a

significant agricultural city, Zhijiang's primary agricultural products include rice, rapeseed, live pigs, citrus, and cotton.

In a recent round (2018-2020), Zhijiang was honored as the nominated city of the national civilized city, and the "Civilized City of Hubei Province". Dongshi Town and Caodian Village received awards for provincial-level civilized towns and villages. The Guanmiao Mountain Village has been recognized as the “2017 China Beautiful Leisure Village” and National Civilized Village.

1.3 Historical and Cultural Significance

Zhijiang's rich history positions it as a renowned historical and cultural city in the province. Formerly known as Danyang, the city's Chu culture has deep roots. Zhijiang is identified as one of the birthplaces of Chengbeixi culture and Daxi culture. The Guanmiaoshan site, a representation of the Neolithic culture, is enlisted as a national key cultural relics protection unit. The city, dubbed the "hometown of Chinese folk culture and art," boasts national and provincial intangible cultural heritages such as Zhijiang Folk Blowing Music and Zhijiang Nanguan. Additionally, Zhijiang, known as a “Chinese famous liquor city,” celebrates the long-standing wine culture represented by the Qiantaiji Distillery. The “Zhijiang” wine enjoys national recognition.

In promoting national fitness and low-carbon travel, Zhijiang has developed bicycle lanes. It has become the first shared bicycle demonstration county in the country, and the 37th Mobike bicycle city in the world. Cycling has emerged as a popular means of transportation for its citizens.

2. Rural E-commerce Landscape in Zhijiang

2.1 Strategic Location Favoring Ecommerce

Zhijiang's strategic location makes it a transportation hub and an e-commerce city in the province. The Zhijiang River serves as a crucial node of the national regional transportation network. The Yangtze River Golden Waterway, with a natural deep-water coastline of 111.5 kilometers, bisects the city. It has 25 docks and 39 berths, with an annual cargo handling capacity of 11.46 million tons.

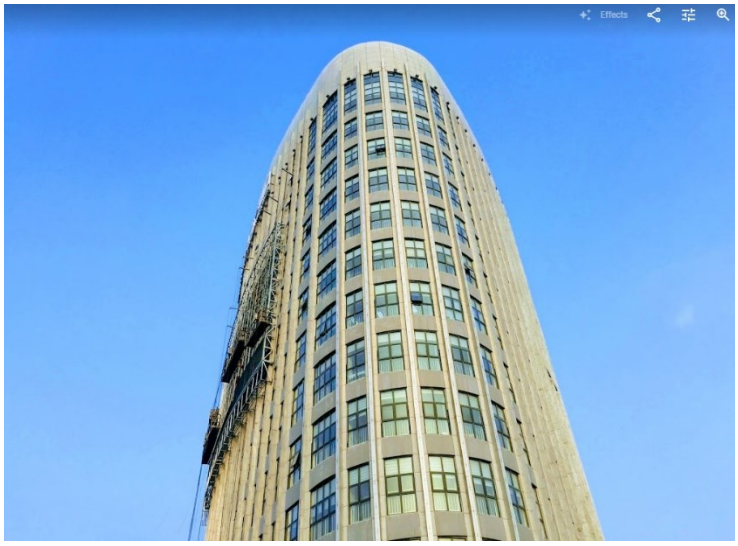
2.2 High Rate of E-commerce Adoption

E-commerce entrepreneurship in Zhijiang leads the nation. As per the public e-commerce entrepreneurship rankings released by the Alibaba Research Institute, Zhijiang holds the second position in the central and western region counties. It also ranked second nationwide in e-commerce men’s shoes sales.

The Pinghu Village of Dongxi Town was the first in Yichang to become a Taobao Village and the second in the province. Presently, four out of the nine Taobao villages in Hubei Province are situated in Zhijiang.

Leveraging its favorable transportation location, industrial base, and e-commerce ecology, Zhijiang is quickly transforming into China's men's shoes e-commerce capital, the Three Gorges Eco-Economic Cooperation Zone e-commerce center, and express logistics distribution center.

2.3 Development of E-commerce Industrial Park



The towering skyscraper of the Zhijiang E-Commerce Industrial Park is a prominent landmark in the city. The park, which has become the city's e-commerce powerhouse, integrates functions of public service, marketing, product display, logistics and distribution, innovation and entrepreneurship, and financing support across e-commerce industry chains. It can house 100 appliance companies and entrepreneurs. The Zhejiang e-commerce operation model, introduced through specialized "operating service providers," builds a "platform + company + intelligent logistics + base + farmers" structure. By comprehensively integrating online and offline, it connects Zhijiang products directly to the market. This e-commerce industrial park propels the city's economic transformation and development, thereby driving the city's rapid economic growth.

The park encompasses various service centers and facilities, including:

- Agricultural Product Quality and Safety Traceability Center
- The “Golden and Tasteful” Brand Construction Center
- The Village Taozhijiang Service Center
- The E-commerce Promotion Center
- The Maisheng Zhongchuang Space
- Agricultural Products Exhibition Center
- Livestream Broadcast Room
- Brainstorming Room

The park offers services to approximately 11,000 companies and 7,800 online stores across China's four major e-commerce platforms. These e-commerce companies and online stores employ around 20,000 people and dispatch roughly 460,000 packages daily.

The park provides business incubation services to companies of a certain size. For the first three years, it does not charge any rent for office space. Additionally, it has established a dedicated e-commerce training center for all citizens and villagers, where it regularly organizes e-commerce training courses.

3. E-commerce Promotion Model in Zhijiang

During our field trip, we visited four Taobao villages in three towns:

- Longquantang village in Wen'an County
- Fairy Village in Fairy Town
- Pinghu Village and Yaojiangang Village in Dongxi Town

A Comprehensive E-commerce Service Center in Pinghu Village

We also toured some upcoming Taobao villages, such as Dongqiao Village in Wen'an Town and Wutongmiao Village in Fairy Town. While exploring the countryside, town officials guided us through various e-commerce companies that sell agricultural and industrial products. We had the opportunity to visit an e-commerce company run by female entrepreneurs specializing in traditional Chinese dresses.

We noticed some shared attributes across Taobao villages in Zhijiang. These include:

- Each village has a comprehensive e-commerce service center which serves as a training and brainstorming center, product display center, business incubator, warehouse, packaging, and logistics center.

- E-commerce is promoted by inviting established e-commerce companies from other regions. The invited company must meet specific criteria based on experience and brand value.
- E-commerce companies support villagers in three ways: (1) free e-commerce training; (2) opportunities to sell products as commission agents in the company's online store; (3) job opportunities in packaging, logistics, and more.

3.1 Case Studies of Sample Villages

In Pinghu Village in Dangxi Town, government support has been crucial in advancing e-commerce. The village comprises individuals displaced by the Three Gorges Dam, with no history of farming. Moreover, the villagers did not engage in agriculture. Consequently, the government is striving to alleviate poverty through rural e-commerce.

To motivate people to embrace e-commerce, the government provides economic incentives to villagers. Those engaging in e-commerce can receive 15-20 yuan daily. Additionally, for each package dispatched via Taobao, they receive 5 yuan.

The same model applies to Longquantang, another village near Zhijiang City. Here, the government invited an e-commerce company to encourage villagers to join e-commerce. The company offers diverse support to villagers, including product development, training, and branding. They employ villagers as marketing agents to sell their products. The villagers earn commissions for each product they sell through e-commerce.

The products traded in Pinghu and Longquantang differ. Pinghu primarily deals in body heating stickers, while Longquantang mainly trades in agricultural products. However, these two villages share a common trait: their lack of experience and initial reluctance to join e-commerce.

3.2 Role of Public-Private Partnerships

E-commerce is promoted through the Public-Private Partnership (PPP) model. The government offers significant support to e-commerce companies willing to establish in the village. This support includes free office and storage space, tax subsidies, and access to affordable labor in rural areas.

To encourage villagers to engage in e-commerce, the government provides economic incentives such as a daily fixed amount support and a fixed amount for each item sold on the e-commerce platform.

4. Key Takeaways and Learning for Developing Countries

4.1 Importance of Government Support

The Zhijiang model demonstrates the vital role of government in facilitating rural e-commerce adoption. Across the developing world, governments are making strategic investments in digital infrastructure like

rural broadband connectivity and power supply. They are also launching skill development programs to enable rural entrepreneurs to leverage e-commerce.

Public-private partnerships can provide localized support addressing awareness, training, access to finance and customized technological solutions. E-commerce platforms are empowering rural women entrepreneurs through targeted initiatives. With the backbone of infrastructure and digital literacy coupled with private sector outreach, developing countries can drive rapid e-commerce adoption in rural areas.

While the optimal model will depend on the village context, government support and public-private coordination are key to replicating the success of China's Taobao Villages. Strategic policies and investments can unlock the inclusive development potential of rural e-commerce globally.

4.2 Monopoly Advantage Not Required for Rural E-Commerce Success

Conventional thinking suggests that a village requires a unique monopoly advantage or specialized product ecosystem to successfully adopt the Taobao model and excel in e-commerce. However, findings from Pinghu and Longquantang challenge this notion.

These villages had no specific product history or advantage in any particular domain. Yet with the right external support through government incentives, private sector partnerships, infrastructure and training, they managed to develop flourishing rural e-commerce models.

