WHAT SELLS IN E-COMMERCE

NEW EVIDENCE FROM ASIAN LDCs





In partnership with:



What sells in e-commerce

New evidence from Asian LDCs

About the paper

Cross-border e-commerce can help least developed countries (LDCs) to become more competitive and diversify their exports – and this is especially true for Asia-Pacific, the most dynamic region in global e-commerce. To capture that potential, small businesses in these countries need more market intelligence.

This paper fills that gap, using market data from Alibaba.com to identify which products from five Asian LDCs – Bangladesh, Cambodia, Lao People's Democratic Republic, Myanmar and Nepal – can generate the most demand abroad.

Publisher: International Trade Centre

Title: What Sells in E-commerce: New Evidence from Asian LDCs

Publication date and place: Geneva, April 2018

Page count: 47

Language: English

ITC Document Number: CEES-18-10.E

Citation: International Trade Centre (2018). What Sells in E-commerce: New Evidence from Asian LDCs. ITC, Geneva.

For more information, contact: Marion Jansen, Jansen@intracen.org.

For more information on ITC publications on e-commerce, see: http://www.intracen.org/itc/sectors/services/e-commerce/.

ITC encourages the reprinting and translation of its publications to achieve wider dissemination. Short extracts of this paper may be freely reproduced, with due acknowledgement of the source. Permission should be requested for more extensive reproduction or translation. A copy of the reprinted or translated material should be sent to ITC.

Digital image(s) on the cover: © Shutterstock

© International Trade Centre (ITC)

ITC is the joint agency of the World Trade Organization and the United Nations.

Foreword by ITC

Cross-border e-commerce represents a new pathway for small and medium-sized enterprises (SMEs) to increase competitiveness in the global market and diversify their export portfolio. Yet this potential is not fully exploited, particularly for companies from least developed countries (LDCs). Apart from the common challenges around limited telecommunication infrastructure and access to e-payment and logistics services, a major challenge for SMEs is the lack of market intelligence to identify demand for their products in the international market.

This publication is a contribution to addressing that challenge, providing new evidence on cross-country trade relationships in e-commerce. It draws on actual market data from Alibaba's international business-to-business (B2B) e-commerce platform (Alibaba.com) to help companies from five Asian LDCs (Bangladesh, Cambodia, Lao People's Democratic Republic, Myanmar and Nepal) identify which products generate demand from international buyers. This analysis enables SMEs to better target potential markets and clients.

The publication also compares online and offline trade and offers an insight into how, e-commerce is different from traditional trade. For example, although there are similarities in terms of main products and markets, e-commerce tends to focus more on consumer products and higher value added products. In Myanmar's agricultural exports via e-commerce, for example, beans, nuts and rice replace the cereals, sugar and vegetables of offline trade as the products of most interest abroad.

E-commerce offers opportunities to diversify exports in terms of both products and markets. Apparel and clothing accessories account for around 86% of Bangladesh's total exports, for example, but only 47% of online demand. Agriculture, food and beverages, and consumer electronic products fill the gap. Similarly, the United States market accounts for only 1% of Myanmar's total exports, but 22% of online demand, suggesting that there is significant unfulfilled trade potential.

In e-commerce, companies also tend to focus on niche products and unique offerings. In textile and leather, star products for Bangladesh are T-shirts, jeans and hoodies. For Lao People's Democratic Republic, it is pillows, cushions, mats and sheets, while for Nepal, it is carpets and rugs that account for a predominant share of online demand.

Asia-Pacific is a dynamic region in global e-commerce. Strong economic growth coupled with industrial transformation, rising productivity, improving electricity, telecommunication and transportation infrastructure, and enhanced trade facilitation provides fertile ground for rapid e-commerce growth in the region, including in the LDCs under study.

Previous publications and firm-level surveys on e-commerce from the International Trade Centre (ITC) have highlighted this potential of e-commerce for SMEs. They have also identified the bottlenecks SMEs face in their online business. Together with ITC's broader offering on e-strategies and e-entrepreneurship, this new publication represents a step towards overcoming those bottlenecks and maximizing that potential.

I would like to express our appreciation to AliResearch for their excellent collaboration. Big data analysis is already widely used by large companies to improve their product development and marketing strategies, but SMEs often lack resources and access to these transformative tools. In partnership with the private sector, ITC brings these tools to SMEs and offers market data analysis to boost their competitiveness in the global e-commerce market.

Arancha González Executive Director International Trade Centre

Howaler

Foreword by AliResearch

Since the turn of the 21st century, international trade has greatly changed in terms of participating entities, trade patterns, business models and organizational modes due to the rapid worldwide adoption of internet technology and e-commerce. This has promoted the inclusive development of the global economy and trade. In particular, the dividends of economic development are more equitably distributed among countries and communities, which creates more opportunities for small and medium-sized enterprises (SMEs), rural areas, young people and disadvantaged groups.

E-commerce is inclusive. It empowers SMEs, least developed countries (LDCs) and regions to embrace the digital economy, access international markets, create new job opportunities, stimulate industrial transformation and promote the growth of the economy and trade, thus contributing to sustainable and inclusive development.

Alibaba Group serves SMEs and consumers around the globe and aims to make it easy to do business anywhere. As one of the new providers of business infrastructure in the digital age –infrastructure that includes e-commerce platforms, inclusive finance, intelligent logistics, big data, cloud computing and cross-border e-commerce services – Alibaba Group helps SMEs to buy and sell globally and to identify innovative growth enablers.

In March 2016, Jack Ma, Executive Chairman of Alibaba Group, proposed the Electronic World Trade Platform (eWTP) initiative, which aims to take advantage of the digital e-commerce growth trend, boost SMEs, lower barriers of trade and investment and incubate new trade rules. In September 2016, eWTP was accepted as a core policy recommendation of the Business 20 (B20) and mentioned in the communiqué issued by the Group of 20 (G20) leaders at their Hangzhou Summit.

The eWTP initiative has been widely endorsed by the international community. In November 2017, the first eHub programme under eWTP was launched in Malaysia, which provides e-commerce, logistics, cloud computing, mobile payment, talent cultivation and other infrastructure services for SMEs. In collaboration with the World Trade Organization (WTO) and the World Economic Forum (WEF), eWTP is also engaged in the new 'Enabling E-commerce' initiative.

Cross-border e-commerce is building a free, open, universal and inclusive platform for global trade. On this platform, global connectivity is fulfilled, with hundreds of millions of consumers 'buying globally' and SMEs 'selling globally'. In fact, cross-border e-commerce stands a good chance of becoming the main form of global trade in the future.

I wish to express my appreciation to the International Trade Centre (ITC) for their dedicated efforts to this publication. Alibaba has been working with ITC to help SMEs, in particular those from LDCs in Asia, expand their exports through cross-border e-commerce. We are happy to see that SMEs from Bangladesh, Cambodia, Lao People's Democratic Republic, Myanmar and Nepal are actively exploring the global market on the Alibaba.com platform and gradually improving their e-commerce capabilities.

I hope that this publication can help SMEs and government agencies in the developing and least developed countries to better understand and leverage cross-border e-commerce, unleash their potential for international trade and achieve greater development in the process.

Hongbing GAO Vice President of Alibaba Group and Director of AliResearch

为多元水

Acknowledgements

This paper was prepared by Quan Zhao, ITC Trade Policy Advisor; Jimena Sotelo, ITC international consultant; and Yutong Dang, ITC intern, under the supervision of Marion Jansen, ITC Chief Economist.

Thanks are also due to Xue Yan, Deputy Director, Ali Cross-border E-commerce Research Centre; Ouyang Cheng, Director of Ali Cross-border E-commerce Research Centre and Executive Senior Adviser of AliResearch; Lv Xiaodong, Data Analyst of AliResearch; and Chen Xin, Senior Adviser of AliResearch for support with data and analysis. ITC also extends its thanks to AliResearch for providing access to the proprietary data used for the publication.

In addition, ITC would like to thank Erica Meltzer for editing; Natalie Domeisen, ITC, for peer review; and Evelyn Seltier, ITC, for production coordination and quality control. Kristina Golubic, Serge Adeagbo and Franco Iacovino provided graphic and printing support.

Contents

| Foreword by ITC | iii |
|--|------|
| Foreword by AliResearch | iv |
| Acknowledgements | V |
| Acronyms | viii |
| Executive summary | ix |
| CHAPTER 1 ASIAN LDCS: PREPARING FOR A BOOM IN E-COMMERCE | 1 |
| Rapid regional e-commerce growth | 1 |
| Using the power of online market data | 2 |
| CHAPTER 2 OVERVIEW OF TRENDS | 4 |
| Improving business ecosystems for e-commerce | 4 |
| Increasing SME participation in e-commerce | 7 |
| CHAPTER 3 COUNTRY-SPECIFIC INFORMATION | 10 |
| Bangladesh | 11 |
| Cambodia | 15 |
| Lao People's Democratic Republic | 19 |
| Myanmar | 23 |
| Nepal | 27 |
| CHAPTER 4 MAIN FINDINGS | 32 |
| Appendices | 34 |
| References | 35 |

Tables and Figures

| Table 1 | ICT infrastructure access indicators (2016) | 5 |
|-----------|--|----|
| Table 2 | Emerging e-payment solutions in Asian LDCs | 5 |
| Table 3 | Logistics performance indicators | 6 |
| Table 4 | Annual growth rate of the number of registered sellers | 7 |
| Table 5 | Total purchase inquires received, annual change rate (2015-2017) | 7 |
| Table 6 | Comparison of top export markets in online and offline demand | Ç |
| Table 7 | Top 10 product categories in Bangladesh's overall exports (2016) and e-commerce (2017) | 12 |
| Table 8 | Changes in online demand, by product category (2015-2017) | 12 |
| Table 9 | Top 10 markets in Bangladesh's overall exports (2016) and e-commerce (2017) | 14 |
| Table 10 | Top 10 product categories in Cambodia's overall exports (2016) and e-commerce (2017) | 16 |
| Table 11 | Changes in online demand, by product category (2015-2017) | 17 |
| Table 12 | Top 10 markets in Cambodia's overall exports (2016) and e-commerce (2017) | 18 |
| Table 13 | Top 10 product categories in Lao People's Democratic Republic's overall exports (2016) | |
| | and e-commerce (2017) | 20 |
| Table 14 | Changes in online demand, by product category (2015-2017) | 20 |
| Table 15 | Top 10 markets in Lao People's Democratic Republic's overall exports (2016) | |
| | and e-commerce (2017) | 22 |
| Table 16 | Top 10 product categories in Myanmar's overall exports (2016) and e-commerce (2017) | 24 |
| Table 17 | Changes in online demand, by product category (2015-2017) | 24 |
| Table 18 | Top 10 product categories in Myanmar's overall exports (2016) and e-commerce (2017) | 26 |
| Table 19 | Top 10 product categories in Nepal's overall exports (2016) and e-commerce (2017) | 28 |
| Table 20 | Changes in online demand, by product category (2015-2017) | 29 |
| Table 21 | Top 10 markets in Nepal's overall exports (2016) and e-commerce (2017) | 30 |
| Figure 1 | Global cross-border B2C e-commerce transaction value (\$ billion) | 1 |
| Figure 2 | Internet users as percentage of population (2005-2016) | 4 |
| Figure 3 | Number of registered sellers and active buyers on Alibaba.com | 8 |
| Figure 4 | Trending products in Bangladesh's e-commerce exports (2017) | 11 |
| Figure 5 | Product diversification indicator for Bangladesh | 13 |
| Figure 6 | Market diversification indicator for Bangladesh | 14 |
| Figure 7 | Trending products in Cambodia's e-commerce exports (2017) | 15 |
| Figure 8 | Product diversification indicator for Cambodia | 17 |
| Figure 9 | Market diversification indicator for Cambodia | 18 |
| Figure 10 | Trending products in Lao People's Democratic Republic's e-commerce exports (2017) | 19 |
| Figure 11 | Product diversification indicator for Lao People's Democratic Republic | 21 |
| Figure 12 | Market diversification indicator for Lao People's Democratic Republic | 22 |
| Figure 13 | Trending products in Myanmar's e-commerce exports (2017) | 23 |
| Figure 14 | Product diversification indicator for Myanmar | 25 |
| Figure 15 | Market diversification indicator for Myanmar | 26 |
| Figure 16 | Trending products in Nepal's e-commerce exports (2017) | 27 |
| | Product diversification indicator for Nepal | 29 |
| Figure 18 | Market diversification indicator for Nepal | 31 |

Acronyms

Unless otherwise specified, all references to dollars (\$) are to United States dollars, and all references to tons are to metric tons.

B2B Business-to-business
B2C Business-to-consumer
E-commerce Electronic commerce
E-payment Electronic payment

FDI Foreign direct investment
GDP Gross domestic product
GNI Gross national income

ICT Information and communications technology

IMF International Monetary Fund ITC International Trade Centre

ITU International Telecommunication Union

LDC Least developed country

MDI Market diversification indicator

PDI Product diversification indicator

SME Small and medium-sized enterprise

UNCTAD United Nations Conference on Trade and Development

WTO World Trade Organization

Executive summary

This publication uses market data from Alibaba's international business-to-business (B2B) e-commerce platform (Alibaba.com) to examine the cross-border e-commerce exports of five least developed countries (LDCs) in South and South-East Asia, namely, Bangladesh, Cambodia, Lao People's Democratic Republic, Myanmar and Nepal.

Strong economic growth, coupled with industrial transformation, growing productivity, improving electricity, expanding telecommunication and transportation infrastructure, and enhanced trade facilitation, has led to rapid e-commerce growth in these countries in recent years. Yet one of the main challenges for their small and medium-sized enterprises (SMEs) to leverage e-commerce and expand their exports is the lack of market intelligence that would allow them to identify demand for their products in the international market. This publication addresses that challenge, providing insights into what products attract demand on online platforms and how e-commerce is different from traditional trade.

