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Study on China’s Natural Rubber Import

Huide HUANG¹, Jing LIU², Haolun HUANG^{1*}

1. Institute of Science and Technology Information, Chinese Academy of Tropical Agricultural Sciences, Haikou 571101, China; 2. Chinese Academy of Tropical Agricultural Sciences, Haikou 571101, China

Abstract China is a large importer of natural rubber. In 2016, China’s natural rubber import reached 2.5 million t, the amount of import was up to 3.35 billion USD. China imported 1.593 million t natural rubber (2040 million USD) mainly from Thailand, 0.288 million t (400 million USD) from Malaysia, 0.28 million t (390 million USD) from Indonesia, and 0.168 million t (230 million USD) from Vietnam. According to the import classification, in 2016, China imported 1.658 million t technical natural rubber, accounting for 66.3% of China’s total natural rubber import volume; China imported 0.424 million t natural rubber latex, accounting for 16.9% of China’s total natural rubber import volume; China imported 0.214 million t other shape of natural rubber, accounting for 8.6% of China’s total natural rubber import volume; China imported 0.205 million t natural rubber smoked sheets, accounting for 8.2% of China’s total natural rubber import volume. According to the import situation, China still needs importing large volume of natural rubber.

Key words Natural rubber, Import, Analysis

1 Introduction

Production areas of natural rubber are mainly distributed in Asia, Africa and South America. Asia accounts for 93% of total production. The main production countries in Southeast Asia accounts for 90% of the world’s total production. Natural rubber is mainly produced in Thailand, Indonesia, Vietnam, Malaysia, China, India, Myanmar, Sri Lanka, Côte d’Ivoire, Nigeria, Liberia, Cameroon, Ghana and Gabon. The Asian-Pacific area accounts for 70% of total consumption. China is the world’s largest consumer of natural rubber. China’s natural rubber consumption accounts for about 36% of the world market, showing that China takes up a lead

ing role in the consumption of natural rubber. According to data of the General Administration of Customs of People’s Republic of China, China imported 5.81 million t natural rubber and synthetic rubber (including latex)^[1], showing a big gap between supply and demand. In this study, we mainly analyzed China’s natural rubber import.

2 Analysis of import volume and amount

China is a natural rubber producer, but also a large importer of natural rubber. According to statistics of China Customs, China imported 2.5 million t natural rubber, the import volume increas-

Table 1 China’s natural rubber import in 2016

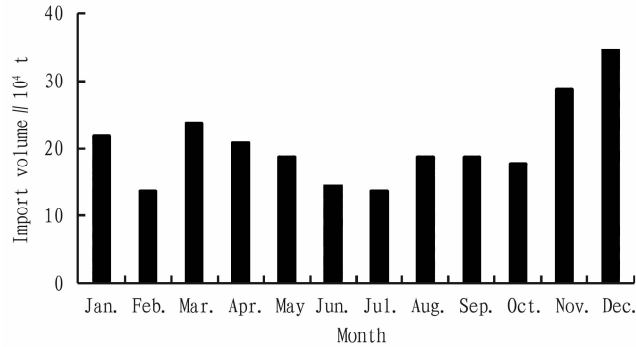
Month	Volume//10 ⁴ t	Amount//10 ³ USD	Volume compared with the same period in the last year//%	Amount compared with the same period in the last year//%
January	22	257493	2.4	–19.4
February	14	158385	–21.3	–39.4
March	24	268983	10.6	–13.5
April	21	253427	–3.2	–18.7
May	19	261588	38.4	26.2
June	15	211598	–1.8	–11.1
July	14	195230	–46.0	–53.5
August	19	251029	–29.9	–39.3
September	19	252163	–36.5	–41.2
October	18	252764	–13.2	–11.9
November	29	410380	9.1	17.9
December	35	580886	15.4	57.2

Data source: China Customs Information Website (<http://www.haiguan.info>).

