

This history and future of the malaysian rubber industry



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The issue of our topic is tightness in rubber supply in Malaysia. The natural rubber production in Malaysia is declining recent years. The statement of supply-demand balance of natural rubber in ANRPC member countries during 2009 state that Malaysia's total supply is 1751000 tonnes while total demand is 1765000 tonnes. There is a natural rubber demand surplus of 14000 tones. Natural rubber will remain in tight supply next year as yields from aging trees decline and output grows slow, said the Association of Natural Rubber Producing Countries. The association represents Cambodia, China, India, Indonesia, Malaysia, Papua New Guinea, Philippines, Singapore, Sri Lanka, Thailand and Vietnam.

PROBLEM STATEMENT

There are three problem statements of our issue. First is the shortage of land. The shortage of land is caused by the competition for land use. Production decline due to planting of other crops, especially oil palm. Second problem statement is weather condition affect the rubber output. The dry spell has began in the fall of 2009 and many crops damage from drought reducing the rubber production. Third problem statement is the increasing rubber demand. The increasing rubber demand is caused by the development of automobile sector as the sector is the biggest latex user.

OBJECTIVES

Our objective of this proposal is to evaluate the statistic of rubber industry in Malaysia. We have to find data of the statistic of rubber industry in Malaysia and evaluate it in order to know the rise and fall of the industry throughout the years. As Malaysia is one of the world top producers of natural rubber, the statistic that we find is mainly on natural rubber in Malaysia. Our <https://assignbuster.com/this-history-and-future-of-the-malaysian-rubber-industry/>

evaluation focuses on the production of natural rubber since year 1961 to year 2010.

Our next objective is to determine the factors contributing to the rise and fall in the rubber industry in Malaysia throughout the years. Rubber industry in Malaysia rise from the 1960s, but then there was a drastic fall in the late 1970s. In the mid 1980s, there was a recovery in the industry, but it falls again about 1997 and 1998. In this proposal, we will find out and determine why our rubber industry rise and fall throughout the years.

The third objective of this proposal is to identify the challenges facing by the rubber industry and its future directions. Although there are some challenges facing by the rubber industry such as our issue - tightness in rubber supply and others, the future of rubber industry in Malaysia is said to be bright. Here we will discuss about why our rubber industry is said to have a bright future despite of the challenges we are facing now.

METHODOLOGY

The methodology we use is mainly based on secondary data which are statistics, internet journals and newspaper articles. Statistics we found from the internet such as the data of Malaysia NR production and a graph of the area replanted with rubber trees in Malaysia. We found many internet journals such as other rubber industry research paper in our literature review. A few newspaper articles had also being found such as the news about " Malaysia rubber industry expects to bounced back" hence we can determine that our rubber industry will have a bright future.

LITERATURE REVIEW

Dr Habibah Suleiman from the Malaysian Rubber Board established a journal on November 2000 entitled “ The Status of and the Future Direction of the Malaysian Rubber Industry”. In the journal, Dr Suleiman states that changes in rubber industry included smallholder industry has become an important raw material supplier and the emergence of the downstream sector. The other changes that highlighted is the increasing domestic consumption in rubber industry has turning Malaysia into a major importer of NR.

Dr Suleiman suggested that consolidation of holdings is important, as consolidated holdings will provide a synergy for integrated economic activities in the rubber industry. Replanting rubber activities should be concerned and value added rubber products are encouraged. Measures such as R&D need to be taken to ensure the future development of an integrated rubber industry which includes the re-engineering of all sectors and more importantly the integration of the upstream and downstream sectors.

The second literature review is “ An Evaluation of the Impact of Rubber Trees in China on the Rural Economy with Specific Focus on Xishuangbanna, Yunnan and Hainan Island” by Roland Cheo in 2000. In this journal, Roland explains about the world trends in natural rubber production and the practical difficulties of growing natural rubber in China in the 1990s. Roland states that in the middle of 1990s, the natural rubber price is falling, the world demand for natural rubber is stagnating and the dependence on synthetic rubber is increasing. China is facing problems such as increasing direct and indirect cost and lost of productivity.