The evidence indicates that monopoly advantage is not a prerequisite for becoming a thriving Taobao Village. The key success factors are an enabling business environment created through strategic policies, public-private collaboration, logistics access and skill development.

With dedicated efforts towards building awareness, capabilities, logistics and access to finance, even villages without any unique product ecosystem can reap transformational economic gains from integrating into the digital commerce landscape.

Rather than product specialization, the emphasis must be on strengthening holistic rural e-commerce readiness. This highlights the feasibility of replicating the Zhijiang model across diverse village settings in developing countries to drive broad-based rural development.

4.3 Job Creation and Economic Impact

Moreover, the PPP model can stimulate job creation and local economic development. Through training and education initiatives, villagers can acquire digital skills necessary for e-commerce, leading to the creation of new job roles such as digital marketers, online customer service representatives, and logistics coordinators. This diversification of job opportunities can be instrumental in reducing unemployment and underemployment in these regions.

In the short term, this model can accelerate rural economic development by connecting isolated rural communities with national and global markets. In the long run, it holds the promise of transforming these rural communities into vibrant economic hubs, thereby reducing rural-urban economic disparities and contributing to balanced regional development.

4.4 Replicability for Other Developing Regions

The Zhijiang model demonstrates immense potential for replication across developing regions grappling with rural poverty and limited economic opportunities.

In Africa, where smallholder farmers struggle with restricted market access, rural e-commerce can provide crucial linkages to urban centers and export channels. By enabling farmers to directly access customers, e-commerce can boost incomes, encourage agricultural growth, and nurture rural entrepreneurship. Similarly, by connecting rural artisans to expanded product design, financing and distribution networks, e-commerce can aid in preserving cultural heritage while promoting inclusive growth.

The PPP approach can facilitate context-specific solutions tailored to local needs, leveraging private sector expertise to build digital skills, provide mentoring, and strengthen market connections. Government initiatives must involve infrastructure development, incentives for adoption, and partnerships to provide digital literacy and e-commerce training customized for rural citizen-entrepreneurs.

In essence, the digital empowerment of rural communities can transform subsistence-based villages into thriving economic clusters integrated with the modern economy. The Taobao model offers a framework for participatory rural commerce that foregrounds public-private collaboration, human capability building, and entrepreneurial mindset change for enabling shared prosperity.

5. Conclusions

This analysis of rural e-commerce in Zhijiang offers valuable insights into the potential of e-commerce to stimulate economic growth in rural areas, both within China and globally. The Public-Private Partnership model implemented in Zhijiang demonstrates that with the right support and incentives, villagers can leverage e-commerce to improve incomes and living standards.

Several key takeaways emerge from Zhijiang's experience with rural e-commerce:

- Government support is essential in providing the basic infrastructure and services needed to facilitate e-commerce adoption. This includes investments in roads, internet connectivity, electricity, logistics networks, and digital skills training.
- The specific e-commerce model suited for a village depends on its unique characteristics such as

demographics, skills, infrastructure, and products/resources. A one-size-fits-all approach may not work.

- While a monopoly advantage can boost e-commerce success, villages without such an advantage can also thrive through the PPP model which provides knowledge, experience and market access.
- E-commerce diversifies income sources for villagers and creates new job opportunities in areas like marketing, customer service, packaging and logistics. This stimulates broader local economic development.
- Rural e-commerce holds immense potential for developing regions with large agrarian populations and untapped resources. It can provide market linkages to enable small-scale producers to earn higher incomes.

Rural e-commerce powered by strategic government support and public-private collaboration is a promising pathway for inclusive development. As Zhijiang's experience shows, e-commerce can be an engine of rural growth and poverty alleviation globally if implemented thoughtfully based on local contexts. Further research on adaptable e-commerce models can help more villages join the digital economy.

International Innovative Farm School Alliance Declaration

We all agree and pledge to form the International Innovative Farm School Alliance (IIFSA), and commit to cooperate in developing the youth potential through practice-based on-farm education in agriculture, environmental protection, information technology, and rural development.

Signatories

Dr. C. Sekhar, Professor, India

Abdul Saboor Pakistan

Mongolian University of Life Science

National University of Mongolia

Tohoŕenagun Edgard B. SOZONLIN

National University of Mongolia

Prof Dr. Md. Salauddin Palash

Dr Geofrey Gathungu Chuka University, Kenya

Dr. Jerotich Sirma

Dr. Mahmoud Moustafa Elhabbag

prof. Dr Harb A. El. Hasseen El-bardisy

Harb Hassen

Diaa Ebrahim Ebrahim sharaa

Diaa El hag

Umar Ijaz Ahmed, MNSUAM Pakistan

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Sino-Pak Cross-Border E-commerce Association

Sino-Pak CBEC Association

Amar Razzaq & Zhou Deyi

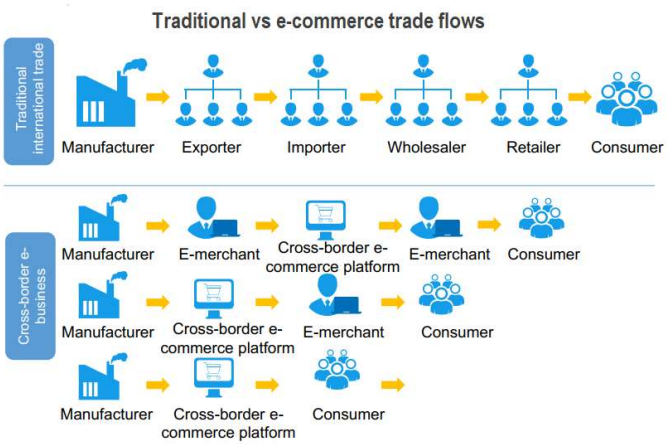
INTRODUCTION

E-COMMERCE in China and many other countries has become the cornerstone of the economy instead of a supplement. It has greatly reduced information cost, built an open and transparent market environment, deeply integrated with traditional sectors, and successfully transformed the nation's economic landscape. Meanwhile, the growth benefits have not been only distributed among big players. From cities to villages, from manufacturing to service sectors, SMEs have a level playing field to compete with large companies and become the new growth engine of the economy.

China's domestic e-commerce has also brought countless benefits to rural areas. These benefits are reflected in the form of poverty alleviation, employment generation, and income growth for rural residents. At present, there are more than 3,000 Taobao Villages (a village with at least 100 active online stores) in 24 provinces in China with an annual trade volume of RMB 220 billion. This phenomenon has created more than 1.8 million jobs in China, most of which are located in rural areas.

Pakistan is a country with abundant natural resources, young and talented human resources, and a vast consumer base. It has the potential to become the driving force of the e-commerce market. Recent developments in the country, such as the integration of smartphones, 3G, 4G, and broadband Internet services, road and logistics improvements, are all enablers for e-commerce trade. The rise of the middle class and small and medium-sized enterprises, the growth of the online shopping experience, and the standardization of microfinance services have increased the country's readiness for cross-border e-commerce (CBEC) trade. Pakistan's e-commerce market is expected to reach US$ 1 billion by 2020. This enormous market has recently attracted global e-commerce giants including Alibaba, which has acquired Daraz.pk; and Ant Financial that acquired a 45% stake in Telenor's Tameer Microfinance Bank.

Currently, most of the trade between Pakistan and China is carried out through traditional (offline) channels. However, such transactions rarely benefit ordinary people, because ordinary people only stay on the purchase side,



Source: AliResearch

and it is often difficult for them to join the supplier's market. The cross-border e-commerce (CBEC) trade, on the other hand, leads to an inclusive growth that benefits from economic, trade, social, scientific and technological advancement which are incurred by every country and everyone, in particular, disadvantaged groups, developing countries, and regions.

The CBEC trade is particularly beneficial to Pakistan for two reasons. First, the trade imbalance between Pakistan and China is a problem that the Pakistani side has been paying attention to for a long time. CBEC trade can increase the export of Pakistan's comparative advantage

products. Second, China is a massive market for e-commerce trade because of the rise of the middle class and the highly developed e-commerce ecosystem that has been integrated into all areas of the economy. Compared with general trade, cross-border e-commerce, supported by more open and positive policies, provides easier access to imported goods and can help Pakistani products to reach to Chinese consumers directly and more conveniently, at relatively favorable tax rates. Similarly, this CBEC trade is beneficial to China because it offers new ways of trading, which may include more Chinese micro, small, and medium enterprises (MSMEs). It can also benefit the rural economies of both countries and thus alleviate poverty.

THE SINO-PAK CBEC ASSOCIATION

In Pakistan, cross-border e-commerce is a relatively new phenomenon, and it requires a great deal of effort to find solutions to simplify trade between the two countries. There are many financial, regulatory, and policy barriers between Pakistan and China that hinder the development of CBEC trade.

The purpose of the Sino-Pak CBEC Association is to promote e-commerce trade between the two countries in a mutually beneficial manner. We conceptualize this association as a not-for-profit association that can include key stakeholders in both countries. These individuals may include researchers, academicians, students, policymakers, businesspeople, and the general public. Our goal is to find solutions to existing problems in CBEC trade promotion through research, education and the development of dialogue between stakeholders in both countries.