Increasing SME participation in cross-border e-commerce

The number of registered sellers and active buyers from these countries on Alibaba's B2B platform grew by over 30% per year in 2015-2017, indicating a rapid expansion and growing interest in e-commerce. International demand for these countries' products is also growing, reflected in the increasing number of purchase inquiries received from international buyers. But the change in demand varies from country to country, with Bangladesh and Cambodia registering steadier growth than the other three countries.

E-commerce vs. traditional trade

The use of both traditional trade data and Alibaba e-commerce data for this publication makes it possible to compare online and offline trade. The two have several things in common, including the fact that champion products in offline trade also attract demand via e-commerce. Apparel and textile products, along with agricultural products, are the largest export categories in offline trade for the five countries discussed here, and they also feature prominently in e-commerce. Large markets in offline trade, such as the United States, China and India, also tend to be the largest markets for e-commerce exports.

Nevertheless, there are key differences between the two types of trade.

First, e-commerce focuses on processed products ready for consumption. By contrast, raw materials and commodities, such as mineral ores, do not feature prominently in e-commerce even though they are top exports in offline trade.

Second, product lines in which SMEs predominate, such as gifts and crafts, attract a greater share of total demand in online trade, while those commercialized by large companies with well-established distribution and trade channels, such as beverages and spirits, are not big in online trade.

Third, e-commerce provides opportunities to expand and diversify exports, notably into higher value added segments across and within sectors. Apparel and clothing accessories account for around 86% of Bangladesh's total exports, for example, but only 47% of online demand. The gap is filled by agriculture, food and beverages, and consumer electronic products. Export diversification through e-commerce can also occur within the same sector. For instance, agriculture is a top traded category for Myanmar in both online and offline trade, but in online trade, higher value added products, such as beans, nuts and rice, replace vegetables, sugar and cereals as the main products attracting international demand.

Fourth, e-commerce is more likely to generate demand in new sectors. Beauty and personal care products feature prominently in Cambodia and Myanmar's online trade, and is the fastest-growing category for Bangladesh. Hair extensions, a lightweight and high-value product ideal for e-commerce, are the single largest export in this category, attracting about a third of all purchase inquiries received by sellers from Myanmar.

Fifth, each country has its unique offerings in e-commerce. Though there are similarities between the broad export categories of the five LDCs, the star products in e-commerce vary significantly from country to country. In textile and leather products, for example, Bangladesh excels in T-shirts, jeans and hoodies. For Lao

People's Democratic Republic, the stars are pillows, cushions, mats and sheets, while for Nepal, carpets and rugs account for over 70% of total demand in this category. This shows that countries focus on their unique offerings, and may not necessarily compete on the same products in the international market. At the same time, these products seem to be at different levels of sophistication in different countries, which suggests varying production capacities for textile goods.

In terms of markets, the United States appears to be the largest source of demand for these countries' e-commerce exports, followed by China and India. The United States market is particularly noteworthy for Myanmar, since it accounts for only 1% of the country's total exports. The number of purchase inquiries, however, suggests that there is significant interest from United States buyers in products from Myanmar, and considerable unfulfilled export potential.

Report overview

Chapter 1 outlines e-commerce growth in the region and explains how Alibaba market data has been used.

Chapter 2 gives an overview of e-commerce export trends in the five countries under study. There is an improving e-commerce business ecosystem in these countries, an increased uptake of e-commerce by SMEs and increased demand for their products from international buyers.

Chapter 3 provides country-specific information on e-commerce products and markets. This includes trending products in e-commerce, changes in demand over 2015-2017, and main sources of demand. The chapter compares the demand in online and offline trade¹ and identifies products and markets with potential for export growth and diversification through e-commerce.

Chapter 4 highlights the differences between online and offline trade and looks at the e-commerce potential of each of the five countries.

×

¹ To simplify, offline trade refers to a country's overall exports, which include trade facilitated by B2B e-commerce.

CHAPTER 1 ASIAN LDCS: PREPARING FOR A BOOM IN E-COMMERCE

Cross-border e-commerce is rapidly transforming global trade. As of 2016, 12% of global goods trade was conducted via cross-border e-commerce,² and this rapid transformation is expected to continue in the coming years.

Rapid regional e-commerce growth

Asia-Pacific is the most dynamic region in cross-border e-commerce, with China and the United States being the largest global players. Cross-border business-to-consumer (B2C) e-commerce transactions in Asia-Pacific are expected to grow more than sixfold in six years, from \$71 billion in 2014 to \$476 billion in 2020.³

Western Europe Mid-Eastern Europe North America 48% 25% 18% 102 216 2014 2020 2014 2020 19% 176 2014 2020 Middle East & Africa Asia Pacific Latin America 60% 33% 140 53 12% 476 2020 2014 2014 2020 2014 2020 B2C e-Commerce B2C Cross-border e-Commerce

Figure 1 Global cross-border B2C e-commerce transaction values (\$ billion)

| | 2014-20 incremental B2C cross-border e-Commerce trade volume (billion dollars) | Contribution of global total incremental trade volume (%) |
|------------------------|--|---|
| Asia Pacific | 405 | 53.6% |
| Western Europe | 143 | 18.9% |
| North America | 109 | 14.4% |
| Latin America | 47 | 6.2% |
| Mid-eastern Europe | 32 | 4.2% |
| Middle-East and Africa | 21 | 2.7% |

Source: Accenture & AliResearch

This rapid growth may mean significant export opportunities for the developing countries in the region, including the five Asian LDCs covered by this report. There is fertile ground in these countries for cross-border e-commerce exports. Their GDP is growing at around 7% per year, and industrial transformation is rapidly reshaping their economies.

Some have already gained a solid foothold in the e-commerce market for light manufacturing, with textile and apparels becoming increasingly competitive in the global market. Others have a competitive edge in unique offerings, such as agricultural products, gifts and crafts, and natural resources-related products.

² Mckinsey (2016).

³ Accenture & AliResearch (2015), Cross-border B2C E-commerce Market Trends.

Increasing investment in e-commerce-related infrastructure, such as electricity grids, telecommunication and transportation networks, and improved trade facilitation, is paving the way for e-commerce growth. The use of mobile devices and broadband Internet is rising rapidly . An expanding urban middle class and increasingly youth-centred population lay a solid foundation for rapid e-commerce growth in these countries.

Companies from these five countries are already actively exploring ways to expand their exports through cross-border e-commerce. The number of registered sellers from these countries on Alibaba's B2B e-commerce platform (Alibaba.com) grew by over 30% per year between 2015 and 2017. The number of interactions with global buyers is also rapidly increasing, indicating growing demand for the countries' products.

Nevertheless, SMEs in LDCs still face significant challenges to cross-border e-commerce, including inadequate infrastructure and support services, limited access to markets and lack of capacity. One of the greatest challenges is the lack of market intelligence to identify demand for their products in the international market. SMEs often do not have the resources or the capacity to analyse demand, and without market intelligence may miss out on business opportunities. Results from an ITC survey of more than 2,200 enterprises show that acquiring online visibility is another major issue, more important than insufficient technical skills.⁴

Using the power of online market data

This publication, in partnership with AliResearch, for the first time uses actual market data from Alibaba.com to examine demand for cross-border e-commerce exports from these five countries, helping to fill the gap for market intelligence.

With over 50 million registered buyers globally, Alibaba.com is the world's largest online business-tobusiness (B2B) marketplace and plays a key role in helping SMEs to trade globally through ecommerce. Data from Alibaba's platform provide useful insights into demand for different types of products and from different markets, which can guide companies to better target their potential clients and to expand their business operations more strategically.

The main objective of this publication is to identify which products from the five LDCs under study have existing and/or potential demand from international buyers via cross-border e-commerce.

For each of the countries, the data extracted from Alibaba.com include:

- Number of registered sellers. This indicates the level of participation of local businesses in selling through e-commerce.
- Number of active buyers. 5 This indicates the level of participation of local businesses in purchasing through e-commerce.
- Number of purchase inquiries. A purchase inquiry consists of a buyer's request for information from a seller through Alibaba.com. This request can include inquiries about products, requests for price quotes, communication through the platform's instant messaging app "TradeManager", and actually placing an order for purchase.

The key data category here is the number of purchase inquiries. It serves as a reliable proxy for demand and interest from international buyers⁶ for a particular product that could potentially lead to purchases. The greater the number of purchase inquiries about a product, the greater the demand/interest for that particular product is likely to be.

2

⁴ International Trade Centre (2017). New Pathways to E-commerce: A Global SME Competitiveness Survey. Geneva, ITC.

⁵ This refers to the buyers from the countries under study who have made at least one purchase-related activity, including purchase inquiries, during the period concerned.

⁶ Alibaba.com is mainly a platform for cross-border B2B e-commerce. Inquiries from domestic buyers normally account for a negligible share of the total, except in the case of Bangladesh, where purchase inquiries from domestic buyers represent 4% of the total.

The reason for using purchase inquiries rather than actual transaction data is that as a B2B platform, Alibaba.com mainly serves to match supply and demand, and actual transactions are predominantly done offline through direct contact between sellers and buyers. Because they do not reflect interest in a product, actual transaction data, even if they were available, would not provide a full picture of the country's e-commerce.

For each country, purchase inquiries are examined by product categories and by the countries in which the products originate. The data are then used to identify demand for a particular group of products as well as demand from a specific country.

Although the publication provides useful information based on actual market data, there are certain limitations.

First, e-commerce data are limited to one platform and thus do not capture the entire global demand through e-commerce. This is particularly noticeable in the study of markets. In countries where buyers use other platforms for B2B purchases, the demand is not captured and thus not reflected in the results. Germany, for instance, is the second largest importer of products from Bangladesh, yet is not in the top ranking of Bangladesh's e-commerce markets through Alibaba.com. Comparing online demand with the countries' overall exports shows that Alibaba's platform is most frequently used by buyers from the United States, China and Asia in general, and to a lesser extent from Europe, except for the United Kingdom.

Second, more disaggregated data are required for in-depth analysis. The available data provide only aggregate numbers of purchase inquiries for products and markets, and thus it is not possible to look at the demand for a particular product from a particular market. Such detailed examination would be particularly useful for SMEs to pinpoint specific demands for their products or even to trace demand at the company level.

Third, product categories on Alibaba.com do not correspond strictly to the Harmonized System (HS) classifications. For e-commerce sites, products are classified from a consumer end-use perspective, and thus include such categories as "Gifts" and "Gardening". At a broader level, main categories – such as textiles, agriculture and machineries – do have a closer match with the HS codes. Nevertheless, comparing online and offline demand can provide only an estimate, and not an accurate assessment. A list of product categories on Alibaba.com is attached in Annex I.

Despite these limitations, the publication offers insights into e-commerce opportunities for SMEs in the Asian LDCs and represents the first attempt to use actual market data from a leading global e-commerce site to help SMEs from LDCs identify demand for their products.

CHAPTER 2 OVERVIEW OF TRENDS

This chapter summarizes the key e-commerce trends in the five LDCs under study and puts them into the context of the business environment for e-commerce within individual countries.

Improving business ecosystems for e-commerce

Rapid improvements in internet access

Affordable and reliable Internet access is one of the preconditions for the growth of online business. It is particularly important for firms that conduct only online trade. ITC's e-commerce survey, referred to earlier, finds that 80% of respondents were SMEs engaging in international trade solely through crossborder e-commerce, with no operations in offline trade.⁷

The five LDCs discussed in this publication have all seen rapid improvements in Internet access in recent years. In 2016, their Internet penetration was above the LDC average (17.5 Internet users per 100 inhabitants). 8 Myanmar and Cambodia stand out as particularly well-connected nations, with Internet reaching over 25% of the total population (Figure 2).

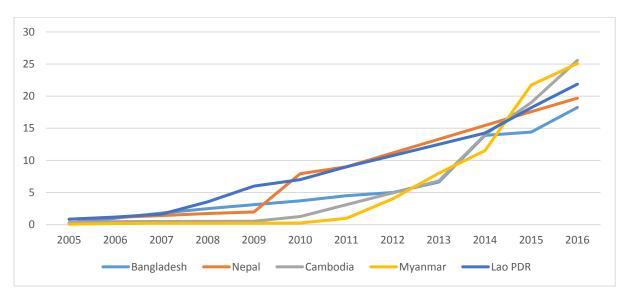


Figure 2 Internet users as percentage of population (2005-2016)

Source: International Telecommunication Union (ITU).

Mobile broadband is of growing importance, particularly with 4G and the incoming 5G technology. For all five countries, 2G and 3G coverage is almost ubiquitous, surpassing the LDC average, with the exception of Lao People's Democratic Republic, where 30% of the population remains outside of the 3G signal range. 4G mobile network development is uneven: over half of the population is covered in Bangladesh and Cambodia, but in Lao People's Democratic Republic and Myanmar such networks are only just emerging (Table 1).

Improving Internet access is accompanied by the increasing affordability of mobile data. Mobile broadband in Bangladesh, Cambodia, Lao People's Democratic Republic and Myanmar appears to be relatively affordable, with a price below the LDC average (see Table 1). The price for mobile data in Nepal is considerably higher than in the other four countries, however, at \$5.80 for 500MB of mobile broadband, representing 9.5% of gross national income (GNI) per capita.

⁷ ITC (2017). New Pathways to E-commerce: A Global SME Competitiveness Survey.

⁸ ITU. World Telecommunication/ICT Development Report and database.