Received: June 20, 2017 Accepted: August 10, 2017
Supported by Special Fund for Basic Scientific Research Project in Chinese Academy of Tropical Agricultural Sciences "Study on Structural Adjustment and Development of Major Tropical Crop Industry in the Supply Front" (1630072016013).
* Corresponding author: E-mail: 174696975@qq.com

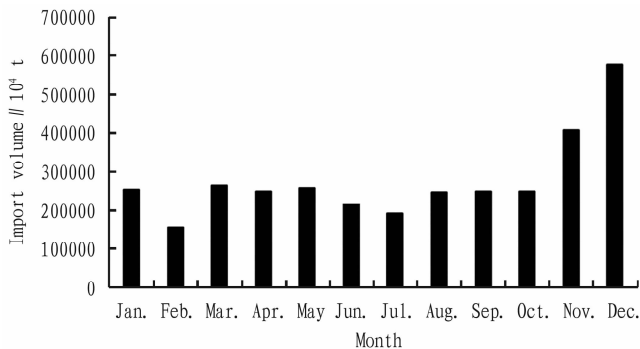
ing by 38.4% (Table 1), the months with minimum import volume were February and April with monthly import volume of 0.14 million t; the month with maximum import volume was December, up to 0.35 million t (Fig. 1). In 2016, China’s natural rubber import amount reached 3.35 billion USD^[2], the month with minimum import amount (160 million USD) was February, and the

month with maximum import amount (580 million USD) was December (Fig. 2.)



Data source: China Customs Information Website (<http://www.haiguan.info>).

Fig. 1 China natural rubber import volume in 2016



Data source: China Customs Information Website (<http://www.haiguan.info>).

Fig. 2 China natural rubber import amount in 2016

3 Analysis on countries from which China imported natural rubber

According to statistical data of China Customs Information Website, China mainly imported natural rubber from 20 countries and regions (as listed in Table 2), mainly including Thailand, Malaysia, Indonesia, and Vietnam (Fig. 3). In 2016, the import volume from these four countries accounted for 93.2% of China's total natural rubber import volume. China imported 1.593 million t (2040 million USD) mainly from Thailand, 0.288 million t (400 million USD) from Malaysia, 0.28 million t (390 million USD) from Indonesia, and 0.168 million t (230 million USD) from Vietnam.

Table 2 China's natural rubber import in 2016

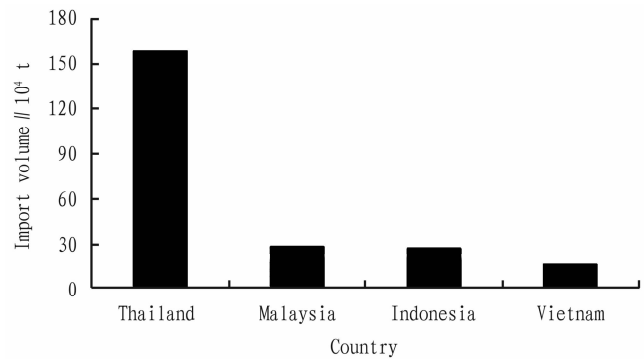
Country	Import volume//kg	Import amount//USD
Thailand	1593491401	2035414258
Malaysia	288126293	397608658
Indonesia	279575337	385940646
Vietnam	168367963	229209635
Myanmar	72332446	144451478
Laos	53022165	99214824
Côte d'Ivoire	33862142	43530427
Cambodia	6375590	8829373

(to be continued)

(continued)

Country	Import volume//kg	Import amount//USD
Sri Lanka	969874	2439360
Papua New Guinea	1456000	1893424
Ghana	907200	1122711
Liberia	660074	1095216
Nigeria	563584	741462
Philippines	511410	668925
Cameroon	532980	652223
India	300350	352510
The Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu	62308	223579
Italy	2642	118612
Korea	20308	36015
China	33228	24589

Data source: China Customs Information Website (<http://www.haiguan.info>).



Data source: China Customs Information Website (<http://www.haiguan.info>).