Roland also suggested some policy in order to enhance the rubber industry in China. One is to practice agro-forestry in Xishuangbanna especially on the pre-existing single crop rubber plantations. Second is to use rubber trees as timber, especially in furniture manufacture. As the climate of Xishuangbanna not suitable to plant rubber trees, hence cleared land can use to plant other crops such as coffee.

The third literature review is by N. M. Mathew (2009) with the title of “Rubber Products Manufacturing Industry in India : Current Trends and Future Prospects”. Mathew mentioned that India is the fourth largest producer of natural rubber. The natural rubber growth in India is supported by the entry of foreign countries in rubber product manufacture and this will help the domestic market of rubber industry in India. In the journal, Mathew states that the tyre production, annual turnover, export in the rubber industry in India grow steadily from 2006 to 2009.

Besides that, Mathew highlighted that India is emerging as a large market for rubber products as it has a large population based. The tyre sector has perform well, while the non-tyre sector such as some high-value technical goods still needs further investments. The rubber industry in India is expected to grow as the automobile industry in India develop rapidly nowadays.

Introduction of rubber industry in Malaysia

The rubber industry is beginning since year 1878 with the first rubber tree was planted in Kuala Kangsar, Perak. Therefore, it can be seen obviously that the rubber industry has been around in a very long way and more than a

century in our life. It has formed the backbone and become one of the key sectors of the Malaysian economy especially it being an important component in the agriculture sector which contributes to the nation's prosperity and gross domestic product (GDP) Malaysia. The Malaysian rubber industry has successfully established itself as a third biggest producer of natural rubber (NR) in the world and produces a broad range of products from natural rubber as well as rubber wood products and superior quality is widely used as a benchmark in the international market. Besides that, Malaysia also remains the world's largest exporter of natural rubber (NR) medical gloves, catheters and latex thread. From the finished rubber products, rubber gloves are the Malaysia's biggest export product. For examples, the well known producers of rubber glove in Malaysia are such as Top Glove, Oon, Comfit, Profeel, Dermagrip, Supergloves and RadiaXon. It is estimated that over 60% of the rubber glove market at the internationally level is control by the Malaysia. As reported by the Department of Statistics Malaysia, an export of Malaysia's natural rubber (NR) has recorded 85, 587 tons in August 2010. It showed an increase of 10, 082 tones or 13. 4 percent over the previous month. The major destination of Malaysia's NR was China which is about 48. 1 percent. In addition, the Malaysian rubber sector also contributed 80, 643 tones production of natural rubber (NR) in the August 2010. Malaysia has invests heavily in research and development (R&D) in the rubber industry in order to develop innovative and new uses for its rubber.

Rise and Fall of the Rubber Industry in Malaysia and factors contributing to it.

Malaysia, NR area, production and yields, 1961-2005

<http://www.unctad.org/infocomm/anglais/rubber/images/MalaysiaProduction.gif>

Source: UNCTAD secretariat (Data: FAOSTAT database)

statistic rubber. png

Since 1960, the increased in demand for rubber began to be overtaken by the large increases in synthetic rubber supply. Therefore, rubber prices declined up to 1970 due to this expanded rubber supply except for a short-lived rise in 1969. However, natural rubber production still on the rise because in the mean time, technical advances in preparing and packaging NR (natural rubber) were the positive factors in respond to the demand and to competition from the expanding role of synthetic rubber(SR). These technical changes in the nature of manufactured rubber products had influenced the demand for NR in a broadly positive manner. One major was the introduction from the mid-1960s of radial tyres, which much enhanced the use of NR at the expense especially of styrene-butadiene rubber (SBR). Radials progressively replaced the previously dominant cross-ply tyres, and were to have great impact on NR and SBR consumption shares over time.