Table 1 ICT infrastructure access indicators (2016)

| | Percentage of the population covered by | | | | ions per 100 | Price of 500 MB of mobile data | | |
|---|---|-------------------------|---------------------------------------|---------------|-------------------------------|--------------------------------|---------------|---|
| Country | 2G mobile network | 3G mobile network | 4G LTE/ WiMAX mobile network | Mobile phones | Active mobile broadband | Fixed broadband | Price (\$) | Price as a percentage of GNI per capita |
| Bangladesh | 99 | 90 | 65 | 77.88 | 17.79 | 3.77 | 2.3 | 2.3 |
| Cambodia | 99 | 80 | 50 | 124.94 | 50.19 | 0.61 | 1.0 | 1.1 |
| Lao People's Democratic Republic | 98 | 71 | 7 | 55.39 | 34.66 | 0.34 | 2.5 | 1.7 |
| Myanmar | 100 | 96 | 9 | 89.26 | 47.63 | 0.06 | 2.4 | 2.5 |
| Nepal | 92 | 90 | 0 | 111.70 | 30.78 | 0.78 | 5.8 | 9.5 |
| LDCs | 88 | 61 ⁹ | 16 | 67.7 | 19.1 | 0.9 | 8.3 | 12.0 |

Note: Figures for LDCs are ITC calculations based on ITU data.

Source: ITU.10

Emerging e-payment solutions

Electronic payment (e-payment) capability is essential for e-commerce transactions. Policy and regulatory changes in recent years have spurred the emergence of e-payment providers in the five LDCs, both domestic and foreign (Table 2). Bangladesh Bank first approved online payments in 2009 and, in 2013, the use of debit and credit cards for online payments. 11 Cambodia introduced its online banking system in 2016, and Lao People's Democratic Republic is developing its own such system with international cooperation. These e-payment solutions have provided impetus for e-commerce growth.

Table 2 Emerging e-payment solutions in Asian LDCs

| Country | Payment Solution | Description |
|--|---------------------|---|
| | Sslcommerz | The first payment gateway in Bangladesh. |
| Bangladesh | Others | EasyPayWay, PortWallet, aamarPay, shurjoPay, and Payza |
| | Wing | The most widely adopted payment app in Cambodia. 12 A popular phone-to-phone payment service. |
| Cambodia | Others | True Money, E-Money, Lybour Pay-pro Smart buy Paygo Sea. |
| Lao People's Democratic Republic | OnePay | Launched by Banque Pour Le Commerce Extérieur Lao (BCEL). It allows customers to transfer through bank accounts by means of a QR code. |
| | 2C2P | Provides e-commerce payment service in partnership with Myanmar Payment Union (MPU), the national payment network. There are already some 900,000 MPU cards in Myanmar. |
| Myanmar | MyPay Ltd | A Myanmar mobile payment firm which acquired Singapore's Fastacash in March 2017 and is developing social and mobile payment. |
| | eSewa | Offers a mobile wallet that can be linked to accounts in a wide range of banks and that supports both face-to-face and online payments. |
| | IME Pay | Can be linked to accounts in a range of banks and supports both face- to-face (offline) and remote (online, e-commerce) payments |
| Nepal | RuPaiya brand | Launched by Prabhu Bank. Includes a prepaid card, which is intended for bill payments, domestic e-commerce and general retail purchases. |
| | Others | PayPal, iPay, SCT, MoCo, net banking from Nepal Investment Bank Limited. |

Source: UNCTAD, export.gov, BCEL, Myanmar Business Today.

⁹ ITU. ICTs, LDCs and the SDGs: Achieving universal and affordable Internet in the least developed countries, 2018, p.91.

¹⁰ ITU(2018). ICTs, LDCs and the SDGs: Achieving universal and affordable Internet in the least developed countries [this title is different from what is listed in the references]

¹¹ www.export.gov (2017), Bangladesh-Ecommerce.

¹² UNCTAD (2017). Cambodia Rapid eTrade Readiness Assessment.

E-commerce logistics remains a major challenge

Access and cost of logistics services are key determinants of the competitiveness of e-commerce firms. According to the findings of the ITC survey based on 2,200 responses, the share of logistic costs in the final price in cross-border e-commerce transactions could be almost twice as high for firms in developing countries (26%, as opposed to 14% for firms in developed countries).¹³

Table 3 summarizes access to and quality of logistics infrastructure and services, especially in e-commerce-relevant areas, such as ease tracking and tracing ability, timeliness of shipment to destination and post-service efficiency.¹⁴

According to the World Economic Forum, the five countries discussed here remain at the lower end of the competitive spectrum in the global ranking of logistics performance. Bangladesh and Cambodia perform better in terms of the overall availability and quality of transport infrastructure and services within the group. The rankings for Lao People's Democratic Republic are a matter of concern, since most of the country's indicators declined between 2014 and 2016.

Table 3 Logistics performance indicators

| | Bangladesh | Nepal | Lao People's Democratic Republic | Cambodia | Myanmar |
|---|------------|-------|---|----------|---------|
| Availability and quality of transport infrastructure 1-7 (best) | 2.7 | 2.1 ▼ | 2.4 ▼ | 2.6 | 2.33 🛦 |
| Availability and quality of transport services 1-7 (best) | 3.5 ▼ | 3.2 | 3.2 ▼ | 3.7 ▲ | - |
| Ease and affordability of shipment 1-5 (best) | 2.7 | 2.5 🛦 | 2.2 ▼ | 2.6 | 2.23 |
| Logistics competence 1-5 (best) | 2.7 ▲ | 2.1 | 2.1 ▼ | 2.7 | 2.36 🛦 |
| Tracking and tracing ability 1-5 (best) | 2.6 ▼ | 2.5 🔺 | 1.8 | 3.3 ▲ | 2.57 🔺 |
| Timeliness of shipment to destination 1-5 (best) | 2.9 ▼ | 2.9 🔺 | 2.7 🛦 | 3.2 ▼ | 2.85 ▼ |
| Post-service efficiency 1-7 (best) | 3.4 | 3.4 | 4.5 ▼ | 3.5 | - |

Note: Upward and downward arrows denote the change in value during 2014-2016.

Source: World Economic Forum Global Enabling Trade Index and World Bank Logistics Performance Index for Myanmar.

6

¹³ International Trade Centre (2017). New Pathways to E-commerce: A Global SME Competitiveness Survey. Geneva.

¹⁴ Transport infrastructure measures availability and quality in the four main modes of transport (road, air, railroad and seaport). Logistics services assess the availability and quality of transport services, considering competition of shipping and logistics companies in the country. World Economic Forum, The Global Enabling Index.

¹⁵ World Economic Forum ranking in transport infrastructure and out of 136 countries is as follows: Bangladesh, 109; Cambodia, 113; Lao People's Democratic Republic, 125; and Nepal, 135. When it comes to the transportation service ranking, the positions are: Cambodia, 87; Bangladesh, 100; Nepal, 119; and Lao People's Democratic Republic, 121. As for Myanmar, it ranks 113 of the 160 countries in the World Bank Logistics Performance Index.

Increasing SME participation in e-commerce

Within this context, the number of registered sellers from these countries on the Alibaba platform has been growing steadily, at over 30% per year in 2015-2017 (Table 4). This indicates that companies are actively exploring e-commerce opportunities.

The highest two-year average growth rate is registered in Myanmar (54.3%), and the lowest in Bangladesh (29.1%). But this does not necessarily mean that e-commerce is growing more slowly in the latter. On the contrary, considering the cumulative number of registered sellers, it may suggest that growth in Bangladesh has already passed beyond the rapid expansion period, whereas Myanmar is just entering that period.

In 2017, with over 145,000 registered sellers (cumulative) on Alibaba.com, Bangladesh stands out as the largest player among the five countries. This corresponds to the size of the economy and the volume of the country's overall exports.

On average, the gross domestic product (GDP) of these five countries grew at around 7% in 2016. The number of online sellers on Alibaba.com is increasing considerably faster than the countries' respective GDP growth: more than four times in Bangladesh; more than five times in Cambodia, Lao People's Democratic Republic and Nepal; and more than seven times in Nepal. This rapid growth is fuelled by strong economic growth, improving telecommunication and transportation infrastructure, a youth-centred population and increasing investment in e-commerce-related activities.

Table 4 Annual growth rate of the number of registered sellers

| | Growth rate 2015-2016 | Growth rate 2016-2017 | Average growth ¹⁶ 2015-2017 | Number of online sellers 2017 | GDP growth rate 2016-2017 ¹⁷ |
|--|--------------------------|-----------------------|---|-------------------------------|---|
| Bangladesh | ngladesh 28.2% 30.0% | | 29.1% | 145,629 | 7.1% |
| Cambodia | Cambodia 49.5% | | 45.0% | 26,998 | 6.8% |
| Lao People's Democratic Republic | 37.5% | 36.8% | 37.1% | 4,705 | 6.9% |
| Myanmar | Myanmar 63.1% | | 54.1% | 25,614 | 7.6% |
| Nepal | 29.3% | 37.6% | 33.4% | 30,483 | 5.0% |
| Average | 33.5% | 33.8% | 33.7% | | |

Source: ITC, using data from Alibaba.com and GDP figures from the International Monetary Fund (IMF).

As mentioned earlier, the total number of purchase inquiries received by sellers can be regarded as a proxy for overall demand for a country's products. Comparing year-on-year changes in the total demand, it could also serve as an indicator for estimating overall e-commerce performance.

This important indicator, however, varies from country to country (Table 5). Purchase inquiries for products from Bangladesh rose by 25% in 2016 and 6% in 2017. Strong growth is also seen for products from Cambodia, which received 10% more purchase inquiries in 2016 and an additional 41% more registered sellers in 2017.

Table 5 Total purchase inquires received, annual percentage change rate (2015-2017)

| | 2015-2016 | 2016-2017 |
|----------------------------------|--------------|--------------|
| Bangladesh | ▲ 25% | ▲ 6% |
| Cambodia | ▲ 10% | ▲ 41% |
| Lao People's Democratic Republic | ▼ 47% | ▼ 9% |
| Myanmar | ▲ 33% | ▼ 45% |
| Nepal | ▲ 14% | ▼ 12% |

Source: ITC, using data from Alibaba.com.

¹⁶ Compound Annual Growth Rate (CAGR)= (Ending Value / Beginning Value)^{1/2} – 1.

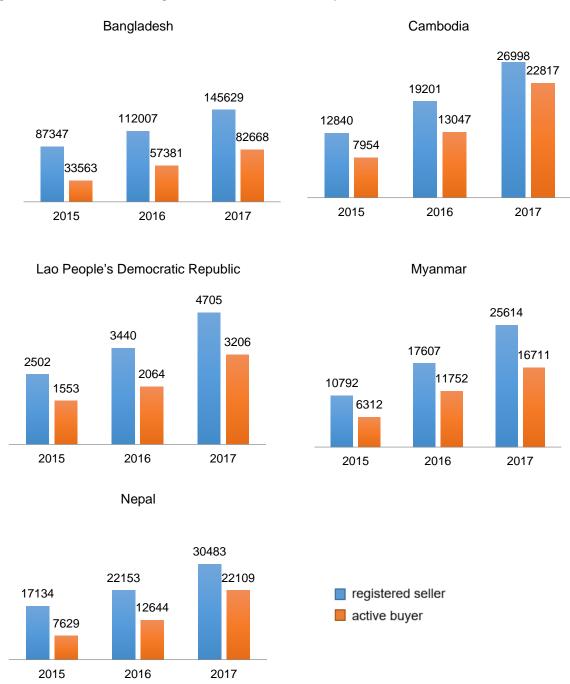
¹⁷ Source: IMF (October 2017), World Economic Outlook, Real GDP Growth.

For Myanmar and Nepal, growth was strong in 2016 (33% and 14% respectively), but this was followed by a similarly large drop in 2017 (45% and 12% respectively). Purchase inquiries received by sellers from Lao People's Democratic Republic declined by 47% and 9% respectively in 2016 and 2017.

The reasons for these variations in each country's performance across the years are hard to identify. They could be related to the types of products that the countries trade and the markets that they target. They could also be related to how buyers in different destination markets actually use the platform.

Purchase inquiries received per company may also vary significantly, though specific data on that are not available. One could assume that, as in many other platforms, a small share of sellers, particularly paying members, actively use the platform and receive the bulk of purchase inquiries, while the rest are rather using it as a "yellow page" in which they simply list the company's information and offers.

Figure 3 Number of registered sellers and active buyers on Alibaba.com



Source: ITC, using data from Alibaba.com.

In terms of the sources of demand, the United States, China and India are the three largest markets in which e-commerce purchase inquiries originate. This is to a certain extent consistent with the countries' overall trade pattern: the United States is the largest export market for Bangladesh and Cambodia; China is the largest export market for Lao People's Democratic Republic and Myanmar; and India is the largest export market for Nepal. Table 5 compares the largest destination markets in online and offline trade.

However, apart from these three largest markets, there seems to be limited overlap in the rest of the list. New destination markets, such as Pakistan, Austria, Egypt, Poland, Russian Federation and Saudi Arabia, appear in the list of top markets for e-commerce export. This does not necessarily mean that e-commerce is helping SMEs to diversify into new markets, since international demand coming through the platform rather depends on the use of the platform by buyers in the destination markets and on the types of products being traded. Europe, for instance, a major market for Asian exports, is sometimes missing from online demand.

The United States market is particularly noteworthy for Myanmar. The United States accounts for only 1% of Myanmar's total exports but a sizeable proportion of purchase inquiries. This suggests there is significant interest from United States buyers in products from Myanmar and significant unfulfilled export potential.