PLANNED INITIATIVES

In the short term, we have designed the following initiatives:

CBEC Free Trade Zone

First, we plan to establish an experimental CBEC free trade zone in Pakistan to reduce trade barriers and logistics of products traded through CBEC. To do this, we must consider the trade balance between the two countries so that both people can benefit from this initiative. The potential location of this free trade zone may be Gilgit-Baltistan near the border with China and the new Gwadar Port. These locations are already at the heart of the New Silk Road and the China-Pakistan Economic Corridor.

Launching of Rural Taobao Village Model in Pakistan

We are looking for potential Taobao Village sites in Pakistan to link rural e-commerce practitioners in Pakistan to Chinese consumers, and vice versa. Given the existence of the CBEC Free Trade Zone, consumers in both countries will have easier access to CBEC trading products, especially Pakistani agricultural products with comparative advantages.

Internship and E-commerce Education

In view of the above, we understand the training needs of e-commerce startups, rural e-commerce practitioners, students, and researchers. In this regard, we plan to establish a mechanism through which internship opportunities can be provided to relevant entities in China and Pakistan. Besides, steps can be taken to promote e-commerce education in Pakistan and China through formal and informal institutions.

The International Cross-Border E-Commerce Journal

We plan to release a high-quality, peer-reviewed international journal of cross-border e-commerce soon. The journal will focus on the practical issues facing CBEC in countries along the Belt and Road. Currently, we are looking for Editorial Board members, section editors, associate editors, and the managing editor. The CBEC Association website is under construction. When launched, we will integrate the CBEC journal with our website. We welcome you to join this journal in the capacity that suits you best. The CBEC team also welcomes the ideas and suggestions in this regard. In the long run, our goal is to promote the journal globally for indexing in well-known indexing organizations. Also, our future cross-border e-commerce forums and conference proceedings will be published in this journal.

International Farm School Alliance Network

The International Farm School Alliance (IFSA) is the brainchild of Professor Zhou Deyi. The premise of IFSA is to establish a farm school alliance to develop youth potential through practice-based farm education in agriculture, environmental protection, information technology, and rural development. We believe that the exchange of information and services through CBEC will

become more and more important in the future. With the support of this innovative alliance, farmers from countries along the "Belt and Road" can connect, exchange ideas, learn new farming methods, demonstrate advanced agricultural production techniques online, and finally realize cross-border e-commerce trade related to agriculture. The program is particularly beneficial for an agricultural economy like Pakistan, where the demand for agricultural training and education and overseas consumers is growing.

HOW YOU CAN JOIN

We are looking for interested researchers, academicians, students, entrepreneurs, policymakers, government officials, and other stakeholders to join the association and become part of our growing community. We warmly welcome your valuable comments and suggestions to enrich the purpose and scope of this new association. If you are interested in joining, please email your resume and a short letter of intent to the contact details below. After receiving your resume, we may discuss the position that best suits you and the responsibilities attached to the position. We also ask that you disseminate this information among colleagues who may be interested in joining the association. The Sino-Pak CBEC Association will be formally established during the second CBEC Forum in Pakistan (December 03-05, 2019).

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ABOUT HUAZHONG AGRICUTLURAL UNIVERSITY (HZAU), WUHAN, CHINA

Huazhong Agricultural University (HZAU) is one of the best agricultural universities in China. Featuring life science, HZAU also gives much emphasis on the rational disciplinary construction of agriculture, sciences, engineering, arts, law, economics, and management. According to ESI ranking, Crop Science, Plant & Animal Science, Chemistry, Biology & Biochemistry, Molecular Biology & Genetics, and Microbiology have ranked the top 1% in the above-mentioned disciplines. Covering an area of 495 hectares, the campus is surrounded by three sides by clear lakes and backed by green hills, making it an ideal place for teaching and research.

In addition, it has been converted into a nationally important base for training senior specialized agricultural personnel and developing agricultural science and technology. It is a Chinese Ministry of Education Double First-Class Discipline University, with Double First-Class status in certain disciplines.

Aerial view of Huazhong Agricultural University

ABOUT E-COMMERCE RESEARCH INTITUTE (ERI) OF HUAZHONG AGRICULTRUAL UNIVERSITY

Huazhong Agricultural University's E-Commerce Research Institute (ERI) was established in 2018. Under the leadership of Professor Zhou Deyi, a visiting researcher at Alibaba Group and a professor at College of Economics and Management (CEM) HZAU, Professor He Dehua and Professor Wang Qing from CEM, ERI has achieved many milestones in the short period.

Participants of the First CBEC Forum at HZAU

The foundation of ERI was laid after the success of the First International Cross-Border E-commerce Forum in

2018, with participants from more than a dozen countries coming together for a week. We are currently co-organizing the second International Cross-border E-Commerce Forum (2019) at the University of Agriculture Faisalabad, Pakistan.

Our CBEC team has been researching rural e-commerce in China. We will jointly hold this year's Taobao Summit in Zhijiang, Hubei Province, from November 23rd to 24th, together with the Zhijiang County Government and Aliresearch Institute of Alibaba Group.

ERI has successfully organized many e-commerce training programs and internships for Chinese and international students. These programs include cross-border e-commerce entrepreneurship training on the Alibaba, AliExpress, Amazon and eBay marketplace. Our students participated in the national new retail cross-border e-commerce simulation competition organized by Alibaba in 2018 and won two second prizes.

For our cross-border e-commerce training program, we organized an online training course for more than 30 Pakistani students in July 2019. Some of these students are now working with us on the Amazon online store. In addition, ERI has a training base at HZAU's Business Incubation Center, through which we offer internship opportunities for Chinese and international students. Currently, we are developing an English-taught course on cross-border e-commerce practice training. Students enrolled in this course will participate in AliExpress's analog system with zero risk and comprehensive experience.

ABOUT WUHAN, CHINA

Wuhan is the capital and largest city of the Chinese province of Hubei. It is the most populous city in Central China, with a population of over 10 million, the seventh most populous Chinese city, and one of the nine National Central Cities of China.

Wuhan's history dates 3500 years. Wuhan today is considered as the political, economic, financial, commercial, cultural and educational center of Central China It is a major transportation hub, with dozens of railways, roads, and expressways passing through the city and connecting to other major cities. Because of its key role in domestic transportation, Wuhan is sometimes referred to as "the Chicago of China" by foreign sources.

While Wuhan has been a traditional manufacturing hub for decades, it is also one of the areas promoting modern industrial changes in China. Wuhan consists of three national development zones, four scientific and technological development parks, over 350 research institutes, 1,656 hi-tech enterprises, numerous enterprise incubators, and investments from 230 Fortune Global 500 firms. It produced a GDP of US$224 billion in 2018. Recently, Wuhan won the United Nations sustainable development award. Here are some pictures of the city:

The FIRST INTERNATIONAL CONFERENCE ON CROSS-BORDER E-COMMERCE COOPERATION (November. 26-29, 2018)

Importance and Objectives

With fast expansion of internet and e-commerce, cross-border e-commerce is becoming more and more an essential channel for export which imposes the challenges and opportunities for international trade. In the past five years, Chinese cross-border B2C e-commerce has achieved an annual growth rate of more than 100%. In 2016, China's cross-border e-commerce turnover surged to 6.3 trillion yuan. The Chinese experience in cross-border e-commerce might be useful for other countries.

Meanwhile in the context of 'Belt and Road' initiative of Chinese government, ICT and transportation infrastructure of "Belt and Road" countries have been significantly improved. It is expected that cross-border e-commerce may have enormous impact on the economies of 'Belt and Road' countries.

This international conference organized by Huazhong Agricultural University (Wuhan) is to promote the network building, knowledge sharing, and cooperation in cross-border e-commerce education and research among universities of "Belt and Road" countries.

Conference Agenda and Activities

- Keynote speeches about cross-border e-commerce development and research in China and in the world
- Introduction of e-commerce or cross-border e-commerce in participants' countries
- The value of cross-border e-commerce for customers in participants' countries and strategies to add more value and increase the volume of cross-border e-commerce
- Demonstration of selected online e-commerce platforms (software learning)
- Field trip to cross-border e-commerce companies in China
- Discussion on cross-border e-commerce education and opportunities for research cooperation among participants' universities

Selection Guidelines

Participants are expected to have demonstrated background and interest in cross-border e-commerce education and research. All applicants are expected to submit a paper along with their CVs to the conference secretariat **email: wangqing_ng_99@foxmail.com**.

Participants are expected to introduce e-commerce and/or cross-border e-commerce development and research in their countries. Furthermore, participants' proposals/papers are expected to identify the value of cross-border e-commerce in their countries, propose potential research and education programs, and/or include proposals for cross-border e-commerce education and research cooperation between countries.

Important Dates	
Conference dates:	26th - 29th November, 2018
Registration deadline:	10th October, 2018
Issuing of invitation letters and air-ticket reservation:	20th October, 2018
Venue:	**Huazhong Agricultural University, Wuhan, Hubei Province, China.**

Important Notes

- ❖ Round trip economy class air-tickets and accommodation for conference days of the selected participants will be covered by Huazhong Agricultural University (HZAU).
- ❖ Every selected participant is required to provide a copy of Chinese visa to get the economy class air-ticket.