Latex products and notably dipped goods with high NR content were a further growth area, although there were also opposite effects due to the increased in preferences for SR latices in carpet backings. From the 1950 up to 1970 was actually a period when the market for rubber visibly divided into

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technical niches for given NRs and SRs, with less possibly substitution and more complementary.

Retaining production viability

Steady rises in labour and land cost were the negative factors for NR production during these years (1950-1970). Rise in wages were actually the preferable outcome for workers but with the rise in both wages and land value, a considerable adjustments in resource allocation and technology were highly required in order to retain profitability. Thus, producing low quality rubber from unselected seedlings became uneconomic in such circumstances, and these negatives factors were the stimulator for many Malaysian rubber producers to adopt new production and processing technologies to decrease the production cost. Although wages in Malaysia were already much higher than those elsewhere, but this was offset by the superior application of technology and transport cost compare to countries like Indonesia and Thailand due to better roads and shorter distances.

By 1970 high yielding trees occupied a large profit of the rubber area on Malaysian estates. The area of planted rubber on smallholdings had also expanded substantially. Malaysia's consequent advance to an NR output of 1. 269 million tonnes in 1970 enable it to retain a 40% share of world total production although its proportion of global plantings had dropped considerably.

Further growth and change, 1970 to early 1990s

The growth of NR was interrupted by market downturns and was rather lower than in 1960s. During this period, oil shocks in the 1970s and the two global economic recessions of the early 1980s and early 1990s were the chief influences on NR production. The huge oil price increases affected NR in two conflicting ways. They raised the cost and price for SR but at the same time also reduced the demand of vehicle users for fuel. Rise in cost and price for SR increased the demand for NR but the reduced in demand for automobile decreased the demand for NR. Therefore, with these two conflicting effects, in each oil shocks, initial surge in price of NR, as it followed SR, was succeeded by a decline as the demand for rubber slackened. The decline in the late 1970s was then exacerbated by recession and the stagnant world commodity market, but was corrected by strong recovery in the mid-1980s. This continued until further difficult conditions emerged in 1990s, when non-fuel commodities including NR reached their lowest real price since 1932.

Besides that, technical changes in the nature of tyres had also influenced the demand for NR. Improved designs which gave longer distances travelled per tyre and lower weights per unit, advanced car layouts including front wheel drives which cut the degree of tyre wear had reduced the NR utilization and therefore the demand which affect its production.

However, the growing consumer requirement for dipped goods and especially examination gloves, associated with the rapid spread of AIDS has influenced the NR demand in a positive manner.

Till 1990, Malaysia was the world leader in NR industry. It was the largest producer as well as leader in research and the entire world looked up to

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Malaysia for everything on NR. But a host of factors, including poor leadership, large-scale shift to oil palm, unattractive price for NR for years, shortage of skilled tappers, reallocation of resources from rubber cultivation to rubber products manufacture and massive urbanisation influenced many to do a rethinking on NR's continued viability. The result: From 2 million hectares in 1965, the rubber area drastically came down to 1.02 million in 2009. Today, Malaysia is the third largest producer of NR with Thailand and Indonesia occupying the first and the second positions with production at 3 million tonnes and 2.6 million tonnes respectively.

Problems relating to the rubber industry that caused tightness in rubber supply

Shortage of land/Competition use of land

Over the past decades, the global rubber industry has witnessed incredible growth in the production in the Malaysia. It can be proven by Malaysia has become the top 3 rubber producer at the internationally level. Besides that, the Malaysian natural rubber (NR) industry is currently being controlled and dominated by the smallholders' in which they had accounted approximately 86 percent of the total planted area. Rubber cultivation has occupied about 4.2 million acres with 65 percent of the total cultivated area in the Malaysia. But, currently, there was a limited availability of land for the plantation and also expansion of rubber especially the natural rubber (NR) plantation in the Malaysia if compared to the last decades which the total area of Malaysia is mostly dominated by the rubber trees plantation. Rubber plantation area is showing a decreasing trend year by year from year 1990 until year 2009

with the reason of competition of the land use in the Malaysia. It can be shown in the figure below.