Table 6 Comparison of top export markets in online and offline demand

| Bang | ladesh | Carr | bodia | Lao People's Democratic Republic | | Myanmar | | No | epal |
|-------------------|-------------------|-------------------|-------------------|-------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Overall | E-commerce | Overall | E- commerce | Overall | E- commerce | Overall | E-commerce | Overall | E- commerce |
| United States | United States | United States | United States | China | United States | China | United States | India | United States |
| Germany | China | United Kingdom | India | Thailand | China | Thailand | India | United States | China |
| United Kingdom | Bangladesh | Germany | China | Viet Nam | India | India | Bangladesh | Germany | India |
| France | India | Japan | Canada | India | Thailand | Singapore | China | Turkey | Australia |
| Spain | United Kingdom | Canada | United Kingdom | Japan | Hong Kong SAR | Japan | Viet Nam | United Kingdom | Canada |
| Italy | Canada | China | Egypt | Germany | Korea, Rep. of | Korea, Rep. of | Pakistan | China | United Kingdom |
| Canada | Pakistan | Thailand | Pakistan | United Arab Emirates | Canada | Hong Kong SAR | Canada | France | Nepal |
| Japan | Austria | Spain | Australia | Swaziland | Poland | Germany | Thailand | Japan | Germany |
| Belgium | Malaysia | Belgium | Saudi Arabia | United Kingdom | Malaysia | United States | United Kingdom | Canada | France |
| Netherlands | Russian Fed. | France | Russian Fed. | Switzerland | Australia | Malaysia | Nigeria | Italy | Russian Fed. |

Note: Top 10 e-commerce destination markets are compiled based on the number of inquiries received from international buyers.

Source: ITC Trade Map and Alibaba.com.

CHAPTER 3 COUNTRY-SPECIFIC INFORMATION

This chapter features country-specific analysis of the products and markets for each of the five countries' B2B e-commerce. Discussion of each country is divided into three sections:

1. Trending products in e-commerce

The trending products in e-commerce are the ones which received the greatest number of purchase inquiries, which serves as a proxy for demand and interest from buyers. This provides an indication of which products from the countries may attract interest from international buyers.

This section also compares the most demanded products in e-commerce with the country's overall exports to provide insights into whether, and if so how, products traded through e-commerce are different from those traded offline.

2. Products for export growth and diversification

This section traces changes in online demand for different products over the period 2015-2017 and examines products which products saw an increased or decreased demand from international buyers. This change may indicate potential future demand. The section also draws on ITC's product diversification indicator (PDI)¹⁸, which analyses a country's best options for product diversification for export, based on its existing trade pattern and comparative advantages.

3. Markets for export growth and diversification

This section ranks the countries/economies in which purchase inquiries originate in order to identify where existing and potential buyers are located. It also compares the top 10 sources of e-commerce demand with the top 10 markets for the country's overall exports, offering insights into which markets may have e-commerce potential. The section further draws on ITC's market diversification indicator (MDI), which analyses a country's best options for market diversification for export, based on its existing trade pattern and comparative advantages.

-

¹⁸ More information on ITC's Export Potential Map is available at http://exportpotential.intracen.org.

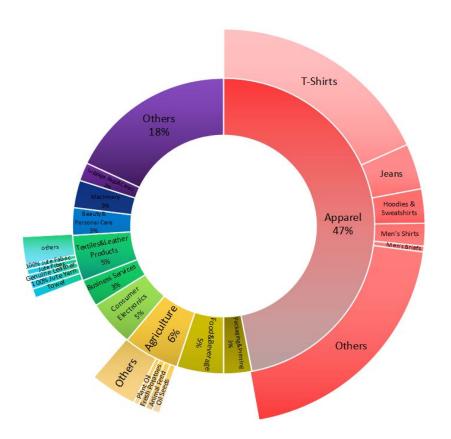
Bangladesh

Trending products in e-commerce

According to data from Alibaba.com, the product categories that received the largest number of online purchase inquiries (a proxy for international demand, as mentioned earlier) in Bangladesh include apparel (47% of all purchase inquiries), agriculture (6%), food and beverages (5%), consumer electronics (5%), business services¹⁹ (3%), packaging and printing²⁰ (3%), beauty and personal care (3%), machineries (3%), and luggage, bags and cases (2%). These top 10 categories account for 82% of all purchase inquiries.

To get a closer look at the demand for specific products within each category, the table in Figure 4 provides a breakdown of the three categories that attract the most demand in e-commerce. In apparel, T-shirts (39%), jeans (8%), hoodies and sweatshirts (6%), men's shirts (4%) and men's underwear (1%) received the most purchase inquiries. In agriculture, star products include oil seeds (10%), animal feed (10%), fresh potatoes (10%) and plant oil (7%). In textile and leather products, towels (15%), jute yarn (13%), genuine leather (11%), jute fibre (9%) and jute fabric (8%) stand out.

Figure 4 Trending products in Bangladesh's e-commerce exports (2017)



| Product | Share | | | | | |
|-----------------------|-------|--|--|--|--|--|
| Apparel | | | | | | |
| T-shirts | 39% | | | | | |
| Jeans | 8% | | | | | |
| Hoodies & sweatshirts | 6% | | | | | |
| Men's shirts | 4% | | | | | |
| Men's underwear | 1% | | | | | |
| Others | 43% | | | | | |
| Agriculture | | | | | | |
| Oil seeds | 10% | | | | | |
| Animal feed | 10% | | | | | |
| Fresh potatoes | 10% | | | | | |
| Plant oil | 7% | | | | | |
| Others | 63% | | | | | |
| Textiles & leat | her | | | | | |
| Towels | 15% | | | | | |
| 100% jute yarn | 13% | | | | | |
| Genuine leather | 11% | | | | | |
| Jute fibre | 9% | | | | | |
| 100% jute fabric | 8% | | | | | |
| Others | 46% | | | | | |

Source: ITC, using data from Alibaba.com.

Comparing the most demanded products in e-commerce with the country's overall exports (Table 7) provides insights into whether, and if so how, products traded through e-commerce are different from

¹⁹ Business services include exhibition services, processing services, consulting, logistics services, designing services, agency services and supply chain management.

²⁰ Packaging and printing include both goods and services. Goods include such products as carton, cardboard, pill cases, aluminium foil and packaging labels. Services mainly include printing and packaging services.

those traded offline. Apparel and clothing accessories account for around 86% of Bangladesh's exports. In fact, seven of the country's top 10 export products are related to apparel and clothing, including footwear, yarn, rags and raw materials.

When it comes to e-commerce, apparel remains a top category, but accounts for a much smaller share. Only 47% of all purchase inquiries received by sellers from Bangladesh are related to apparel. Other products, including agriculture (6%), food and beverages (5%), and consumer electronics (5%), also receive a significant number of inquiries.

Table 7 Top 10 product categories in Bangladesh's overall exports (2016) and e-commerce (2017)

| Rank | Overall exports | | E-commerce | |
|------|--|-------|-------------------------------|-------|
| | Product | Share | Product | Share |
| 1 | Apparel, not knitted or crocheted | 43% | Apparel | 47% |
| 2 | Apparel, knitted or crocheted | 43% | Agriculture | 6% |
| 3 | Other made-up textile articles | 3% | Textiles and leather products | 5% |
| 4 | Footwear, gaiters and the like | 2% | Food and beverages | 5% |
| 5 | Other vegetable textile fibres | 2% | Consumer electronics | 5% |
| 6 | Fish and crustaceans, molluscs | 2% | Business services | 3% |
| 7 | Headgear and parts thereof | 1% | Packaging and printing | 3% |
| 8 | Leather; saddlery and harness | 1% | Beauty and personal care | 3% |
| 9 | Raw hides and skins (other than foreskins) | 1% | Machinery | 3% |
| 10 | Vehicles (other than railway) | <1% | Luggage, bags and cases | 2% |
| Sum | Sum of the top 10 products | 97% | Sum of the top 10 products | 82% |

Source: ITC Trade Map and Alibaba.com.

Products for export growth and diversification

Tracing changes in demand for different products over the past two years (2015-2017), this section examines products that saw increased or decreased online demand from international buyers, which may serve as an indicator for future demand.

While apparel remains constant at the top of the list, demand for beauty and personal care products is rising very rapidly. Purchase inquiries related to this category scaled up 10 positions in ranking in the past two years (2015-2017). Considering that beauty and personal care products already attract significant demand (accounting for 3% of total purchase inquiries), this is a product category with great potential for growth. Over the period 2015-2017, increased demand was also seen for agricultural products, food and beverages, and consumer electronics, while the ranking of textile and leather products fell from second to third place.

The product diversification indicator (PDI) in ITC's Export Potential Map sets out a country's best options for export diversification, based on its existing trade pattern and comparative advantages.

According to its PDI, Bangladesh's best options for export diversification are roots and tubers of manioc, manioc starch, and semi-milled or wholly milled rice. Bangladesh finds manioc starch easiest to reach. Coffee, not roasted, not decaffeinated is the product with the strongest demand potential.

Table 8 Changes in online demand, by product category (2015-2017)

| Ranking | Products | Change in ranking |
|---------|-------------------------------|-------------------------|
| 1 | Apparel | - |
| 2 | Agriculture | ▲ 1 |
| 3 | Textiles and leather products | ▼ 1 |
| 4 | Food and beverages | ▲ 1 |
| 5 | Consumer electronics | 1 |
| 6 | Business services | ▼ 2 |
| 7 | Packaging and printing | - |
| 8 | Beauty and personal care | ▲ 10 |
| 9 | Machinery | ▼ 1 |
| 10 | Luggage, bags and cases | ▼ 1 |

Source: Alibaba.com

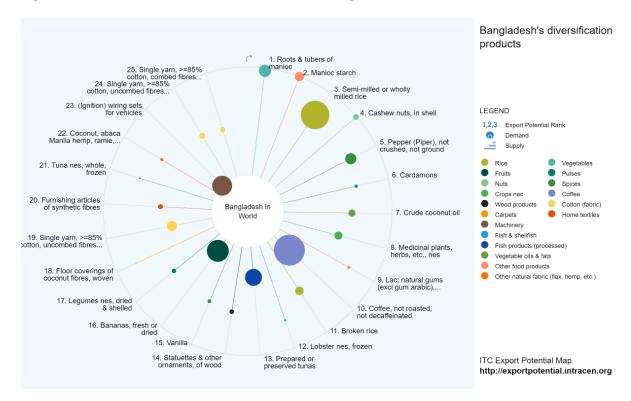


Figure 5 Product diversification indicator for Bangladesh

Source: ITC Export Potential Map.

Markets for export growth and diversification

In 2017, 59% of all purchase inquiries to registered sellers from Bangladesh on Alibaba.com came from the following 10 countries: United States, China, Bangladesh, India, United Kingdom, Canada, Pakistan, Austria, Malaysia and Russian Federation. The United States takes the largest share of 14%, followed by China (12%) and India (10%). Inquiries from domestic buyers in Bangladesh account for 4% of inquiries.

Table 9 compares the top 10 destination markets in Bangladesh's overall exports and online purchase inquiries. The United States is the largest market in both cases, with a 16% share of overall exports and 14% of all purchase inquiries. However, there is a significant difference in the rest of the list. In overall exports, Germany is the second largest market (14%), followed by the United Kingdom (9%) and France (7%). In fact, geographically, seven of the top 10 are European countries.

In e-commerce, however, with the exception of the United Kingdom and Russian Federation, the top European markets are missing from the list. This might be due to the market orientation of the e-commerce platform and to differences in the types of products traded online and offline – apparel and clothing, for instance, have a lower share in online demand than in offline trade, where they are a major product traded between Bangladesh and Europe.

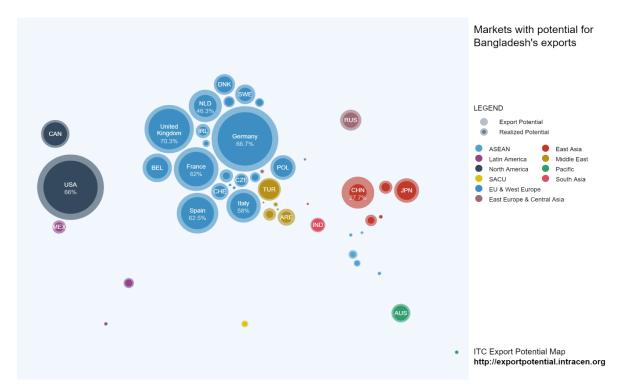
Table 9 Top 10 markets in Bangladesh's overall exports (2016) and e-commerce (2017)

| | Overall exports | | E-cor | nmerce |
|------|-----------------|------------------|--------------------|--------------------|
| Rank | Market | Share in exports | Market | Share in inquiries |
| 1 | United States | 16% | United States | 14% |
| 2 | Germany | 14% | China | 12% |
| 3 | United Kingdom | 9% | Bangladesh | 10% |
| 4 | France | 7% | India | 9% |
| 5 | Spain | 7% | United Kingdom | 3% |
| 6 | Italy | 4% | Canada | 3% |
| 7 | Canada | 3% | Pakistan | 2% |
| 7 | Japan | 3% | Austria | 2% |
| 8 | Belgium | 3% | Malaysia | 2% |
| 10 | Netherlands | 3% | Russian Federation | 2% |
| Sum | Top 10 markets | 69% | Top 10 markets | 59% |

Source: ITC Trade Map and Alibaba.com.

ITC's Export Potential Map also offers insights into market diversification. The markets with the greatest potential for Bangladesh's exports are the United States, Germany and the United Kingdom. The United States shows the largest absolute difference between potential and actual exports in value terms, leaving room to realize additional exports worth \$2.3 billion.

Figure 6 Market diversification indicator for Bangladesh



Source: ITC Export Potential Map.

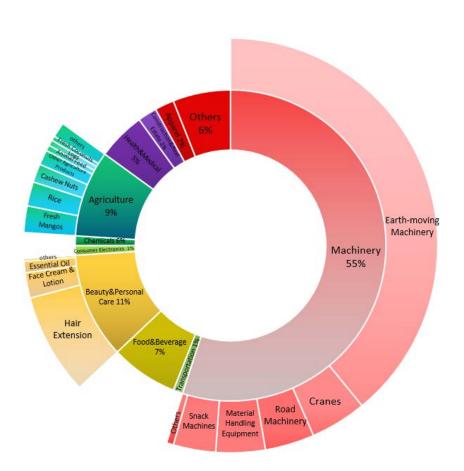
Cambodia

Trending products in e-commerce

According to data from Alibaba.com, the product categories that received the largest number of online purchase inquiries in Cambodia include machinery (55% of all purchase inquiries), beauty and personal care (11%), agriculture (9%), food and beverages (7%), health and medical (5%), construction and real estate²¹ (2%), consumer electronics (1%), chemicals (1%) and transportation²² (1%). These top 10 categories account for 94% of all purchase inquiries.