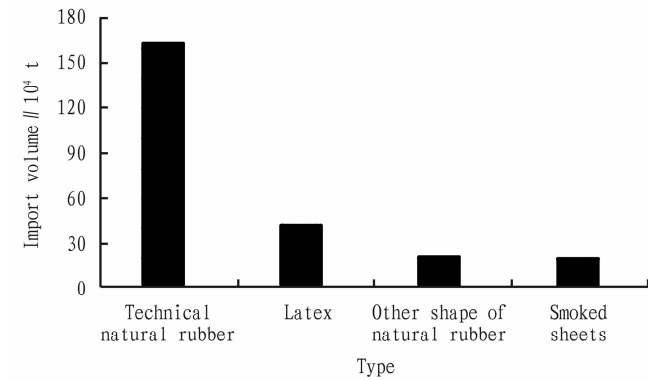
Fig. 3 Top 4 countries from which China imported natural rubber in 2016

4 Analysis on type of imported natural rubber

4.1 Type of China's natural rubber import in 2016 According to the statistical classification of custom trade, in 2016, China imported 1.658 million t technical natural rubber, accounting for 66.3% of China's total natural rubber import volume; China imported 0.424 million t natural rubber latex, accounting for 16.9% of China's total natural rubber import volume; China imported 0.214 million t other shape of natural rubber, accounting for 8.6% of China's total natural rubber import volume; China imported 0.205 million t natural rubber smoked sheets, accounting for 8.2% of China's total natural rubber import volume, as shown in Fig. 4.

4.2 Imported technical natural rubber In 2016, China imported 1.658 million t of natural rubber products with import amount up to 2230 million USD (as shown in Table 3); in the same year, China imported technical natural rubber mainly from five countries: Thailand, Malaysia, Indonesia, Vietnam, and Côte d'Ivoire (Fig. 5). Among them, China imported 0.955 million t technical natural rubber from Thailand, accounting for 57.60% of total import volume, and the import amount was about 1270 million USD, accounting for 56.93% of the import amount. China imported 0.275 million t technical natural rubber (about

380 million USD) from Malaysia, 0.269 million t technical natural rubber (about 370 million USD) from Indonesia, 0.118 million t technical natural rubber (about 160 million USD) from Vietnam, and 0.003 million t technical natural rubber (about 40 million USD) from Côte d'Ivoire.



Data source: China Customs Information Website (<http://www.haiguan.info>).

Fig. 4 Type of China's natural rubber volume in 2016

Table 3 Technical natural rubber imported by China in 2016

Country	Import volume//kg	Import amount//USD
Thailand	954905270	1271604748
Malaysia	274739409	377427357
Indonesia	269965560	371341322
Vietnam	118576946	161961585
Côte d'Ivoire	29896237	38107197
Myanmar	3253320	4480593
Cambodia	1885420	2526181
Papua New Guinea	1456000	1893424
Ghana	907200	1122711
Liberia	504000	661248
Philippine	474000	639314
Laos	340480	622193
Nigeria	423360	538906
Cameroon	393120	491173
Sri Lanka	12200	36423
South Korea	19200	29760
Japan	784	4134

Data source: China Customs Information Website (<http://www.haiguan.info>).

4.3 Imported natural rubber latex In 2016, China imported 0.424 million t natural rubber latex (with import amount of 442.68 million USD), as listed in Table 4. In 2016, top 5 countries from which China imported natural rubber latex were Thailand, Vietnam, Malaysia, Laos, and Myanmar, as shown in Fig. 6. Among them, China imported 388170t natural rubber latex from Thailand, accounting for 91.53% of total import volume, and the import amount was about 401.21 million USD, accounting for 90.63% of the import amount. China imported 19642 t natural rubber latex from Vietnam with import amount of 18.87 million USD; China imported 10486 t natural rubber latex from Malaysia with import amount of 15.89 million USD; China imported 2509 t natu-

ral rubber latex from Laos with import amount of 3.2 million USD; China imported 18.39 million t from Myanmar with import amount of 1.72 million USD.