Organizer:

Prof. Dr. Zhou Deyi	+86-15527826338	zdy@mail.hzau.edu.cn

Contact:

Dr. Muhammad Rizwan (Coordinator)	+86-13125008896	rizwaneco@mail.hzau.edu.cn
Ms Liteng (Secretary)	+86-18271840610	577716847@qq.com
Ms Wangqing (Coordinator)	+86-18627928252	wangqing_ng_99@foxmail.com

Tentative Schedule of the First Cross-border E-commerce International Forum

Date & Time		Activities	Place
26/11	**Arrival and Registration**		
	10:00-22:00	Registration of participants and accommodation	M412
Day 1 – Opening Ceremony and Academic Sessions ***Session Chair –*** *Dr. Zhou Deyi*			
27/11	07:00-08:00	Breakfast	International Academic Exchange Center
	08:00-09:30	**Opening Ceremony**	
		Dr. Qing Ping	Welcome to the participants and opening remarks
		Dr. Li Gucheng	Welcome to the participants and opening remarks
		Dr. Zhou Deyi	Welcome to the participants
		Dr. Abdul Saboor – *Pakistan*	***Keynote Speech*** Scope and potential of e-commerce in the agrarian economy of Pakistan: Triangulation of AliBaba model.
	09:30-09:45	Group Photo	
	09:45-12:00	**Academic Session I** ***Session Chair*** *– Dr. Abdul Saboor*	
		Dr. C. Sekhar – *India*	Cross Border E-commerce in India – A paradigm to the progressive nations
		Dr. Brice Sozonlin – *Gabon*	Cross-border e-commerce as lever of development in Africa
		Dr. Geofrey Kingori Gathungu – *Kenya*	Concept on the role of e-commerce in improvement of horticultural input and product marketing
		Dr. Dr. Md. Mostafizur Rahman – *Bangladesh*	E-commerce in Bangladesh: The present scenario and prospects
	12:00-13:30	**Lunch Break**	International Academic Exchange Center
	13:30-17:30	Visit Wuhan Overseas Scholar Park and Lou Lan Mi Yu – Optics Valley	
	17:30-19:00	Back to HZAU and Dinner	
	19:00-21:00	Dr. Zhou Deyi and Miss Xiang Yi – *China*	- An evolutionary explanation of Chinese ecommerce development history - Student's business introduction
Day 2 – Academic Sessions and Departure to Hangzhou			

28/11	**Academic Session II** ***Session Chair*** *- Dr. Geofrey Kingori Gathungu*		
	08:30 –10:30	Dr. Umar Ijaz Ahmed – *Pakistan*	E-Commerce in Pakistan: Present trends, challenges and prospects
		Dr. Burmaa Sampil, and Dr. Urandelger Gantulga – *Mongolia*	Component based e-commerce: Current states and future trends in Mongolia
		Dr. Sirma Jerotich – *Kenya*	E-commerce in Kenya
		Dr. Mahmoud Moustafa Imam Elhabbaq – *Egypt*	E-commerce (reality, expectations and challenges): A case study of Egypt
	Academic Session III ***Session Chair*** *– Dr. Palash Md Salauddin*		
	10:30 – 12:00	Dr. Thithit Atchattabhan – *Thailand*	E-commerce in Thailand
		Dr. L. Togtokhbuyan, and Dr. G. Bilguun – *Mongolia*	Current situation of agricultural products production in Mongolia and the opportunities to develop e-commerce
		Dr. Palash Md Salauddin - *Bangladesh*	E-commerce experiences in Bangladesh: A case of Daraz online shopping
	12:00-14:00	**Lunch**	
	14:00-16:40	Railway station and Departure to Hangzhou	
Day 3 – Hangzhou Field Trip			
29/11	07:00-08:00	Breakfast	Hotel in Hangzhou
	08:30-12:00	Visit AliBaba and Hemma Fresh Store in Hangzhou	
	12:00-13:00	**Lunch**	
	13:00-18.00	Visit the Wool Industry Cluster (pu yuan) in Hangzhou	
	18:00-19:30	Back to hotel in Hangzhou and dinner	
Day 4 – Visit the International Small Commodities Market, Yiwu			
30/11	07:00-08:00	**Breakfast**	
	09:00-09:40	Hangzhou - Yiwu	
	10:00-12:00	Visit Yiwu Lugang E-Commerce Town	
	12:00-13:00	**Lunch**	
	13:00-17:00	Visit Yiwu International Trade City	
	17:00-19:00	**Dinner**	
	Session Chair *– Dr. C. Sekhar and Dr. Muhammad Rizwan Jan*		
	19:00-21:00	Meeting with representatives of Pakistan and Indian Business Association in Yiwu	

	21:00-23:50	Yiwu railway station and departure to Wuhan (***sleep overnight in train***)	
Day 5 – ERP training and closing ceremony			
1/12	08:30-09:30	Breakfast	International Academic Exchange Center
	09:30-12:00	Visit Campus and Cainiao Delivery Market (Optional)	
	12:00-13:30	**Lunch and Rest**	
	Session Chair *– – Dr Mahmoud Moustafa Imam Elhabbaq*		
	13:30-14:00	Dr. Wang Qing	Information management system and technology in e-commerce
	14:00-15:00	Mr. Traore Lacina – *Cote d'Ivoire*	Experience based education in HZAU
	15:00-17:30	Prof. Zhou Deyi	- 1+1 international innovation farm school alliance (networking) initiative - The Way Forward for the Forum - Closing Ceremony
	17:30-18:30	**Dinner**	
2/12	**Departure**		

2nd INTERNATIONAL CROSS-BORDER E-COMMERCE FORUM - 2019, IARE, UAF (DEC. 03- Dec. 05, 2019)

Importance and Objectives

E-commerce has become an integral part of business in the modern world. In the past five years, Chinese cross-border e-commerce has achieved an annual growth rate of more than 100%. In 2016 alone, China's cross-border e-commerce turnover surged to 6.3 trillion Yuan. The Chinese experience in cross-border e-commerce might be useful for other countries. Meanwhile in the context of 'Belt and Road' initiative of Chinese government, ICT and transportation infrastructure of "Belt and Road" countries have been significantly improved. It is expected that cross-border e-commerce may have enormous impact on the economies of 'Belt and Road' countries.

The first international cross-border e-commerce forum was organized by Huazhong Agricultural University (Wuhan) in November 2018. Researchers and e-commerce practitioners from more than 10 countries participated in the first forum. In this connection, the 2nd International Cross-Border E-Commerce Forum-2019 is being organized in University of Agriculture Faisalabad, Pakistan to promote the network building, knowledge

sharing, and cooperation in cross-border e-commerce education and research among universities of "Belt and Road" countries.

Conference Agenda and Activities

- Keynote speeches about cross-border e-commerce development and research in China and in the world
- Introduction of e-commerce or cross-border e-commerce in participants' countries
- Field trip to cross-border e-commerce companies in Pakistan
- Discussion on cross-border e-commerce education and research cooperation opportunities among participant universities

Selection Guidelines

All applicants are required to submit abstracts along with their CVs to the conference secretariat **email: amjadiqbal1775@yahoo.com cc: rizwaneco@mail.hzau.edu.cn** Upon selection, participants will be required to submit papers to introduce e-commerce or cross-border e-commerce development and research in their countries, identify possible research agenda, propose possible research and education programme, or draft proposals for cross-border ecommerce education and research cooperation among countries.

Important Dates

Conference dates:	DEC. 03- Dec. 05, 2019
Abstract submission deadline:	10th October, 2019
Announcement of accepted abstracts:	15th October, 2019
Registration deadline:	30th October, 2019
Issuing of invitation letters:	5th November, 2018

Venue: **University of Agriculture Faisalabad, Pakistan.**

Important Notes

- Conference registration is free.
- Free accommodation for conference days for the selected participants will be covered by University of Agriculture Faisalabad, Pakistan (U.A.F).