To get a closer look at the demand for specific products within each category, the table in Figure 7 provides a breakdown of the three categories that attract the most demand in e-commerce. In machineries, earth-moving machinery (71%), cranes (9%), road machinery (7%), material handling equipment (7%) and snack machines (6%) received the largest number of purchase inquiries. In beauty and personal care, star products include hair extensions (72%), face creams and lotions (18%) and essential oils (8%). In agricultural products, fresh mangos(23%), rice (21%), cashew nuts (16%), animal feed (5%), logs (4%) and fresh coconuts (3%) stand out.

Figure 7 Trending products in Cambodia's e-commerce exports (2017)



| Product | Share | | |
|-----------------------------|---------|--|--|
| Machinery | | | |
| Earth-moving machinery | 71% | | |
| Cranes | 9% | | |
| Road machinery | 7% | | |
| Material handling equipment | 7% | | |
| Snack machines | 6% | | |
| Others | <1% | | |
| Beauty & person | al care | | |
| Hair extension | 72% | | |
| Face creams and lotions | 18% | | |
| Essential oil | 8% | | |
| Others | 2% | | |
| Agriculture | | | |
| Fresh mangos | 23% | | |
| Rice | 21% | | |
| Cashew nuts | 16% | | |
| Other agricultural products | 13% | | |
| Animal Feed | 5% | | |
| Logs | 4% | | |
| Fresh coconuts | 3% | | |
| Others | 15% | | |

Source: ITC, using data from Alibaba.com.

²¹ Construction and real estate include such construction materials as masonry materials, floors, hardware and bathroom products, and such real estate properties as apartments, office buildings and warehouses.

products, and such real estate properties as apartments, office buildings and warehouses.

22 Transportation includes such products as bicycles, bicycle accessories, trucks, buses and other vehicles.

Comparing the most demanded products in e-commerce with the country's overall exports (Table 10) provides insights into whether, and if so how, products traded through e-commerce are different from those traded offline. In Cambodia's overall exports, apparel and related products (including footwear and clothing accessories) account for over 70% of the volume.

When it comes to e-commerce, the product at the top of the list is, interestingly, machineries, which accounts for more than half of the international inquiries addressed to Cambodian e-commerce firms. Further examination reveals that there are indeed several companies active in this field. They offer a range of machinery products, mostly used and second-hand earth-moving machinery and cranes. There are two paying membership companies in this sector that actively use the platform. Both are SMEs with annual revenue of \$2 million to \$5 million; they mainly target the Middle Eastern and North and South American markets.

The second largest category in e-commerce exports is beauty and personal care, with an 11% share of all purchase inquiries received. As in the case of Myanmar, hair extensions dominate, garnering 72% of all inquiries in this category. Hair extensions are a trending and relatively recent product in global e-commerce, today accounting for \$985 million in global imports. ²³They are typical of the high-value, low-weight products that are ideal for cross-border e-commerce.

Agriculture accounts for 9% of all purchase inquiries. In e-commerce, the demand is primarily for fresh mangos, rice and cashew nuts, whereas in Cambodia's overall exports, only cereals appear as a major agricultural product in the top 10 exports, accounting for 3% of all exports. This indicates that e-commerce provides opportunities to diversify exports within a traditional sector like agriculture into higher value added segments.

Table 10 Top 10 product categories in Cambodia's overall exports (2016) and e-commerce (2017)

| Rank | Overall exports | | Overall exports E-commerce | |
|------|--|-------|------------------------------|-------|
| | Product | Share | Product | Share |
| 1 | Apparel, knitted or crocheted | 61% | Machinery | 55% |
| 2 | Footwear, gaiters and the like | 8% | Beauty and personal care | 11% |
| 3 | Apparel and clothing accessories | 5% | Agriculture | 9% |
| 4 | Electrical machinery and parts thereof | 4% | Food and beverage | 7% |
| 5 | Vehicles (other than railway) | 4% | Health and medical | 5% |
| 6 | Cereals | 3% | Construction and real estate | 2% |
| 7 | Pearls and stones | 2% | Apparel | 2% |
| 8 | Fur skins and artificial fur | 2% | Consumer electronics | 1% |
| 9 | Rubber and articles thereof | 2% | Chemicals | 1% |
| 10 | Articles of leather | 1% | Transportation | 1% |
| Sum | Sum of the top 10 products | 92% | Sum of the top 10 products | 94% |

Source: ITC Trade Map and Alibaba.com.

Products for export growth and diversification

Tracing changes in demand for different products over the past two years (2015-2017), this section examines products that saw increased or decreased online demand from international buyers, which may serve as an indicator for future demand.

²³ divality.com, Market research, hair extensions.

Demand for transportation products has increased significantly, jumping 16 positions in the ranking of online purchase inquiries to become the 10th most demanded product, although demand remains modest relative to other categories, accounting for only 1% of all inquiries.

Health and medical products also saw increasing demand, rising four positions in the ranking between 2015 and 2017. Considering that this category already accounts for 5% of international inquiries, it could be a good candidate for expanding into the global market.

The PDI in ITC's Export Potential Map identifies a country's best options for export diversification, based on its existing trade pattern and comparative advantages.

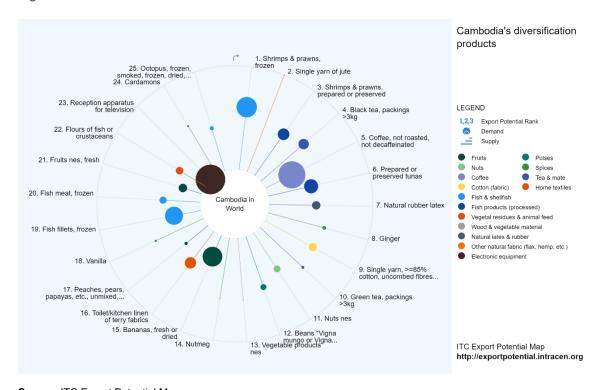
According to the PDI for Cambodia, those options include shrimps and prawns, and single yarn of jute. Cambodia finds single yarn of jute easiest to reach. Reception apparatus for television is the product with the strongest demand potential.

Table 11 Changes in online demand, by product category (2015-2017)

| Ranking | Products | Change in ranking |
|---------|----------------------------|-------------------------|
| 1 | Machinery | 1 |
| 2 | Beauty & personal care | 1 |
| 3 | Agriculture | ▼ 2 |
| 4 | Food & beverages | - |
| 5 | Health & medical | 4 |
| 6 | Construction & real estate | 1 |
| 7 | Apparel | ▼ 2 |
| 8 | Consumer electronics | ▼ 1 |
| 9 | Chemicals | - |
| 10 | Transportation | ▲16 |

Source: Alibaba.com.

Figure 8 Product diversification indicator for Cambodia



Source: ITC Export Potential Map.

Markets for export growth and diversification

In 2017, 48% of all purchase inquiries to registered sellers from Cambodia on Alibaba.com came from the following 10 countries: United States, India, China, Canada, the United Kingdom, Pakistan, Egypt, Australia, Saudi Arabia and Russian Federation. The United States takes the leading share of 18%, followed by India (5%) and China (4%). Egypt and Saudi Arabia are not main trade partners for the

region, yet they appear on the list probably because of purchase inquiries related to machineries, as exporters in this category focused on the Middle Eastern market.

Table 12 compares the top 10 destination markets in Cambodia's overall exports with online purchase inquiries. The United States is the largest market in both cases, with a 21% share of overall exports and 18% of all purchase inquiries. However, there is a significant difference in the rest of the list. The largest markets in Cambodia's overall exports, such as Germany, Japan and Thailand, are missing from the list of e-commerce markets, replaced by Pakistan, Egypt and Australia. This might be due to differences in the types of products traded online and offline.

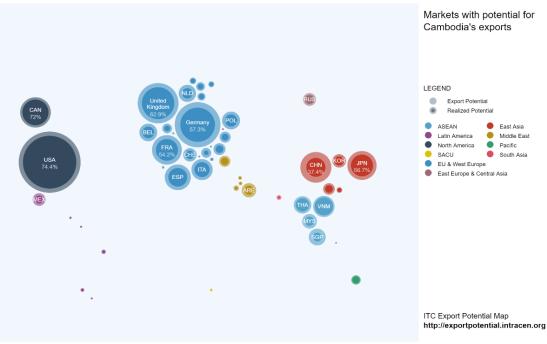
Table 12 Top 10 markets in Cambodia's overall exports (2016) and e-commerce (2017)

| | Over | all exports | E-com | nmerce |
|------|----------------|------------------|--------------------|------------------|
| Rank | Market | Share in exports | Market | Share in exports |
| 1 | United States | 21% | United States | 18% |
| 2 | United Kingdom | 9% | India | 5% |
| 3 | Germany | 9% | China | 4% |
| 4 | Japan | 8% | Canada | 4% |
| 5 | Canada | 7% | United Kingdom | 3% |
| 6 | China | 6% | Pakistan | 3% |
| 7 | Thailand | 4% | Egypt | 3% |
| 7 | Spain | 4% | Australia | 3% |
| 8 | Belgium | 4% | Saudi Arabia | 3% |
| 10 | France | 4% | Russian Federation | 2% |
| Sum | top 10 markets | 91% | top 10 markets | 48% |

Source: ITC Trade Map and Alibaba.com.

ITC's Export Potential Map also offers insights into market diversification. The markets with the greatest potential for Cambodia's exports are the United States, Germany and the United Kingdom. The United States shows the largest absolute difference between potential and actual exports in value terms, leaving room to realize additional exports worth \$882.9 million.

Figure 9 Market diversification indicator for Cambodia



Source: ITC trade potential map.

Lao People's Democratic Republic

Trending products in e-commerce

According to data from Alibaba.com, the product categories that received the largest number of online purchase inquiries in Lao People's Democratic Republic include textiles and leather (23% of total purchase inquiries), agriculture (20%), construction and real estate (10%), beauty and personal care (10%), food and beverages (8%), health and medical (8%), furniture (4%), minerals and metallurgy (4%), service equipment (3%), and mechanical parts and fabrication services (2%). These 10 categories account for 92% of all purchase inquiries.

To get a closer look at the demand for specific products within each category, the table in Figure 10 provides a breakdown of the three categories that attract the most demand in e-commerce. In textile and leather products, pillows (84%), cushions (9%), mats (6%) and sheets (1%) received the most purchase inquiries. In agriculture, star products include fresh-cut flowers (34%), oil seeds (25%) and logs (21%). In construction and real estate- related products, timber (67%), tiles (13%) and solid wood boards (10%) are the main products attracting international demand.

Figure 10 Trending products in Lao People's Democratic Republic's e-commerce exports (2017)



| Products | Share | | | |
|-----------------------------|-------|--|--|--|
| Textiles & leather Products | | | | |
| Pillows | 84% | | | |
| Cushions | 9% | | | |
| Mats | 6% | | | |
| Sheets | 1% | | | |
| Agriculture | • | | | |
| Fresh-cut flowers | 34% | | | |
| Oil seeds | 25% | | | |
| Logs | 21% | | | |
| Others | 20% | | | |
| Construction real estate | - | | | |
| Timber | 67% | | | |
| Tiles | 13% | | | |
| Solid wood boards | 10% | | | |
| Others | 10% | | | |

Source: ITC, using data from Alibaba.com.

Comparing the most demanded products in e-commerce with the country's overall exports (Table 13) provides insights into whether, and if so how, products traded through e-commerce are different from those traded offline. In offline trade, natural resources (ores, copper, stones and metal) account for around 41% of exports.

When it comes to e-commerce, the top category is textile and leather products (23%), followed by agriculture (20%) and construction and real estate-related products (10%). Natural resources still have a significant presence in e-commerce, but presumably with higher value added, since the main demand is not for unprocessed resources, but rather for logs, timber, tiles, solid wood boards, furniture and minerals.

Table 13 Top 10 product categories in Lao People's Democratic Republic's overall exports (2016) and e-commerce (2017)

| Rank | Overall exports | | E-commerce | |
|------|-------------------------------------|-------|------------------------------|-------|
| | Product | Share | Product | Share |
| 1 | Ores, slag and ash | 24% | Textiles & leather products | 23% |
| 2 | Copper and articles thereof | 12% | Agriculture | 20% |
| 3 | Electrical machinery | 11% | Construction and real estate | 10% |
| 4 | Edible fruit and nuts | 7% | Beauty and personal care | 10% |
| 5 | Beverages, spirits and vinegar | 6% | Food and beverages | 8% |
| 6 | Pearls, stones and metals | 5% | Health and medical | 8% |
| 7 | Inorganic chemicals | 4% | Furniture | 4% |
| 8 | Edible vegetables, roots and tubers | 4% | Minerals & metallurgy | 4% |
| 9 | Apparel, not knitted or crocheted | 3% | Service equipment | 3% |
| 10 | Tobacco | 3% | Mechanical parts and | 2% |
| | | | fabrication services | |
| Sum | Sum of the top 10 products | 79% | | 92% |

Source: ITC Trade Map, Alibaba.com.

Products for export diversification

Tracing changes in demand for different products over the past two years (2015-2017), this section examines products that saw increased or decreased online demand from international buyers, which may serve as an indicator for future demand.

Textiles and leather products, which ranked 12th in 2015, became the top category in 2017 in terms of international demand. This suggests a takeoff and a rapid increase in competitiveness of Lao People's Democratic Republic's textile industry.