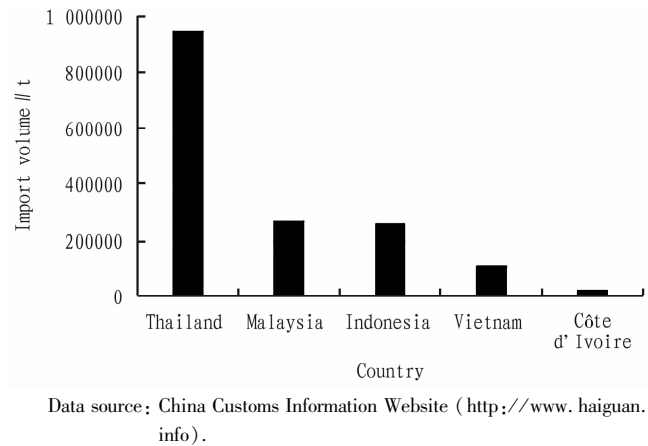
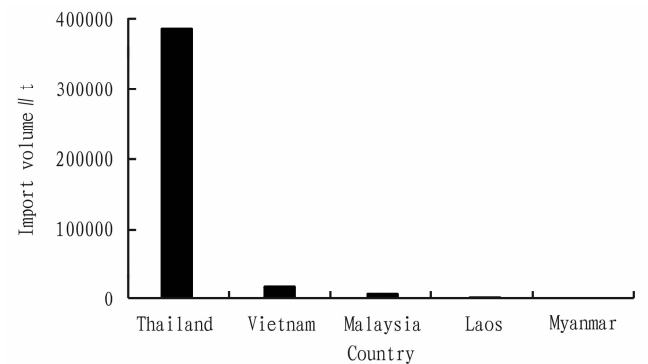


Fig. 5 Volume of top 5 countries from which China imported technical natural rubber

Table 4 Natural rubber latex imported by China in 2016

Country	Import volume//kg	Import amount//USD
Thailand	388170253	401214657
Vietnam	19642400	18871187
Malaysia	10485793	15885881
Laos	2509460	3204639
Myanmar	1839612	1723660
Indonesia	816560	832275
Liberia	156074	433968
India	300350	352510
Cameroon	119860	128250
China	33228	24589
The Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu	8437	6678
Pakistan	820	928
Japan	223	784
Germany	0	64

Data source: China Customs Information Website (<http://www.haiguan.info>).



Data source: China Customs Information Website (<http://www.haiguan.info>).

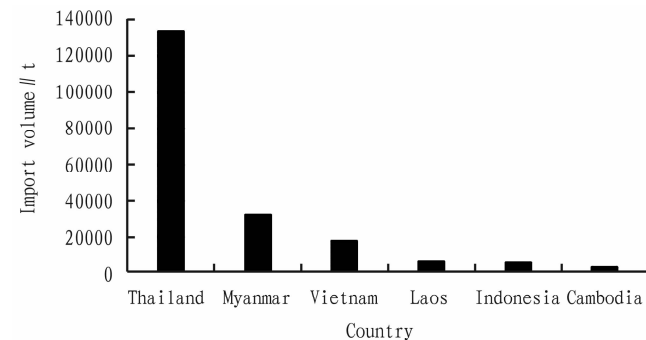
Fig. 6 Top 5 countries from which China imported natural rubber latex in 2016

4.4 Imported smoked sheets In 2016, China imported 0.2 million t natural rubber smoked sheets with the import amount of 324.77 million USD (as listed in Table 5). In the same year, top 6 countries from which China imported natural rubber smoked sheets were Thailand, Myanmar, Vietnam, Laos, Indonesia, and Cambodia (as shown in Fig. 7). Specifically, China imported 134538 t natural rubber smoked sheets from Thailand, accounting for 65.65% of the total import volume, and the import amount was 195.16 million USD, accounting for 60.09% of the total import amount; China imported 32487 t natural rubber smoked sheets from Myanmar with the import amount of 67.08 million USD; China imported 18638 t natural rubber smoked sheets from Vietnam with the import amount of 27.85 million USD; China imported 7421 t natural rubber smoked sheets from Laos with the import amount of 16.75 million USD; China imported 6726 t natural rubber smoked sheets from Indonesia with the import amount of 10.46 million USD; China imported 18638 t natural rubber smoked sheets from Cambodia with the import amount of 6.04 million USD.