Organizers:

Chief Organizer
Institute of Agricultural and
Resource Economics, University of
Agriculture, Faisalabad, Pakistan

Co-organizer:
Prof. Dr. Zhou Deyi
College of Economics and
Management, HZAU, Wuhan,
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Tentative Schedule of the HZAU Delegation for the Second Cross-border E-commerce International Forum

Date & Time	Activities	Place
28-Nov	Travel	Wuhan to Islamabad
29-Nov	Travel	Islamabad to Gilgit
30-Nov	Survey	Gilgit
1-Dec	Travel	Gilgit to Islamabad
2-Dec	Travel	Islamabad to Faisalabad
3, 5-Dec	The 2nd CBEC Forum	UAF
6-Dec	Meeting with officials	PARC, Islamabad
7-Dec	Return	Islamabad

Vision and objectives of the Conference:

- Networking
- Journal
- Workshop (Galleon)
- Countryside tour
- Presentation of research papers
- Cross border association

Team:

Zhou Deyi

Chun Xiaoping

Saqib Khan

Amar Razzaq

Azka Rehman

Li Teng

Dehua He

Muhammad Rizwan

Details of all Activités of Second CBEC Forum, Pakistan (28 Nov-07 Dec)

Date	Time	Place	Activity
28-Nov		Wuhan to Islamabad	Travel
29-Nov		Islamabad to Chilas	Travel
30-Nov		Chilas to Gilgit	Travel
	09:30-11:30	PARC, Gilgit	Meeting with stakeholders in PARC office
	09:30-11:30	Incubator, Callibrone company	Parallel session with students in incubator of Callibrone company
	12:00-13:30	Minister Information office, Gilgit	Meeting with minister information and advisor to CM, Gilgit
	19:00-21:00	Khuda Abad Village near Sust border	Meeting with Khuda Abad village representative
		Sust border to Aliabad, Hunza	Travel
01-Dec	Morning	Hunza	Visited karim Abad Karo center Hunza valley
	Evening	Hunza to Batgram	Travel
02-Dec		Batgram to Faisalabad	Travel
03-Dec		New senate hall, UAF	**Speech Note:** VC Dr. M Ashraf President Chamber of commerce Director IARE, Dr. Sarfraz Hassan Dean Social Sciences, Randhava **Presentations:** Prof Zhou (Vision of CBEC) Aamir + Li teng (History of CBEC)
	14:30-15:40	ORIC Office	Meeting with ORIC
	16:00-16:30	Exhibition center, UAF	Visit to UAF exhibition center
	16:40-16:50	Agronomy field	Visit to Livestock farm
	16:55-17:05	Race ground	Visit to dog race
	19:20-19:50	UAF, Library	Tour of UAF, library
04-Dec		New senate hall, UAF	Presentation: Prof. Xia Chunping Dr. Umer Ijaz
	11:00-11:30	VC Office, UAF	Meeting with VC UAF

		New senate hall, UAF	Presentation Saqib Khan
	13:00-14:00	Institute of home sciences & women industrial home, UAF	Meeting and visit of institute with director institute, Dr. Ayesha, Beenish Visit of women industrial home with Sadaf
	14:20-15:20	Chamber of commerce, Faisalabad	Meeting with president Chamber of commerce
	15:30-17:00	Agri-Tourism development Corporation office	Meeting with Shahzad Basra and visit to nursery Presentation by tanveer, co-founder of Agri-Tourism Development Corporation of Pakistan
	07:20-09:30	Foreign faculty rest house	Meeting with Waqas from Alkaram seed company
05-Dec	09:30-11:00	New Senate Hall, UAF	Presentation and launching ceremony of association: Aamir (Sino-Pak CBEC Association introduction)
	11:00-12:00	New Senate Hall, UAF	Presentation: Azka Rehman (e-commerce as a potential goldmine, from theory to practice) Kanwal (Experience sharing of online training on e-commerce)
	12:20-13:30	Ground, UAF	IBMS business Exhibition
	13:50-14:30	Institute of agricultural and resource economics	Brainstorming with students about e-commerce
		Faisalabad to Islamabad	travel
06-Dec	09:00-12:30	PARC, Islamabad	Meeting with Chairman and different representative of PARC
	12:00-13:30	Centaurus	Visit to centaurus

	13:40-17:00	Damn e koh	Visit to damn e koh
	17:20-19:00	Lok virsa museum	Visit to Lok virsa museum
	21:00-22:00	Guest house	Meeting with our group, Discussion of summary and learning from the tour
07-Dec	09:20-11:00	Guest house	Meeting with CEO, AKRSP
	12:00-13:15	NARC	Meeting with CEO, PARC Agro-tech company, Chairman PARC, many other directors from multiple Government department.
	13:30-15:00	NARC field area	Visit to Horticulture experimental area, agro-tech company display office
	17:00	Return to wuhan/home	travel

Huazhong Agricultural University, China

Bangladesh Agricultural University

Sylhet Agricultural University, Bangladesh

3rd International Cross-Border E-commerce (CBEC) Forum, 2020 Bangladesh

THEME

CROSS-BORDER E-COMMERCE : OPPORTUNITIES AND CHALLENGES IN RESEARCH, EDUCATION AND BUSINESS COOPERATION

Zoom Webinar

21 - 22 December, 2020

1st CBEC, China

2nd CBEC, Pakistan

Registration

Click the registration Button

mostafiz.sau2013@gmail.com
mehedi_adnan@yahoo.com

The 3rd International Cross-Border E-commerce (CBEC) Forum, Bangladesh
21st December 2020

Time		Presenter	Content
Beijing Time	**Bangladesh Time**	**Online Registration**	
15:50 – 16:00	**13:50 – 14:00**	Online Registration and login Zoom meeting	**Zoom ID: 69387764202** **Password: 9909**
16:00 – 16:30	**14:00 – 14:30**	**Opening Session** Chair: Dr. K. M. Mehedi Adnan, Associate Prof., SAU, Bangladesh	
16:00 – 16:10	14:00 – 14:10	Professor Dr. Gucheng Li , HZAU, China	Welcome to the participants and opening remarks
16:10 – 16:20	14:10 – 14:20	Professor Md. Ershadul Haque, Dean, AERS, BAU, Bangladesh	Welcome to the participants and opening remarks
16:20 – 16:30	14:20 – 14:30	Professor Dr. Romaza Khanum, Dean, AEBS, SAU, Bangladesh	Welcome to the participants and opening remarks
		Online Group Photo	
16:30 – 18:00	**14:30 – 16:00**	**Academic Session** Chair: Dr. Muhammad Rizwan, Assoc. Prof., Yangtze University, China	
16:30 – 16:45	14:30 – 14:45	Mr. Amar Razzaq, PhD Scholar HZAU, China	The Past, Present and the Future of Belt and Road Cross-Border E-commerce Research Group
16:45 – 17:00	14:45 – 15:00	Md. Mostafizur Rahman, Assistant Prof., SAU, Bangladesh	How e-commerce can improve the agri-food marketing in Bangladesh?
17:00 – 17:15	15:00 – 15:15	Urandelger Gantulga, Burmaa Sampil and Avirmed; Business School, National University of Mongolia	Measuring E-Commerce Adoption In Ulaanbaatar, Mongolia
17:15 – 17:30	15:15 – 15:30	Dr. Moataz Eliw, Department of Agricultural Economics, Al-Azhar University, Egypt	The Reality of E-Commerce in Egypt
17:30 – 17: 45	15:30 – 15:45	Dr. Geofrey K. Gathungu, Senior Lecturer, Chuka University, Kenya	The Role of Farmer Entrepreneurship in Marketing Linkages and Food Security for Development
17:45 – 18:00	15:45 – 16:00	Open Discussion + Q&A	
18:00 – 19:00	**16:00 – 17:00**	**BREAK**	

19:00 – 20:00	**17:00 – 18:00**	**Training session** **Chair: Dr. Urandelger Gantulga, Senior Lecturer, National University of Mongolia**	
Zoom ID: 63515037061		**Password: 8724**	
19:00 – 19:40	17:00 – 17:40	Mr. Saqib Khan, PhD Scholar, HUST, China	Aliexpress simulation Training for E-commerce Entrepreneurs
19:40 – 19:55	17:40 – 17:55	Mr. Traore Lacina, Li Teng, PhD Scholar, HZAU, P.R.China	International Summer Camp in Bishan, China: Prospects and Outcomes
19:55 – 20:00	17:55 – 18:00	Open Discussion + Q&A	
20:00 – 20:30	**18:00 – 18:30**	**Business Session** Chair: Mr. Saqib Khan, PhD Scholar HUST, China	
20:00 – 20:15	18:00 – 18:15	Monirul Islam, Assistant Director, RDA, Bangladesh	Exploring Applicable Models towards Sustaining Rural e-Commerce in Bangladesh: Rural Women e-Commerce School
20:15 – 20:30	18:15 – 18:30	Wuhan Galleon Cross-border E-commerce Co., Ltd.	Galleon CBEC Model in Thailand
20:30 – 20:45	**18:30 – 18:45**	**Closing Session** Chair: Professor Dr. Md. Salauddin Palash, BAU, Bangladesh	
20:30 – 20:45	18:30 – 18:45	Professor Dr. Deyi Zhou, HZAU	The prospects and future direction of CBEC
20:45 – 22:00	**18:45 – 20:00**	**Parallel Informal Sessions**	

Research and Academic Collaboration Opportunities under CBEC Platform Chair: Mr. Amar Razzaq, PhD Scholar, HZAU, China	**Training and business opportunities** Chair: Ms. Azka Rehman, PhD Scholar, HZAU, China
1. How E-commerce "Kills" distance between producer and consumer: Chinese Experience (Prof Deyi Zhou) 2. Possible research areas in cross-border e-commerce for postgraduate students 3. Collaborative research options for Belt and Road countries 4. Q&A	1. Technical Assistance/Support in E-Commerce Training for Gilgit-Baltistan (GB) Youth China-Pak CBEC Research-Training-Business (Presentation by Mr. Noor ul Amin, AKRSP, Gilgit, Pakistan). 2. Innovation platform construction (Prof. Deyi Zhou) a. Gilgit Summer Camp and rural cultural experience b. Gilgit jade and tourism e-commerce entrepreneurial meeting c. CBEC plus Chinese training d. Invited Leadership trip to China e. Invited entrepreneurial training and internship f. Innovation farm and overseas warehouse project 3. Bishan international summer camp and experiencing rural China project 4. International Taobao village project from Ali research Institute

DATES TO REMEMBER

Abstract Submission

Nov., 01, 2021

Announcement of Selected Abstracts

Nov., 15, 2021

Final Paper Submission

Nov., 30, 2021

Presentation Submission

Dec., 10, 2021

MODE OF FORUM

Online via Zoom Meeting

HOW TO REGISTER

Please use the following link for registration and abstract submission:

https://forms.office.com/r/atw24b4EXS

ORGANIZER INFORMATION

School of Economics and Management, Yangtze University, Jingzhou, China; &

College of Economics and Management, Huazhong Agricultural University, Wuhan, China.