It is also interesting to note that while textiles are a top category for both Bangladesh and Lao People's Democratic Republic, the two countries focus on very different sets of products. For Bangladesh, it is T-shirts, jeans and hoodies. For Lao People's Democratic Republic, the demand is for pillows, cushions, mats and sheets. This might suggest that there is still a gap in capacity for the production of more sophisticated textile products in Lao People's Democratic Republic.

Demand for beauty and personal care products is also on the rise, pushing this category up by five positions in the ranking. It is also a sector with potential for the country, which could conceivably focus on products made with natural ingredients. Mechanical parts and fabrication services also shot up 13 places, but overall demand remains modest.

Table 14 Changes in online demand, by product category (2015-2017)

| Rank ing | Products | Change in ranking |
|-------------|---|-------------------------|
| 1 | Textiles & leather products | ▲ 12 |
| 2 | Agriculture | ▼ 1 |
| 3 | Construction & real estate | ▼ 1 |
| 4 | Beauty & personal care | ▲ 5 |
| 5 | Food & beverages | ▼ 2 |
| 6 | Health & medical | ▼ 2 |
| 7 | Furniture | - |
| 8 | Minerals & metallurgy | ▼ 2 |
| 9 | Service Equipment | ▲ 5 |
| 10 | Mechanical parts & fabrication services | ▲ 13 |

Source: Alibaba.com

The PDI in ITC's Export Potential Map identifies a country's best options for export diversification, based on its existing trade pattern and comparative advantage.

According to the PDI for Lao People's Democratic Republic, the country's best options include cocoa beans, cashew nuts and black tea. Lao People's Democratic Republic finds jute and other bast fibres easiest to reach. Crude palm oil is the product with the strongest demand potential.

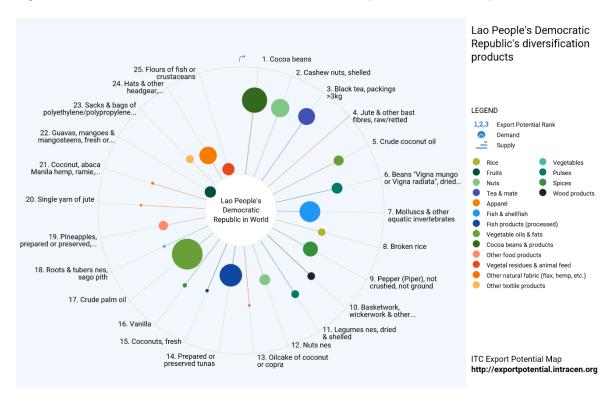


Figure 11 Product diversification indicator for Lao People's Democratic Republic

Source: ITC Export Potential Map.

Markets for export growth and diversification

In 2017, 72% of all purchase inquiries to registered sellers from Lao People's Democratic Republic on Alibaba.com came from the following 10 economies: United States, China, India, Thailand, Hong Kong SAR, Republic of Korea, Canada, Poland, Malaysia and Australia. The United States takes the largest share of 25%, followed by China (21%) and India (5%).

Table 15 compares the top 10 destination markets in Lao People's Democratic Republic's overall exports and online purchase inquiries. The United States is the largest in terms of online purchase inquiries while China is the largest export destination, absorbing over a third of the country's total exports. Viet Nam, the third largest export market for Lao People's Democratic Republic, does not feature prominently in the e-commerce list, probably because of the differences between types of products traded online and offline. India, Hong Kong SAR and Canada rank higher in e-commerce than in offline trade, suggesting that there could be potential to diversify into these new markets for online trade.

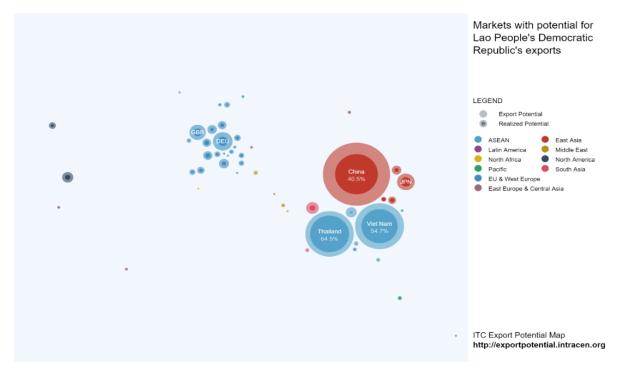
Table 15 Top 10 markets in Lao People's Democratic Republic's overall exports (2016) and e-commerce (2017)

| | Overall exp | orts | E-commerce | |
|------|----------------------|-------|--------------------|-------|
| Rank | Market | Share | Market | Share |
| 1 | China | 36% | United States | 25% |
| 2 | Thailand | 31% | China | 21% |
| 3 | Viet Nam | 17% | India | 5% |
| 4 | India | 3% | Thailand | 4% |
| 5 | Japan | 2% | Hong Kong SAR | 4% |
| 6 | Germany | 2% | Korea, Republic of | 3% |
| 7 | United Arab Emirates | 1% | Canada | 3% |
| 7 | Swaziland | 1% | Poland | 3% |
| 8 | United Kingdom | < 1% | Malaysia | 2% |
| 10 | Switzerland | < 1% | Australia | 2% |
| Sum | top 10 markets | 95% | top 10 markets | 72% |

Source: ITC Trade Map and Alibaba.com.

ITC's Export Potential Map also offers insights into market diversification. The markets with the greatest potential for Lao People's Democratic Republic's exports are China, Viet Nam and Thailand. China shows the largest absolute difference between potential and actual exports in value terms, leaving room to realize additional exports worth \$1.1 billion.

Figure 12 Market diversification indicator for Lao People's Democratic Republic



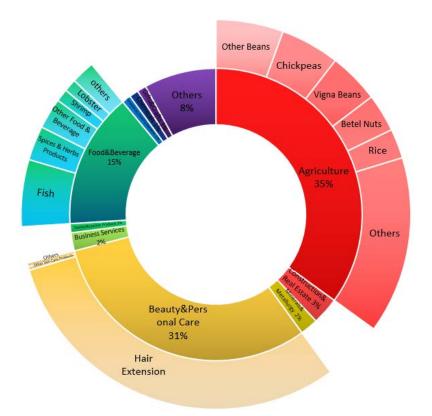
Source: ITC Export Potential Map.

Myanmar

According to data from Alibaba.com, the product categories that received the most online purchase inquiries for Myanmar include agriculture (35%), beauty and personal care (31%), and food and beverages (15%). Compared with other Asian LDCs in this publication international demand for products from Myanmar is highly concentrated in these three categories, which in total account for 81% of purchase inquiries received via the e-commerce platform.

To get a closer look at the demand for specific products within these categories, the table in Figure 13 provides a breakdown of products. In agriculture, various beans (43%), betel nuts (9%) and rice (7%) received the largest number of purchase inquiries. In beauty and personal care, inquiries are highly focused on hair extensions. In food and beverages, aquatic products, such as fish (37%), shrimp (7%), lobster (6%), and spices and herbs (19%), receive the most inquiries.

Figure 13 Trending products in Myanmar's e-commerce exports (2017)



| Product | Share | | | |
|-------------------------|---------|--|--|--|
| Agriculture | | | | |
| Other beans | 17% | | | |
| Chickpeas | 14% | | | |
| Vigna beans | 12% | | | |
| Betel nuts | 9% | | | |
| Rice | 7% | | | |
| Others | 41% | | | |
| Beauty & person | al care | | | |
| Hair extension | 98% | | | |
| Other skin care | 1% | | | |
| Others | 2% | | | |
| Food & bevera | iges | | | |
| Fish | 37% | | | |
| Spices & herbs products | 19% | | | |
| Other food & beverages | 17% | | | |
| Shrimp | 7% | | | |
| Lobster | 6% | | | |
| Others | 15% | | | |

Source: ITC, using data from Alibaba.com.

Comparing the most demanded products in e-commerce with the country's overall exports provides insights into whether, and if so how, products traded through e-commerce are different from those traded offline. In Myanmar's overall exports, the top product categories are minerals and agriculture, each representing around a third of the total. Apparel is the third sector, contributing 13% of Myanmar's total exports.

In e-commerce, agriculture remains a major export sector, but with a different set of products: beans, nuts and rice replace vegetables, sugar and cereals as the main products attracting international demand.

Hair extensions account for another third of international demand via e-commerce, and probably received the single greatest number of purchase inquiries of all product categories. They were first exported in the late 20th century and are becoming a significant export globally via e-commerce because they are lightweight and high-value, which makes them ideal for e-commerce.

Aquatic products, such as fish, shrimp and lobsters, are a major category in overall exports and are finding new export channels through e-commerce. Textiles, timepieces, jewelry, eyewear, gifts and crafts that do not appear in the list of main export products do show up in the e-commerce list, a sign of their growth potential.

Table 16 Top 10 product categories in Myanmar's overall exports (2016) and e-commerce (2017)

| Rank | Overall exports | | E-commerce | |
|------|---|-------|-------------------------------|-------|
| | Product | Share | Product | Share |
| 1 | Mineral fuels and oils | 28% | Agriculture | 35% |
| 2 | Apparel and clothing accessories | 13% | Beauty and personal care | 31% |
| 3 | Edible vegetables and certain roots | 12% | Food and beverages | 15% |
| 4 | Sugars | 10% | Construction and real estate | 3% |
| 5 | Cereals | 6% | Minerals and metallurgy | 2% |
| 6 | Fish and other aquatic invertebrates | 5% | Business services | 2% |
| 7 | Pearls and stones | 4% | Textiles and leather products | 1% |
| 8 | Machinery, nuclear reactors and boilers | 4% | Timepieces, jewelry,eyewear | 1% |
| 9 | Oil seeds and oleaginous fruits | 3% | Chemicals | 1% |
| 10 | Copper and articles thereof | 2% | Gifts and crafts | 1% |
| Sum | Sum of the top 10 products | 87% | Sum of the top 10 products | 92% |

Source: ITC Trade Map, Alibaba.com.

Products for export diversification

Tracing changes in demand for different products over the past two years (2015-2017), this section examines products that saw increased or decreased online demand from international buyers, which may serve as an indicator for demand in those categories.

Accessories such as timepieces, jewelry and eyewear, as well as textiles and leather products, saw a rapid increase in international demand between 2015 and 2017. Compared with traditional exports, such as fuel and minerals, these are higher value added and more labour-intensive products that could potentially garner more demand in future.

Demand for hair extensions has remained strong over the past two years, with the sector moving up two positions. Further analysis is required to study the markets to which this product is exported and to assess its growth potential.

The PDI in ITC's Export Potential Map identifies a country's best options for export diversification, based on its existing trade pattern and comparative advantage.

Table 17 Changes in online demand, by product category (2015-2017)

| Rank ing | Products | Change in ranking |
|-------------|--------------------------------|-------------------------|
| 1 | Agriculture | - |
| 2 | Beauty & personal care | A 2 |
| 3 | Food & beverages | ▼ 1 |
| 4 | Construction & real estate | ▼ 1 |
| 5 | Minerals & metallurgy | A 2 |
| 6 | Business services | - |
| 7 | Textiles & leather products | A 6 |
| 8 | Timepieces, jewellery, eyewear | ▲ 8 |
| 9 | Chemicals | A 3 |
| 10 | Gifts & crafts | ▼ 1 |

Source: Alibaba.com

According to the country's PDI, Myanmar's best options for export diversification include single yarn of jute, roots and tubers of manioc, and cashew nuts. Myanmar finds single yarn of jute easiest to reach. Wiring sets for vehicles is the product with the strongest demand potential.

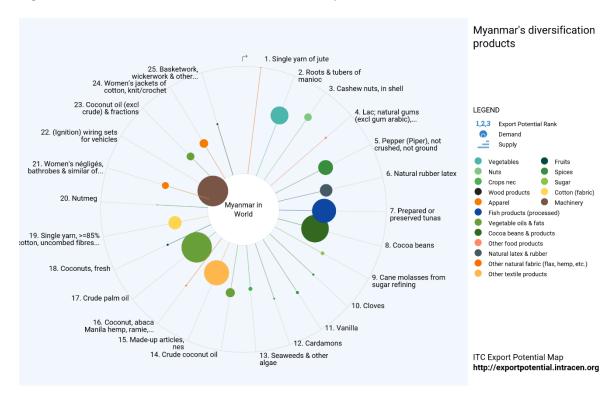


Figure 14 Product diversification indicator for Myanmar

Source: ITC Export Potential Map.

Markets for export diversification

In 2017, 61% of all purchase inquiries to registered sellers from Myanmar on Alibaba.com came from the following 10 countries: United States, India, Bangladesh, China, Viet Nam, Pakistan, Canada, Thailand, United Kingdom and Nigeria.

Table 18 compares the top 10 destination markets in Myanmar's overall exports and online purchase inquiries. China is the largest market, absorbing 41% of the country's total exports, followed by Thailand (19%) and India (9%). Eight of the top 10 destination markets for Myanmar are in Asia, accounting for 88% of total exports.

In e-commerce, demand for Myanmar's products comes from a very diverse set of sources that goes beyond Asia. The largest number of purchase inquiries came from the United States (22% of total purchase inquiries), followed by India (14%) and Bangladesh (4%). Canada, Nigeria and Pakistan also appear in the list.

The United States market is particularly noteworthy since it accounts for only 1% of Myanmar's total exports, but the number of purchase inquiries suggests that there is significant interest from United States buyers in products from Myanmar and unfulfilled export potential for this market. This is also consistent with the findings of ITC's national export strategy for Myanmar, which estimates that the EU, United States, Pakistan and Turkey have high complementarity for trade with Myanmar but that there is still no significant actual trade with these markets.²⁴

_

 $^{^{24}}$ Source: ITC, National export strategy of Myanmar, 2015-2019.