Table 5 Natural rubber smoked sheets imported by China in 2016

Country	Import volume//kg	Import amount//USD
Thailand	134537715	195157100
Malaysia	32487100	67076928
Vietnam	18637687	27854770
Laos	7421000	16752020
Indonesia	6762094	10455949
Cambodia	4324200	6035708
Malaysia	741760	1408999
Cameroon	20000	32800

Data source: China Customs Information Website (<http://www.haiguan.info>).



Data source: China Customs Information Website (<http://www.haiguan.info>).

Fig. 7 Top 6 countries from which China imported natural rubber smoked sheets in 2016

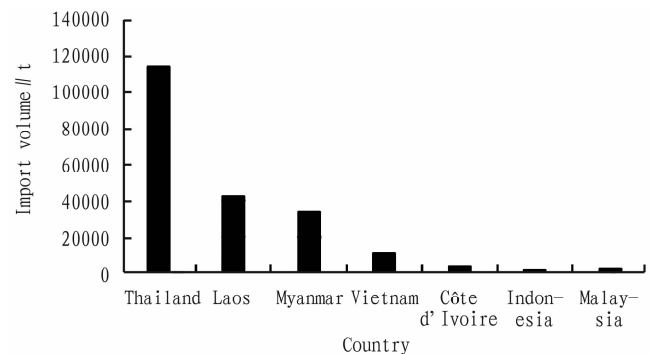
4.5 Other shape of natural rubber imported In 2016, China imported 0.21 million t other shape of natural rubber with the import amount of 352.68 million USD (as listed in Table 6). In the same year, top 6 countries from which China imported other shape of natural rubber were Thailand, Laos, Myanmar, Vietnam, Côte d'Ivoire, Indonesia, and Malaysia (as shown in Fig. 8). Among them, China imported 115884 t other shape of natural rubber from Thailand, accounting for 54.05% of total import volume,

and the import amount was about 167.44 million USD, accounting for 47.48% of the import amount. China imported 42751 t other shape of natural rubber from Laos with the import amount of 78.64 million USD; China imported 34752 t other shape of natural rubber from Myanmar with the import amount of 71.17 million USD; China imported 11511 t other shape of natural rubber from Vietnam with the import amount of 20.52 million USD; China imported 3966 t other shape of natural rubber from Côte d'Ivoire with the import amount of 5.42 million USD; China imported 3966 t other shape of natural rubber from Côte d'Ivoire with the import amount of 5.42 million USD; China imported 2031 t other shape of natural rubber from Indonesia with the import amount of 3.31 million USD; China imported 2159 t other shape of natural rubber from Malaysia with the import amount of 2.89 million USD.

Table 6 Other shape of natural rubber imported by China in 2016

Country	Import volume//kg	Import amount//USD
Thailand	115884163	167437753
Laos	42751225	78635972
Myanmar	34752414	71170297
Vietnam	11510930	20522093
Côte d'Ivoire	3965905	5423230
Indonesia	2030985	3308514
Malaysia	2159331	2886421
Sri Lanka	957674	2402937
Cambodia	165970	267484
The Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu	53871	216901
Nigeria	140224	202556
Italy	2642	118612
Philippine	37410	29611
The United States of America	448	19856
Japan	3134	15781
Germany	635	9127
South Korea	1108	6255
Country (region) not known	15	2903
France	50	542

Data source: China Customs Information Website (<http://www.haiguan.info>).



Data source: China Customs Information Website (<http://www.haiguan.info>).

Fig. 8 Top 7 countries from which China imported other shape of natural rubber in 2016

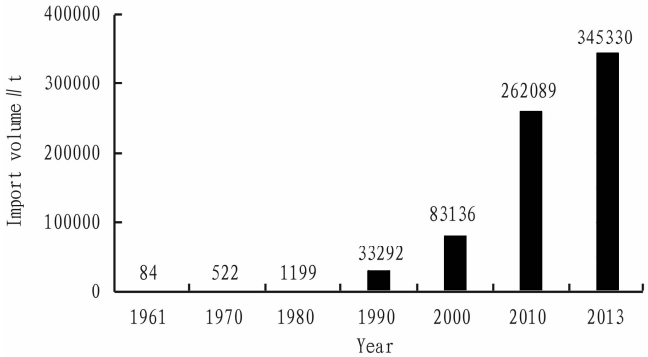
5 Trend of China's natural rubber import