IMPORTANT GUIDELINES

The topic of papers must be relevant to Cross-Border E-commerce, while generally focusing on its role in Food Security amid the COVID-19 pandemic.

CONTACT DETAILS

Dr. Muhammad Rizwan (Secretary)
Email: rizwaneco@yangtzeu.edu.cn

Dr. Amar Razzaq (张明) (Coordinator)
Email: amar.razzaq@hgnu.edu.cn

WAYS TO PARTICIPATE

- Oral Presentation (full paper)
- Experience Sharing
- Audience

BENEFITS OF JOINING

- Networking
- Learning
- Participation Certificates

The 4th International Cross-Border E-commerce Forum

Yangtze University, Jingzhou & Huazhong Agricultural University, Wuhan, China

December 26, 2021

China's cross-border e-commerce (CBEC) continues to expand. The overall value of its cross-border e-commerce in 2019 was 186.21 billion yuan, up 38.3 percent year on year, with exports totaling 94.4 billion yuan and imports totaling 91.81 billion yuan.

Meanwhile in the context of 'Belt and Road' initiative of Chinese government, ICT and transportation infrastructure of "Belt and Road" countries have been significantly improved. It is expected that cross-border e-commerce may have enormous impact on the economies of 'Belt and Road' countries.

However, the ongoing COVID-19 pandemic poses unique challenges as well as presents several opportunities for trade through CBEC platforms. The 4th CBEC forum aims to highlight and find ways to address these issues by inviting and learning from scholars, researchers, and businessmen.

HISTORY OF CBEC FORUMS

- The First Cross-Border E-commerce Forum was held in Wuhan and Hangzhou (China) in 2018 and was organized by the CBEC team of Huazhong Agricultural University.
- In 2019, the University of Agriculture, Faisalabad (Pakistan) hosted the Second CBEC Forum.
- Due to the COVID-19 epidemic, the Third CBEC Forum was held online and was co-hosted by Bangladesh Agricultural University, Sylhet Agriculture University, and Huazhong Agricultural University.

THEME OF THE 4th CBEC FORUM

COVID-19, Food Security and CBEC: Threats, Coping Strategies, and Opportunities

The dramatic increase in the number of online shoppers worldwide during the current pandemic marks an acceleration of the shift in consumer behavior towards the "online first" model. This dramatic shift has been seen across all parts of the world including Asia, Europe, and USA.

However, the trends of cross-border e-commerce vary across regions due to different stages of pandemic and lockdown and social distancing guidelines. This situation presents unique challenges for food security of vulnerable communities. This forum aims to focus on the role of CBEC in ensuring food security in the context of COVID-19 pandemic. Individuals from academic and business community are expected to attend the forum.

4TH INTERNATIONAL CROSS-BORDER E-COMMERCE FORUM

THEME:

COVID-19, FOOD SECURITY AND CBEC: THREATS,COPPING STRATEGIES AND OPPORTUNITIES

Organizer:

School of Economics and Management, Yangtze University China
College of Economics and Management, Huazhong Agricultural University China

Collaborator:

Belt and Road Center for Extension & Training of Rice Technology (BRC-Rice), HZAU

Venue:

Conference Room 5th Floor, School of Economics and Management Yangtze University. Liberal Arts Building, 5th Floor Room No. 505

zoom **Meeting ID: 854 1842 2295** **Password: 20211226**

Date: December 26th, 2021

OUTLINE

4TH INTERNATIONAL CONFERENCE OF CROSS-BORDER E-COMMERCE FORUM

Agenda	Time	Speaker	Institution	Topic
Opening Session	14:00 - 14:05	Dr. Hui Xu Professor / Dean	School of Economics and Management, Yangtze University	Welcome and Opening Speech
	14:06 - 14:10	Dr. Gucheng Li Professor / Dean	College of Economics and Management, Huazhong Agricultural University	Welcome and Opening Speech
	14:11 - 14:20	Dr. Muhammad Rizwan Associate Prof / Assistant Dean	School of Economics and Management, Yangtze University	Journey of CBEC Forum
Online Group Photo				
Session Chair Dr. Muhammad Rizwan				
Keynote Speeches	14:26 - 14:35	Dr. Abdul Saboor Professor / Dean	Faculty of Social Sciences PMAS Arid Agriculture University	Challenging Prospects of Cryptocurrencies in the World of e-commerce
	14:36 - 14:45	Mr. Rana Sikander Azam Former President / Group Leader	Chamber of Commerce & Industry Faisalabad / Electronics Business	CPEC, Cross-Border Ecommerce and Globe: Challenges & Opportunities
	14:46 - 15:00	Dr. Deyi Zhou Professor	Founder CBEC Forum and BRC-Rice Institute Huazhong Agricultural University	CBEC PLUS BRC-RICE: Call for actions.
Break 10 Minutes				
	Time	**Speaker**	**Institution**	**Topic**
	Session Chair Professor Dr. Abdul Saboor,			
Technical Session 1	15:01 - 15:10	Dr. Salahuddin Palash Professor	Bangladesh Agriculture University	Cross-border e-commerce under COVID-19: Lesson learned and beyond
	15:11: 15:20	Dr. Syed Anees Haider Assistant Professor	Comsats University Islamabad	Helicopter Money in Covid-19 period
	15:21- 15:30	Ms. Togtokhbuyan. L Assistant Professor	Mongolian University of Life Sciences	A study of the factors influencing consumer e-commerce in Mongolia
	15:31- 16:40	Mr. George N. Chidimbah and Mr. Gama Rivas	Yangtze University	Challenge within Challenge: Covid-19 and its Impact on Food Security and Trans-border E-commerce-Sub-Saharan African Perspective
	Q & A 05 Minutes			
Break 05 Minutes				

OUTLINE

Technical Session 2	Session Chair		Professor Dr. Salahuddin Palash	
	16:51-17:00	Urandelger Gantulga Senior Lecturer	National University of Mongolia	E-commerce for rural development: exploring the factors influencing entrepreneurial intention
	17:01-17:10	Dr. M. Zahid Farooq Lecturer	University of Veterinary and Animal Sciences	Can CPEC Uplift Pakistan's Dairy Sector and Enhance Food Security and Safety: A review
	17:11-17:20	Mr. Muhammad Aamir Shahzad	Huazhong Agriculture University	Towards recovery from covid-19, E-commerce perception and food accessibility in Pakistan
	17:21-17:30	Ms. Maryam Tahir	MNS University of Agriculture Multan, Pakistan	Factors Affecting Consumer's Online Buying Behavior in Pakistan with special reference to perceived risk and gamification
	Q & A 05 minutes			
Dinner Break 40 Minutes				
Technical Session 3	Session Chair		Dr. Deyi Zhou	
	18:16-18:25	Dr. Amar Razzaq Associate Professor	Huanggang Normal University	The Role of Cross-Border E-commerce in the Global Food Supply Chains during and after the COVID-19 Pandemic
	18-26-18-35	Mr. N'banan Ouattara	Huazhong Agricultural University	A ten weeks' analysis of the impact of the COVID 19 on cashew price and cashew farmers' income in Côte d'Ivoire
	18:36-18:45	Mr. Mohsin Raza	MNS University of Agriculture Multan	Role of social support for rural Food security in Covid-19 pandemic
	Q & A 05 Minutes			
Break 05 Minutes				
Business Session	Session Chair		Dr. Syed Anees Haider	
	18:56-19:15	Mr. Faheem Azhar CEO	Sultan Group, Pakistan	Go Global with China Trade
	19:16-19:35	Suliman Abdalla Ibrahim Ali Production Manager	Mahasil Zaraia Kindom of Saudi Arabia	Effect plant density for different varieties of tomatoes under hydroponics fields at Saudi Arabia
	19:36-19:55	Dr. Deyi Zhou Professor Founder CBEC Forum and BRC-Rice Institute	Huazhong Agricultural University	CBEC plus BRC-Rice: Calls for actions
	Q & A and free talk 35 Minutes			
Closing	20:30	Concluding Remarks and Future of the CBEC Forum by Professor Dr. Deyi Zhou		

THE 5TH INTERNATIONAL CROSS-BORDER ECOMMERCE FORUM

AGENDA

Date: Thursday, December 15, 2022 (One Day Forum)
Time: 15:00 – 21:50 (Beijing Time)
Organizers
Huazhong Agricultural University & Zhongnan University of Economics and Law

Zoom Meeting Information

Zoom Meeting ID: 687 209 3520 Passcode: 20221215

Meeting Link:
https://us06web.zoom.us/j/6872093520?pwd=WnRBemJNbk1ueEkyT0kzY0JudXRWUT09

INTRODUCTORY SESSION (15:00 - 15:50)