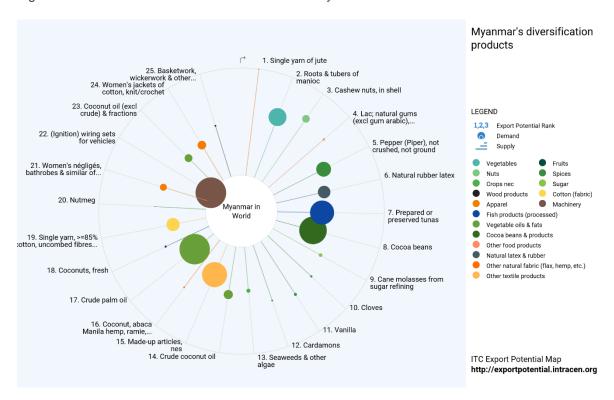
Table 18 Top 10 product categories in Myanmar's overall exports (2016) and e-commerce (2017)

| | Overall | exports | E-commerce | |
|------|--------------------|---------|----------------|-------|
| Rank | Market | Share | Market | Share |
| 1 | China | 41% | United States | 22% |
| 2 | Thailand | 19% | India | 14% |
| 3 | India | 9% | Bangladesh | 4% |
| 4 | Singapore | 8% | China | 4% |
| 5 | Japan | 6% | Viet Nam | 4% |
| 6 | Korea, Republic of | 3% | Pakistan | 3% |
| 7 | Hong Kong SAR | 2% | Canada | 3% |
| 7 | Germany | 1% | Thailand | 3% |
| 8 | United States | 1% | United Kingdom | 2% |
| 10 | Malaysia | 1% | Nigeria | 2% |
| Sum | Top 10 markets | 91% | Top 10 markets | 61% |

Source: ITC Export Potential Map.

ITC's Export Potential Map also offers insights into market diversification. The markets with the greatest potential for Myanmar's exports are China, India and Japan. China shows the largest absolute difference between potential and actual exports in value terms, leaving room to realize additional exports worth \$3.0 billion.

Figure 15 Market diversification indicator for Myanmar



Source: ITC Export Potential Map.

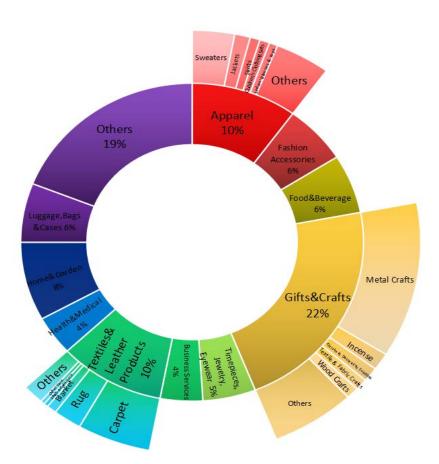
Nepal

Trending products in e-commerce

According to data from Alibaba.com, the product categories that received the most online purchase inquiries include gifts and crafts (22%), textiles and leather products (10%), apparel (10%), home and garden (8%), fashion accessories (6%), luggage, bags and cases (6%), food and beverages (6%), timepieces, jewellery, eyewear (5%), health and medical products (4%), and business services (4%). These top 10 categories account for 81% of all purchase inquiries received via Alibaba's B2B e-commerce platform.

To get a closer look at the demand for specific products within these broad categories, the table in Figure 16 provides a breakdown of the top three categories. In gifts and crafts, metal crafts account for over half of demand (54%), followed by incense (6%) and Christmas decorations (5%). In textiles and leather products, demand for carpets (52%) predominates, followed by rugs (20%) and blankets (7%). In apparel, sweaters (30%), jackets (11%) and skirts (7%) are the star products, receiving the greatest number of purchase inquiries.

Figure 16 Trending products in Nepal's e-commerce exports (2017)



| Product | Share | | | | | |
|----------------------------|-------|--|--|--|--|--|
| Gifts & crafts | | | | | | |
| Metal crafts | 54% | | | | | |
| Incense | 6% | | | | | |
| Christmas decorations | 5% | | | | | |
| Textile & fabric crafts | 4% | | | | | |
| Wood crafts | 4% | | | | | |
| Others | 27% | | | | | |
| Textiles & lea | ther | | | | | |
| Carpets | 52% | | | | | |
| Rugs | 20% | | | | | |
| Blankets | 7% | | | | | |
| 100% Acrylic yarn | 3% | | | | | |
| Other yarn | 3% | | | | | |
| Others | 15% | | | | | |
| Apparel | | | | | | |
| Sweaters | 30% | | | | | |
| Jackets | 11% | | | | | |
| Skirts | 7% | | | | | |
| Children's clothing sets | 7% | | | | | |
| Ladies' blouses & tops | 6% | | | | | |
| Others | 39% | | | | | |
| | | | | | | |

Source: ITC, using data from Alibaba.com.

Comparing the most demanded products in e-commerce with the country's overall exports provides insights into whether, and if so how, products traded through e-commerce are different from those traded offline. In Nepal's overall exports, the top product categories are beverages, spirits and vinegar (14%), and carpets and other textile floor coverings (13%). Fibres, coffee, tea and spices, as well as apparel are also seeing strong demand in the international market. Overall, agriculture and textiles and

apparel seem to be the top two categories, accounting for 25% and 37% respectively of Nepal's overall exports.

Demand for these two categories via e-commerce, however, do not stand out. Beverages, spirits and vinegar – the country's top exports, for instance – rank only seventh in online demand. The reason might be that suppliers of beverages and spirits are more likely to be larger companies with established distribution and trade channels, and which do not rely on e-commerce to expand their outreach. By contrast, in sectors that are often dominated by smaller companies, such as gifts and crafts (ranking first in online demand), companies are more likely to use e-commerce to tap into the international market.

For gifts and crafts, a product search on Alibaba.com shows that the main demand is for singing bowls, gongs, metal statues and keychain souvenirs. This explains why metal crafts account for over half of all purchase inquiries in the gifts and crafts category. Textile and fabric crafts also feature prominently in gifts and crafts. This is in line with ITC's national export strategy for Nepal, which suggests, for instance, that Lokta handmade paper could be a potential sector for export development, contributing to jobs and income for 55,000 families and 300 SMEs. Approximately 80% of the entrepreneurs and workforce in this sector are women; and all value addition is retained in the country.²⁵

Similar to carpets and rugs (Nepal's second largest export), products in the gifts and crafts category have distinctive cultural content, which is the main attraction for international buyers. These products are also popular with tourists, where demand could be mutually reinforcing.

Table 19 Top 10 product categories in Nepal's overall exports (2016) and e-commerce (2017)

| Rank | Overall exports | E-commerce | | |
|------|---|------------|-------------------------------|-------|
| | Product | Share | Product | Share |
| 1 | Beverages, spirits and vinegar | 14% | Gifts and crafts | 22% |
| 2 | Carpets and other textile floor coverings | 13% | Textiles and leather products | 10% |
| 3 | Manmade staple fibres | 8% | Apparel | 10% |
| 4 | Coffee, tea, mate and spices | 8% | Home and garden | 8% |
| 5 | Apparel, not knitted or crocheted | 7% | Fashion accessories | 6% |
| 6 | Plastics and articles thereof | 7% | Luggage, bags and cases | 6% |
| 7 | Apparel, knitted or crocheted | 5% | Food and beverages | 6% |
| 8 | Iron and steel | 4% | Timepieces, jewelry,eyewear | 5% |
| 9 | Footwear, gaiters and the like | 4% | Health and medical | 4% |
| 10 | Residues from the food industries | 3% | Business services | 4% |
| Sum | Sum of the top 10 products | 73% | Sum of the top 10 products | 81% |

Source: ITC Trade Map, Alibaba.com.

Products for export growth and diversification

Tracing changes in demand for different products over the past two years (Table 20), this section examines products that saw increased or decreased online demand from international buyers, which may serve as an indicator for demand in these categories.

The most dynamic sectors in terms of increased demand are food and beverages, up four positions over the two-year period, and home and garden, scaling up three positions.

The jump in purchase inquiries related to food and beverages may suggest that exporters of the country's top export product – beverages and spirits – are exploring ways to leverage e-commerce to expand their global outreach. Growth in the home and garden category seems to be focused on different types of tiles for home decoration.

²⁵ITC, Nepal national sector export strategy, handmade paper and paper products 2017-2021.

The drop by four positions for the Timepieces, Jewellery, Eyewear category may be alarming, since this was also a category with high demand, which includes bracelets, necklaces and other jewellery. This is a high value added export that provides opportunities for artisans and SMEs.

The PDI in ITC's Export Potential Map identifies a country's best options for export diversification, based on its existing trade pattern and comparative advantage.

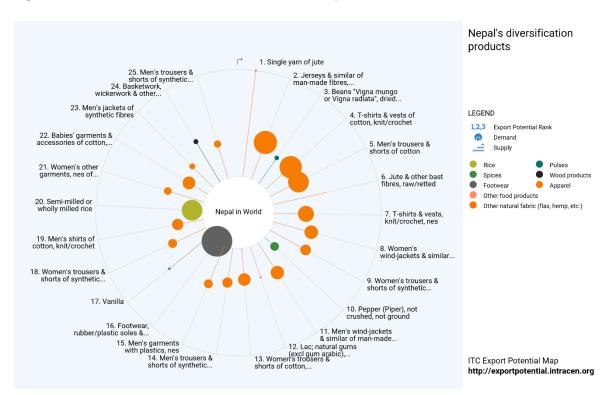
According to Nepal's PDI, the country's best options for export diversification are single yarn of jute, jerseys and similar of handmade fibres, knit/crochet, and beans "Vigna mungo or Vigna radiata", dried and shelled. Nepal finds single yarn of jute easiest to reach. Footwear, rubber/plastic soles and leather uppers are the product category with the strongest demand potential.

Table 20 Changes in online demand, by product category (2015-2017)

| Rank ing | Products | Change in ranking |
|-------------|------------------------------|-------------------------|
| 1 | Gifts & crafts | - |
| 2 | Textiles & leather products | ▲ 1 |
| 3 | Apparel | ▼ 1 |
| 4 | Home & garden | A 3 |
| 5 | Fashion accessories | - |
| 6 | Luggage, bags & cases | ▲ 2 |
| 7 | Food & beverages | 4 |
| 8 | Timepieces, jewelry, eyewear | ▼ 4 |
| 9 | Health & medical | - |
| 10 | Business services | - |

Source: Alibaba.com.

Figure 17 Product diversification indicator for Nepal



Source: ITC Export Potential Map.

Markets for export growth and diversification

In 2017, 65% of all purchase inquiries to registered sellers from Nepal on Alibaba.com came from the following 10 countries: United States, China, India, Australia, Canada, United Kingdom, Nepal, Germany, France and Russian Federation.

Table 21 compares the top 10 destination markets in Nepal's overall exports and online trade. In overall exports, India is Nepal's largest market, absorbing over half (54%) of the country's total, followed by the United States (13%) and Germany (5%).

In e-commerce, the largest number of purchase inquiries came from the United States (22%), followed by China (14%) and India (6%). Australia, Canada, the United Kingdom and Germany are also among the top 10. India's drop in e-commerce ranking probably suggests that the platform is less used by Indian buyers, but it may also be related to differences in the products being traded through e-commerce. The higher share of the United States in online demand suggests that there is unfulfilled export potential in that market.

Table 21 Top 10 markets in Nepal's overall exports (2016) and e-commerce (2017)

| | Overal | l exports | E-commerce | |
|------|----------------|-----------|--------------------|-------|
| Rank | Market | Share | Market | Share |
| 1 | India | 54% | United States | 22% |
| 2 | United States | 13% | China | 14% |
| 3 | Germany | 5% | India | 6% |
| 4 | Turkey | 4% | Australia | 5% |
| 5 | United Kingdom | 4% | Canada | 5% |
| 6 | China | 3% | United Kingdom | 4% |
| 7 | France | 2% | Nepal | 3% |
| 7 | Japan | 2% | Germany | 3% |
| 8 | Canada | 2% | France | 2% |
| 10 | Italy | 2% | Russian Federation | 1% |
| Sum | Top 10 markets | 91% | Top 10 markets | 65% |

Source: ITC trade map, Alibaba.com.

ITC's Export Potential Map also offers insights into market diversification. The markets with the greatest potential for Nepal's exports are India, China and the United States. India shows the largest absolute difference between potential and actual exports in value terms, leaving room to realize additional exports worth \$268.9 million.

Markets with potential for Nepal's exports

LEGEND

Export Potential

Realized Potential

ASEA

ASEA

ASEA

Middle East

North America

North America

EU & West Europe

East Europe & Central Asia

ITC Export Potential Map

http://exportpotential.intracen.org

Figure 18 Market diversification indicator for Nepal

Source: ITC Export Potential Map.

CHAPTER 4 MAIN FINDINGS

The comparisons in the country-specific sections of this publication between top products and markets in e-commerce and a country's overall exports provide insights into whether cross-border e-commerce trade is in any way different from traditional trade and whether it can offer companies new export opportunities.

It appears that in general, champion products in offline trade also attract demand via e-commerce. Apparel and textile products, and agricultural products, for example, are among the largest export categories in offline trade for the five countries under study, and they also feature prominently in e-commerce. Large markets in offline trade for these countries, such as the United States, China and India, also tend to be the largest markets for e-commerce exports.

That being said, e-commerce is certainly different from traditional (offline) trade.

First, e-commerce focuses on processed products ready for consumption. This is evident from the consumer-oriented approach to the classification of products in most e-commerce sites, as well as from the specific products in the top three demand categories. Therefore, even though Alibaba.com is a B2B platform, intermediary products like raw materials, and commodities like mineral ores, do not feature prominently in e-commerce.

Second, products from large companies with well-established distribution and trade channels, such as beverages and spirits, do not lead the way in online demand, despite the fact that this is a top export category in offline trade. Sectors popular with SMEs, such as gifts and crafts, rank higher in online trade than offline trade.