5.1 Stage import trend According to the FAO statistical database, China's import of natural rubber was: 84 t in 1961, 522 t in 1970, 1199 t in 1980, 33292 t in 1990, 83136 t in 2000, 262089 t in 2010, and 345330 t in 2013^[3]. From 1961 to 2013, the growth rate of China's natural rubber import reached the peak in 1990, compared with 1980, reaching 2676.6% (as indicated in Table 7), China's natural rubber import volume reached the maximum in 2013, up to 345330 t (as shown in Fig. 9).

Table 7 Volume and growth rate of China's natural rubber import

Year	Import volume//t	Year compared	Growth rate//%
1961	84	—	—
1970	522	1970/1961	521.4
1980	1199	1980/1970	129.7
1990	33292	1990/1980	2676.6
2000	83136	2000/1990	149.7
2010	262089	2010/2000	215.3
2013	345330	2013/2010	31.8

Data source: FAOSTAT.



Data source: FAOSTAT.

Fig. 9 Volume of China's natural rubber import

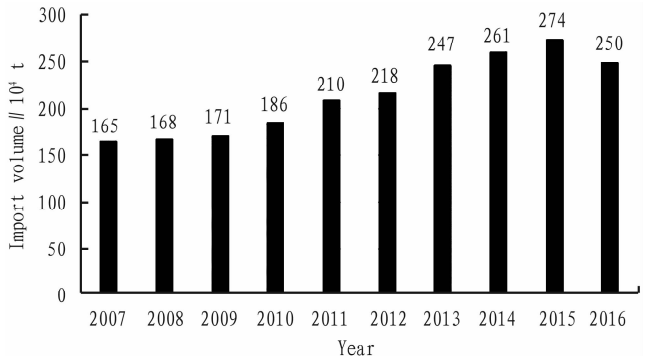
Table 8 Volume and growth rate of China's natural rubber import in 2007 – 2016

Year	Import volume//10 ⁴ t	Annual growth rate//%
2007	165	—
2008	168	1.82
2009	171	1.79
2010	186	8.77
2011	210	12.90
2012	218	3.81
2013	247	13.30
2014	261	5.67
2015	274	4.98
2016	250	−8.76

Data source: China Customs Information Website (<http://www.haiguan.info>).

5.2 Current import trend According to the statistical data of

China Customs, in 2007 – 2016, the volume of China's natural rubber import showed an increasing trend, from 1.65 million t in 2007 to 2.50 million t in 2016. Over the past 10 years, the growth rate of volume of China's natural rubber import reached the highest in 2013, up to 13.3% (as indicated in Table 8). The largest volume of natural rubber import reached the maximum in 2015, up to 2.74 million t, as shown in Fig. 10.



Data source: China Customs Information Website (<http://www.haiguan.info>).

Fig. 10 Volume of China's natural rubber import in 2007 – 2016

6 Conclusions

The maximum consumption of natural rubber comes from the industrial demands, and about 69% is used for the tire manufacturing, daily necessities account for less than 20%. The consumption of rubber tube, medical care, and special rubber fields accounts for a small and steady portion. The demands for tire manufacturing are mainly driven by the automobile manufacturing industry, China's automobile manufacturing industry is showing an excellent development trend, especially the sales terminal market preferences of heavy truck industry. Excellent domestic automobile and heavy truck market increases the utilization of capacity of tire enterprises, accordingly increases the demands for natural rubber. Thus, China's automobile manufacturing industry still demands large volume of natural rubber. Due to the relatively limited domestic production of natural rubber, it is difficult to change the situation of China's high dependence on import of natural rubber in a short term, and China still needs to import large volume of natural rubber. Thailand, Vietnam, Malaysia, and Indonesia are the main sources of natural rubber in China. In the next 10 years, these countries will still be countries from which China imports natural rubber.

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