Session Chair: Dr. Muhammad Rizwan
Associate Professor, Yangtze University, China

Time	Arrangement	Item
15:00-15:10	**Prof. Dr. Ding Shijun** – Organizer School of Business Administration, Zhongnan University of Economics and Law, Wuhan. China	Welcome Address
15:10 – 15:20	**Prof. Dr. Li Gucheng** – Chief Guest Dean, College of Economics and Management, Huazhong Agricultural University, Wuhan, China	Welcome Address
15:20 – 15:50	**Prof. Dr. Zhou Deyi** – Organizer and Keynote Speaker College of Economics and Management, Huazhong Agricultural University, Wuhan, China	The Logic of e-commerce, the success of Chinese e-commerce and its possible impacts for the rest of the world

Session I (15:50 - 17:30)
The Issues and Challenges of Food Security and Poverty Alleviation in the Belt and Road Countries

Session Chair:	Dr. Amar Razzaq Associate Professor, Huanggang Normal University	Discussant	Dr. Charles Okeke Associate Professor, Huanggang Normal University

Time	Speaker	Title
15:50 – 16:10	**Dr. Muhammad Asad Ur Rehman Naseer** Assistant Professor Bahauddin Zakariya University Pakistan	Engaging small landholders with modern supply chains: Efficiency and inclusiveness of citrus farmers in Punjab, Pakistan
16:10 – 16:30	**Dr. Geofrey Gathungu** Dean Faculty of Agriculture and Environmental Studies Chuka University, Kenya	Significance of microfinance credit in use of small agricultural machinery in agribusiness development in Kenya. A case of Chuka sub-county, Kenya
16:30 – 16:50	**Dr. Burhan Ahmed** Associate Professor University of Agriculture Faisalabad, Pakistan	Examining trends in PAK-China trade: Implications for Pakistan's exports to China
16:50 – 17:10	**Dr. Urandelger Gantulga** **Dr. Burmaa Sampil** Assistant Professor National University of Mongolia	A comparative study of Mongolian online shopping before and after Covid-19
17:10 – 17:30	**Dr. Uzma Sarwar** Associate Professor Huanggang Normal University China	Has e-commerce helped Pakistan alleviate poverty in the past decade? A review of the existing evidence

Session II (18:00 - 21:50)
The current scale and future challenges of E-commerce in the Belt and Road countries

Session Chair	Prof. Dr. Muhammad Ashfaq MNS University of Agriculture Multan, Pakistan	Discussant	Dr. Asad Ur Rehman Naseer Bahauddin Zakariya University Multan, Pakistan

Time	Speaker	Title
18:00 – 18:20	**Dr. Muhammad Zahid Farooq** Lecturer University of Veterinary and Animal Sciences, Lahore Pakistan	State of the e-commerce sector in Pakistan, as well as its future opportunities and impacts from Covid-19
18:20 – 18:40	**Dr. Charles Okeke** Associate Professor Huanggang Normal University China	The current scope of e-commerce market in Nigeria
18:40 – 19:00	**Mr. Muhammad Saqib** Wuhan Beltwood Technology Company Ltd. Shenzhen, China	Cross-border e-commerce training: A collaboration model among Chinese enterprises and Belt and Road countries
19:00 – 19:20	**Dr. Amar Razzaq** Huanggang Normal University China	The environmental footprint of our online shopping delights: issues and solutions for a sustainable future
19:20 – 19:40	**Ms. Batkhuyag Temugei** Munkhiin Tun LLC Mongolia	Our cross-border e-commerce experience between Mongolia and China
19:40 – 20:00	**Md. Abdur Rouf Sarkar** **Md Jahid Ebn Jalal** PhD Scholars Zhongnan University of Economics and Law, China	Extent of Catastrophic and Impoverishing Impact of Health Payments in Deltaic Regions: Evidence from Bangladesh

CONTINUED ON NEXT PAGE >>

Session II (18:00 - 21:50)
The current scale and future challenges of E-commerce in the Belt and Road countries

Session Chair	Prof. Dr. Muhammad Ashfaq MNS University of Agriculture Multan, Pakistan	Discussant	Dr. Asad Ur Rehman Naseer Bahauddin Zakariya University Multan, Pakistan

Time	Speaker	Title
20:00 – 20:20	**Dr. Sahar Erfanian** Huanggang Normal University China	The size and challenges of e-commerce in Iran
20:20 – 20:40	**Malik Shabbir Hussain** Postgraduate Scholar Hefei University of Technology China	What motivates Chinese consumers to purchase organic foods: influencing factors and implications for the food security
20:40 – 21:00	**Muhammad Aamir Shahzad** PhD Scholar Huazhong Agricultural University China	Food affordability during the pandemic: The way forward for developing countries
21:00 – 21:30	**Prof. Dr. Zhou Deyi** Huazhong Agricultural University China	"From Formal to be Informal" Thanks and Concluding Remarks
21:30 – 21:50	**Prof. Dr. Muhammad Ashfaq** MNS University of Agriculture, Multan, Pakistan	Concluding Remarks

BRC-rice
WhatsApp group

WhatsApp Group

Important Note

Participants can test the Zoom meeting on December 14 (Wednesday) between 4:00 – 8:00 PM Beijing Time (Please see the Zoom meeting information on first page). Please join the meeting during the testing period and check your connection etc. In case of any problems, send email to amar.razzaq@hotmail.com. In addition, you may join our WhatsApp or WeChat groups using QR codes here.

The 5th CBEC Forum

Valid until 12/19 and will update upon joining group

WeChat Group

Cross-Border E-commer Forum Secretariat

Huazhong Agricultural University
Wuhan, 430070,
P.R. China
Facebook: https://www.facebook.com/wuhancbec

July 01, 2023

The 6th International CBEC Forum

Greetings from Huazhong Agricultural University!

We are delighted to extend a formal invitation to you to participate in the "**6th International Cross-Border E-commerce Forum**" taking place between August 17 and August 26, 2023. The forum is an esteemed assembly and exchange platform launched with the objective to foster collaborations between governments, universities, enterprises, associations, and research institutions among countries along the "Belt and Road".

This year's forum is co-hosted by Huazhong Agricultural University, Kashgar Regional Bureau of Commerce, and Longnan E-Commerce Development Bureau, with support from additional co-organizers and sponsors including Karakoram International University and Kashi University. This forum will focus on the CBEC cooperation in Kashgar and neighboring regions. The forum will serve as a platform for academic discussions and deliberations pertaining to cross-border e-commerce and is committed to employing the resources of overseas students, through universities, to address the challenge of trust deficit in cross-border e-commerce, consequently enhancing cross-border efficiency in the relevant regions.

Event Details:

Date: August 17 - August 26, 2023

Locations: Longnan, Kashgar (China); Gilgit (Pakistan)

Highlights:

- Cross-border E-commerce Research and Discussion in Longnan City (August 17-18)
- The 6th "Belt and Road" Cross-border E-commerce International Forum in Kashgar (August 20-21)
- Visits to Karakoram International University and related companies in Gilgit (August 25, conditional)

As a respected [designation/position] from [Country], your insights and experiences would be invaluable to the discourse. We request your esteemed presence to partake in discussions, share your insights, and contribute to the robust exchange of knowledge and collaboration.

We kindly request that you confirm your attendance for the session you will participate in, at the respective location, by July 10, 2023 to facilitate the necessary arrangements.

We look forward to the honor of your presence at this prestigious forum. Thank you for your consideration and we hope to have the pleasure of welcoming you at the event.

Zhou Deyi
Professor, College of Economics and Management
Huazhong Agricultural University, Wuhan, China
zdy@mail.hzau.edu.cn

THE 6TH INTERNATIONAL CROSS-BORDER ECOMMERCE FORUM

In 2018, Huazhong Agricultural University launched the "Belt and Road" China-Pakistan International Forum on Cross-border E-commerce with the theme of cross-border e-commerce development and agricultural digital services. The purpose is to promote mutual exchanges between relevant governments, universities, enterprises, associations, and research institutions in countries and regions along the "Belt and Road" and to solve the development problems of "Belt and Road" cross-border e-commerce. At the same time, it will help promote the better and faster development of the "Belt and Road" cross-border e-commerce, especially the development of China-Pakistan cross-border e-commerce. On the one hand, the forum conducts academic discussions and exchanges on cross-border e-commerce. On the other hand, it makes full use of the resources of overseas students from the two places and uses universities as the medium to solve the problem of lack of trust in the process of cross-border e-commerce, thereby improving the cross-border efficiency of relevant regions. This year, Huazhong Agricultural University and Karakoram International University jointly launched the "2023 6th 'Belt and Road' Cross-border E-commerce International Forum". To ensure the smooth implementation of the activities, the following work plan is hereby formulated.