Third, e-commerce provides opportunities to expand and diversify exports, notably into higher value added segments. In the case of Bangladesh, for example, apparel and clothing accessories account for around 86% of the country's total exports. However, when it comes to e-commerce, while apparel remains a top category it accounts for only 47% of all purchase inquiries. Demand is diversified into agriculture, food and beverages, and consumer electronic products.

Within the same sector, e-commerce may also differ from traditional trade in terms of products: Agriculture is a top traded category for Myanmar in both online and offline trade, but in e-commerce, beans, nuts and rice replace vegetables, sugar and cereals as the main products attracting international demand.

Fourth, e-commerce could generate demand in new sectors. A notable example is beauty and personal care products, which is one of the top three e-commerce product categories for both Cambodia's and Myanmar's exports and the fastest-growing category for Bangladesh. Nevertheless, it is not a visibly large export category in offline trade. Hair extensions, the single largest export within this category, attract about a third of all purchase inquiries received by sellers in Myanmar. As noted earlier, this product only began to be traded in the late 20th century but is becoming a significant exported product via e-commerce because it is lightweight, of high value and high demand, making it ideal for cross-border e-commerce.

Fifth, each country has its unique offerings in e-commerce. Even though the five LDCs are in the same region, are more or less at the same income level and have similar broad export categories, the star products in e-commerce vary significantly from one country to another. Textile and leather products, for example, are among the most demanded products in Bangladesh, Lao People's Democratic Republic and Nepal, while the star products in this category for Bangladesh are T-shirts, jeans and hoodies. For Lao People's Democratic Republic, they are pillows, cushions, mats and sheets; for Nepal, carpets and rugs account for over 70% of total demand in this category.

This shows that countries focus on their unique offerings, and may not necessarily compete on the same set of products in the international market. At the same time, these products seem to be at different levels of sophistication, indicating different levels of production capacity of textile products.

APPENDICES

List of product categories on Alibaba.com

Agriculture & food Gifts, sports and toys

Agriculture Sports and entertainment

Food and beverages Gifts and crafts Toys and hobbies

Apparel, textiles and accessories

Health and beauty Apparel

Textile and leather products Health and medical

Timepieces, jewelry, eyewear Beauty and personal care

Fashion accessories

Home, lights and construction

Auto and transportation Construction and real estate

Automobiles and motorcycles Home and garden

Transportation

Telecommunication

Machinery, industrial parts and tools

Tools

Bags, shoes and accessories Machinery

Luggage, bags and cases Shoes and accessories Industrial parts and fabrication services

Hardware

Measurement and analysis instruments **Electronics**

Computer hardware and software

Home appliances

Consumer electronics Minerals and metallurgy

Security and protection Chemicals Rubber and plastics

Energy Electrical equipment, components and telecoms

Environment

Electrical equipment and supplies

Packaging, advertising and office

Packaging and printing

Metallurgy, chemicals, rubber and plastics

Office and school supplies

Service equipment

REFERENCES

Accenture (2015). Adding Value to Parcel Delivery, presentation, 13 March, available from https://www.accenture.com/t20170331T042236 w /us-en/ acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Dualpub 23/Accenture-Adding-Value-To-Parcel-Delivery-V2.pdf

Alibaba website.19 March, available from https://rule.alibaba.com/rule/detail/3760.htm

Alibaba, Other situations where trade assurance is applicable, 19 March, available from https://service.alibaba.com/buyer/faq detail/20328903.htm

Asian Development Bank (2017) Sector overview: information and communication technology

Asian Development Bank (2017). Accelerating financial inclusion in South-East Asia with digital finance

Asian Development Bank (2017). Aid for Trade in Asia and the Pacific: Thinking Forward About Trade Costs and the Digital Economy.

Asian Development Bank(2017). Asian development outlook

Bloomberg Briefs(2016). Lao People's Democratic Republic Faces Possible Cement Glut. 22 February. Available from https://newsletters.briefs.bloomberg.com/document/3hz20cux57czgimnux/vietnam-startups

Bloomberg(2018). Internet software and services: Company overview of cybersource corporation. 13 March, available from https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=99804

Burmailibrary(2013), The Telecommunications Law (The Pyidaungsu Hluttaw Law No. 31, 2013) The 4th Waxing Day of Thadingyut, 1375 M.E. 13 March, available from http://www.burmalibrary.org/docs23/2013-10-08-Telecommunications_Lawen.pdf

Cambodia Constructor Association(2017). Cambodia's retail market: a competitive frontline. 22 February. Available from http://construction-property.com/read-news-675

Captain Aung Khin Myint (2014) Myanmar transport & logistic. Presentation. 22 February. Available from http://www.jterc.or.jp/koku/koku_semina/pdf/140307 presentation-04.pdf

Central Intelligence Agency(2018). The world factbook. 22 February. Available from https://www.cia.gov/library/publications/the-world-factbook/geos/np.html

Chan Muyhong(2016) Delivery firms expand operations. 13 March, available from http://www.phnompenhpost.com/delivery-firms-expand-operations

Communicast Myanmar (2016). Myanmar compete ICT solutions, mobile broadband, satellite& broadcasting event. 22 February. Available from http://www.communicastmyanmar.com/ccm/2017/en/download/market_report.pdf

Consumer Protection Act, 2054 (1998), Nepal, 19 March available from http://www.wipo.int/edocs/lexdocs/laws/en/np/np010en.pdf

DHL (2017). The 21st century spice trade: a guide to the cross-border e-commerce opportunity.

Hale, E. (2016). Cambodia Will Be Asia's Next Online Shopping Battleground. *Forbes, 13*(March). Retrieved from https://www.forbes.com/sites/erinhale/2016/11/10/cambodia-will-be-asias-next-online-shopping-battleground/#73fc02a533bd

Europa.eu(2018), Guarantees and returns,19 March, available from https://europa.eu/youreurope/citizens/consumers/shopping/guarantees-returns/index_en.htm

European Commission website, Online Dispute Resolution. 19 March, available from https://ec.europa.eu/consumers/odr/main/index.cfm?event=main.home2.show&lng=EN

Export.gov(2017), Bangladesh-Ecommerce. 13 March, available from https://www.export.gov/article?id=Bangladesh-Ecommerce

Frontier Myanmar (2016). As banks grow, cash is still king in Myanmar. Available from https://frontiermyanmar.net/en/as-banks-grow-cash-is-still-king-in-myanmar

Frontier Myanmar (2016) As banks grow, cash is still king in Myanmar. 13 March, available from https://frontiermyanmar.net/en/as-banks-grow-cash-is-still-king-in-myanmar

General Department of Customs and Excise of Cambodia,19 March, available from http://www.customs.gov.kh/businesstraders-3/goods-under-exemption-of-import-duties/

Global Express Association (2018), Overview of de minimis value regimes open to express shipments world wide, 13 March, available from https://global-express.org/assets/files/Members-Library-2/GEA%20overview%20on%20de%20minimis_2%20March%202018.pdf

Hktdc website (2017).Cambodia: Opportunities and Challenges in the Logistics Sector'13 March, available from http://economists-pick-research.hktdc.com/business-news/article/Research-Articles/Cambodia-Opportunities-and-Challenges-in-the-Logistics-Sector/rp/en/1/1X000000/1X0AADMB.htm

HongKong Means Business (2017). Cambodia: Opportunities and Challenges in the Logistics Sector. Available from http://hkmb.hktdc.com/en/1X0AADMB/hktdc-research/Cambodia-Opportunities-and-Challenges-in-the-Logistics-Sector

International Trade Centre (2017). BRICS countries: Emerging players in global services trade.

International Trade Centre (2017). Status, Opportunities and Challenges of BRICS e-commerce.

Internet Initiative Japan(2016), Lao PDR Energy Efficient Datacenter Project' Cloud Datacenter Using Joint Crediting Mechanism Starts Demonstration Operations. 13 March, available from http://www.iij.ad.jp/en/news/pressrelease/2016/1130.html

ITC(2016). Bringing SMEs onto the e-commerce highway.

ITC(2017), New Pathways to E-commerce: A Global SME Competitiveness Survey

ITU(2018), Achieving universal and affordable Internet in the least developed countries

Kali Kotoski and Cheng Sokhorng (2017). Efforts to formalise SMEs fall short. 22 February. Available from http://www.phnompenhpost.com/business/efforts-formalise-smes-fall-short

Lao People's Democratic Republic Peace Independence Democracy Unity Prosperity(2010). Law on Consumer Protection, 2010. 19 March available

from http://www.aseanconsumer.org/accp/download/Lao/Law%20on%20Consumer%20Protection%20-%20English.pdf

Mustafizur Rahman(2017). The SME sector has the highest opportunity to create employment in Bangladesh: Mustafizur Rahman. 22 February. Available from http://cpd.org.bd/sme-sector-highest-opportunity-create-employment-bangladesh-mustafizur-rahman/

Myanmar Time (2018) Central Bank of Myanmar approves loans without collateral. 22 February. Available from https://www.mmtimes.com/news/central-bank-myanmar-approves-loans-without-collateral.html

Myanmar Time(2018) Foreign buyers queue for another natural resource 22 February. Available from https://www.mmtimes.com/national-news/2429-foreign-buyers-queue-for-another-natural-resource.html

Myanmar Times (2017). Central Bank of Myanmar approves loans without collateral. Available from https://www.mmtimes.com/news/central-bank-myanmar-approves-loans-without-collateral.html

Nepal Rastra Bank(2016). Financial stability report. 22 February. Available from https://nrb.org.np/red/publications/fin_stab_report/Financial_Stability_Report--Issue_No._8 (July 2016)-new.pdf

OECD(2017). Aid for trade. 22 February. Available from https://www.oecd.org/aidfortrade/casestories/casestories-2017/CS%2005-A4AI-Affordable-Internet-in-Myanmar.pdf

OECD. (2017). Economic outlook for Southeast Asia, China and India 2017: addressing energy challenges. Paris: OECD publishing.

Coopers, P. W. (2017). Myanmar Business Guide (5th ed.).

Quan Nguyen (2017) Cross-border B2C e-commerce in Southeast Asia: Key trends and solutions. 21 February available from https://www.linkedin.com/pulse/cross-border-b2c-e-commerce-southeast-asia-key-trends-quan-nguyen/

Sharma, R. (2016). SMEs in Nepal and NEED for Paperless trade. Presentation.

Sanyal, S., & Eisinger, F. (2016). Enabling SME access to finance for sustainable consumption and production in Asia. Switch Asian

Sanjoy Sanyal and Frederik Eisinger/ Adelphi (2016). Enabling SME access to Sanjoy Sanyal, Senior Associate, Adelphi(2017). Green Finance for SMEs 13th Asia Pacific Roundtable on Sustainable Consumption & Production, Melaka, 25th October 2017. Presentation.

SCRIBD (2016). Finance for sustainable consumption and production in Asia: An overview of finance trends and barriers in Myanmar. 22 February. Available from https://www.scribd.com/document/366861260/Green-Finance-Study-2016-Myanmar

Tarek Aziz and Md. Nur-E-Alom Siddique (2016). The Role of Bangladesh Bank in Promoting SMEs' Access to Finance in Bangladesh. 22 February.

TechinAsia(2017). The full guide to Southeast Asia's digital landscape in 2017. 22 February. Available from https://www.techinasia.com/talk/full-guide-southeast-asia-digital-landscape-2017

TelecomPaper (2018). Bangladesh tops 145 mln mobile phone subscribers. 22 February. Available from https://www.telecompaper.com/news/bangladesh-tops-145-mln-mobile-phone-subscribers--1229448

Telegeography(2017), Bangladesh 4G auction 'by December', 13 March, available from https://www.telegeography.com/products/commsupdate/articles/2017/09/14/bangladesh-4g-auction-by-december/

The Consumer Protection Law (The Pyidaungsu Hluttaw No.10, 2014) (The 14th Waxing of Taboung, 1375 M.E.) 19 March available from http://aseanconsumer.org/accp/download/Myanmar/Consumer%20Protection%20Law%20(Engish).pdf

The Consumers' Right Protection Act, 2009 (Act No 26 of 2009), 19 March available from http://www.consumerbd.org/wp-content/uploads/2017/04/consumer-act-2009.pdf

The Laotian times(2016). Lao PDR Gets \$850,000 Containerized Data Center 12 March, available from https://laotiantimes.com/2016/12/28/LaoPDR-gets-850000-containerized-data-center/

The Laotian Times(2018). OnePay Kicks Cash to the Curb in LaoPDR. 22 February. Available from https://laotiantimes.com/2017/11/29/onepay-kicks-cash-to-the-curb-in-LaoPDR/

The Statistics Portal(2017). E-learning and digital education - Statistics & Facts. 21 February. Available from https://www.statista.com/topics/3115/e-learning-and-digital-education/

UNCTAD (2017). b2c e-commerce index 2017. 21 February. Available from http://unctad.org/en/PublicationsLibrary/tn_unctad_ict4d09_en.pdf

UNCTAD (2017). Cambodia Rapid eTrade Readiness Assessment.

UNCTAD(2017). Nepal Rapid eTrade Readiness Assessment World Bank (2016). Enterprise surveys what businesses experience. World Bank. Global Findex Database. 13 March, available from http://datatopics.worldbank.org/financialinclusion/

World Internet Stats(2018). Internet Users, Facebook Subscribers & Population Statistics for 35 countries and regions in Asia. 22 February. Available from https://www.internetworldstats.com/stats3.htm

WTO and OECD (2017). Aid for Trade - Case Story Template.



Street address: ITC, 54-56, rue de Montbrillant, 1202 Geneva, Switzerland

Postal address: ITC,

Palais des Nations, 1211 Geneva 10, Switzerland

+41-22 730 0111 +41-22 733 4439 itcreg@intracen.org Telephone: Fax: E-mail: www.intracen.org Internet:

In partnership with:



Street address: Alibaba Center, No. 9th Building, Wangjing East Garden No. 4th Area, Chaoyang District,

Beijing, China 100102

Website: www.aliresearch.com