TIME AND PLACE

Date: August 17 – August 26, 2023

Location: Longnan, Kashgar (China); Gilgit (Pakistan)

ORGANIZERS AND SPONSORS

Organizers

College of Economics and Management, Huazhong Agricultural University
Kashgar Regional Bureau of Commerce
Longnan E-Commerce Development Bureau

Co-organizers

College of Electronic Commerce, Longnan Teachers College
Department of International Regional Development, Taobao Education
Alibaba.com Ganqingning Branch
Kashgar Young Entrepreneurs Association
Longnan Electronic Commerce Association

Sponsors

Huazhong Agricultural University (Wuhan, China)
Kashi University (Xinjiang China)
Karakoram International University (Pakistan)

PARTICIPANTS

About 100 people will participate (online and offline)

Contact Details

- **Huazhong Agricultural University**: Zhou Deyi: 15527826338
- **Longnan City**: Zhao Yanqiang: 18893351889
- **Kashgar**: Li Defei: 18139365221
- **Karakoram International University**: sajjad.haider@kiu.edu.pk

1. Huazhong Agricultural University (*College of Economics and Management*)

- Qing Ping (Vice President of the University, Online)
- Li Gucheng (Dean)
- Zhou Deyi (Professor)
- Xiong Xueping (Professor)
- Wang Xiqin (Associate Prof.)
- He Dehua (Associate Prof.)
- Xia Chunping (Associate Prof.)
- Wang Qing (Lecturer)
- Zhang Wei (Lecturer)
- Li Teng (PhD Candidate)
- Irfan Mahmood (PhD Candidate)
- Chen Zhilin (ShouWangZhe League)
- Temugai (Master Student)

2. Karakoram International University and Gilgit's Entrepreneurs

- Vice President of the University (Online)
- Dr. Mehfooz Ullah (Director of Business Incubation Centre)
- Sajjad Haider (Director International Office)
- Iftikhar Alam (CEO of Karakorum Agri. Consultancy and Tech, Member of CBEC Assoication
- Sultan Khan (CEO of Di-hub Pvt Limited)

3. Longnan City

Longnan E-Commerce Development Bureau

- Wang Xiaoyuan (Director)
- Wang Runxue (Deputy Director)
- Zhao Yanqiang (Section Chief)
- Dong Chaoyu, Dean of Longnan E-commerce Research Institute

E-Commerce Industry Stakeholders

- Zuo Zhangao (President of Electronic Commerce Association)
- Li Zongying (Director of Wudu District E-commerce Center)
- Yu Haikuo (Head of Xinkun E-commerce Company)
- Qing Xiaoai (Head of E-Commerce Platform)

E-Commerce Experts

- Song Jieyan (Associate Professor, Lanzhou Jiaotong University)
- Zhang Jueya (Head of Cross-border E-Commerce, Hualong Industrial Co., Ltd.)
- Zhai Chunxiao (Teacher of Cross-border E-Commerce, Longnan Teachers College)

4. Kashgar

- Jiang Haitao (Member of the Communist Party Group and Deputy Director of the Kashgar Regional Bureau of Commerce)
- Li Defei (Director of the Regional Bureau of Commerce)

- Patiman Maimeti (cadre of the Foreign Trade Section of the Kashi Regional Bureau of Commerce)
- Liang Chao, President of Kashgar Cross-Border E-commerce Association
- Wang Weihua, General Manager of Kashgar Nanjiang Express E-Commerce Co., Ltd.
- Abduwaili (Representative of Young Entrepreneurs Association)

5. Other Countries and Regions

Various Roles and Institutions

- Amar Razzaq (Associate Professor, Huanggang Normal University)
- Yin Zhiping (Taobao Education Project Manager)
- Saqib Khan (Wuhan Badam Technology Company)
- Li Gen (Head of Linyi Tengfei Huanyu International Trade Co., Ltd)
- Wang Zihua (Head of Ganqingning Branch of Alibaba.com)
- Wang Puqing (Associate Professor, Wuhan Polytechnic University)
- Zhu Zhongcheng (CEO, Shenzhen ZhongShen Soft Technology Company)
- Dr. Muhammad Rizwan, CEO, Hubei International Digital Trade Linkers (Hi-DTL), China
- Ali AbdELrahman (Agricultural Economics Department, Fayoum University, Egypt)
- M. Karim Ahmadzai (Teacher Assistant, Agricultural Economics & Extension Department, Afghanistan)
- Choriev Murotjon (Ph.D Candidate, Hunan University, Uzbekistan)
- Urnaa Gantulga (Associate Professor, National University of Mongolia)
- Dora Atadjanova, the founder of “Teodor Goods” export company and Dalatek Agro Platform, Uzbekistan.
- Otabek Nasirov, Deputy General Director, FinTech Association Uzbekistan.
- Maria Skorik, Uzum PR team. Uzum is the biggest e-commerce B2C marketplace in Uzbekistan and growing fast.

ACTIVITIES

(1) Go to Longnan for Cross-border E-commerce Research and Discussion Session

Date: August 17-18
Location: Wudu District, Longnan City, Chengxian

Agenda
1. Departure from Wuhan to Longnan on August 17
2. On August 18, conduct field research on the cross-border e-commerce business in Wudu and Chengxian and discuss with each other.
3. On August 19th, From Lanzhou to Kashgar by air

(2) The 6th "Belt and Road" Cross-border E-commerce International Forum (Kashgar)

Date: August 20-21
Location: Kashgar

Agenda

- August 20: Full-day tour of Kashgar's cross-border e-commerce and special industries.
- August 21: Full-day event for the 2023 6th "Belt and Road" Cross-border E-commerce International Forum.

Host: Zhou Deyi, Professor of Huazhong Agricultural University

First Session: Speeches by Leaders

Host: Zhou Deyi

Time	Speaker	Details
10:00-10:07	Representative of Huazhong Agricultural University	Speech
10:07-10:14	Representative of Karakoram International University	Speech

Second Session: Regional Policies and Opportunities

Host: Amar Razzaq

Time	Speaker	Details
10:20-10:50	Kashgar Bureau of Commerce	Introduces cross-border E-Commerce development measures and policy support
10:50-11:10	Longnan City E-Commerce Bureau	Introduces Longnan industries and cross-border E-Commerce development plan
11:10-11:30	CHORIEV MUROTJON	E-Commerce in Uzbekistan and it's opportunities
11:30-11:50	Xu Xuejiao	World Bank Central Asia E-commerce Project and opportunities of China e-commerce in Central Asia
11:50-12:10	Mehfooz	The future prospects of E-Commerce in the region
12:10-12:30	Dora Atadjanova	Digitization of farmers and processes as a part of a cross border E-commerce

Break and Group Photo: 12:10–12:20

Third Session: Enterprise Cross-Border E-Commerce Innovation Practice

Host: Zhao Yanqiang

Time	Speaker	Details
16:00-16:20	Yu Haikuo and Saqib	Introduction of training cooperation between Sudan-Longnan E-commerce Company and Di-HUB
16:20-16:40	AbduWaili	Introduction of Kashgar entrepreneurs and business models
16:40-17:00	Sultan Khan	E-Commerce in Gilgit Baltistan
17:00-17:20	Yin Zhiping	Thinking and Exploration of Taobao Education International Integration of Industry and Education
17:20-17:35	Zhang Jueya	Development history of Longnan walnut cross-border e-commerce
17:35-17:50	Zhou Deyi	Overseas Internship Program for Undergraduates of Huazhong Agricultural University in 2023
17:50-18:00	Audience	Questions and discussions

Fourth Session: Signing of Strategic Cooperation Agreement

Host: Li Defei

Time	Speaker	Details
18:10-18:20	Strategic Cooperation Agreement Participants	Agreement between Huazhong Agricultural University, Kashi University, Kashi Bureau of Commerce, and Longnan E-commerce Bureau
18:20-18:30	Cooperation Agreement Participants	Agreement between Longnan E-commerce Association and Kashi Entrepreneurs Association

Fifth Session: Tea Party

Host: Wai Li

Time	Speaker	Details
20:00-20:30	Li Gen	My Story of Cross-Border Trade and Its Enlightenment
20:30-21:00	Iftikhar	My experience with CBEC and e-commerce demand or scope in GB
21:00-21:30	General	Discussing Belt and Road Cross-border E-commerce business, Kashgar's regional benefits and integrating resources from Huazhong Agricultural University and Longnan's Agricultural E-commerce.

Sixth Session: Enterprise Cross-Border E-Commerce Innovation Practice

Host: Dora Atadjanova

Time	Speaker	Details
10:20-10:50	Faqeer Muhammad	Belt and Road Initiatives and its influences on border trade and business: A Case Study of Gilgit-Baltistan
10:50-11:20	Ms. Maria Skorik, Uzum PR team	
11:20-11:50	Otabek Nasirov, Deputy General Director, FinTech Association Uzbekistan.	Uzbek Fintech Market overview

Seventh Session: Gilgit for Cross-Border E-Commerce Research and Discussion

(Note: Due to political instability in Pakistan, only some members may go to Gilgit, or the session may be moved online)

Date/Time	Activity	Details
August 23-24	Transit to Gilgit	Two days on the road
August 25	Fieldwork	Visits to Karakoram International University and related companies

August 26 9:00-10:00	Seminar	Gilgit Taobao Village Possibility Discussion and Cooperation Model Seminar, Host: Iftikhar
August 26 11:00-12:00	Training Cooperation Agreement Signing	Letter of Intent for Training Cooperation between Huazhong Agricultural University and Karakoram International University on Chinese Taobao Teaching, Host: Mehfooz
August 27	Return to Kashgar	

Deadline:

Submission of PPT slides and relevant papers or essays in English or Chinese before the End of June, 2023.