The statistic reported by the Bank Negara Malaysia (BNM) shown that the area replanted with rubber trees in period 1990 to 2009 has decrease substantially from 1, 837, 000 hectares to 1, 237, 000 hectares respectively. The total rubber plantation areas had fallen with amount of 600, 000 hectares.

The total area for rubber plantation declining is because the land has been available for conversion for different and various use. For example, the land had been used for planting other crops, especially the dominant oil palm trees. In Malaysia, the expansion rate of oil palm plantation is rapidly increasing especially in Sabah. In the early 1980s, only 1 percent of the Sabah's land was planted with oil palm. But, beginning from year 1998, the oil palm plantation areas has achieved 11percent or about 842, 496 hectares of Sabah's land area. Therefore, between 1990 until 2002, Malaysia's oil palm area has already expanded from 1. 7 million hectares in year 1990 to 3. 37 million hectares in 2002. In the last year which is 2009, the area under oil palm cultivation has represented 29 per cent of the Sabah's total land area. Majority of these oil palm areas are dominated by smallholders in that states.

The land not only used for the oil palm plantation. When we consider land use in an urban area, the land is basically or usually use for residential (private homes, terraced houses, flats and townhouse complexes), industries (storage, light industries and heavy industries), and also included the development of infrastructures like streets, recreation (parks, sports grounds

and culture), public services such as hospitals, airports, cemeteries and sewerage and also education (primary and high school). The increasing of these constructions in the urban area has totally decreasing the land use in the prospects agriculture such as rubber. As a consequence, the totals output or production of the rubber has decline a large quantity of number and cause the supply of rubber become tight while the demand for the rubber is increasingly.

Weather Condition

Weather condition will affect rubber output especially in the major rubber producer countries such as Thailand, Indonesia and Malaysia. In the late February 2010 and March 2010, rubber supply in Malaysia has gradually declined as the dry season started. There will be drier growing season in Southeast Asia this year due to the El Nino weather pattern. El Nino is an abnormal warming of surface ocean waters in the eastern tropical Pacific, also called Southern Oscillation. Our government official said that Malaysia may not reach the projected 1 million tons of rubber this year if this severe drought continues.

Actually the climate condition for optimum growth of rubber trees is rainfall of around 250 cm evenly distributed without any marked dry season and with at least 100 rainy days per year. Besides that, the suitable temperature range should be about 20°C to 34°C with a monthly mean of 25°C to 28°C, and should be absence of strong wins. When the drought season come, the temperature will be higher and the rainfall will less. This will definitely affect the growth of rubber trees and hence affect the collection of rubber and decrease the rubber supply.

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Increase in rubber demand

The use of rubber is widespread, ranging from household to industrial products, entering the production stream at the intermediate stage or as final products. The automobile industry is the single biggest user of latex, easily consuming about 70% of the world latex production. According to Association of Natural Rubber Producing Countries (ANRPC) director-general Prof Djoko Said Damardjati, tightness in rubber supply would remain an issue amid an upsurge in demand from China and India for their booming auto and tyre manufacturing industries. The remaining 30% are taken up by the general rubber goods (GRG) sector, which includes all products except tires and tubes.

In the manufacturing sense, uses of rubber are door and window profiles, hoses, belts, matting, flooring and dampeners (antivibration mounts) for the automotive industry in what is known as the “under the bonnet” products. Gloves (medical, household and industrial) and toy balloons are also large consumers of rubber, although the type of rubber used is that of the concentrated latex. Significant tonnage of rubber is used as adhesives in many manufacturing industries and products, although the two most noticeable are the paper and the carpet industries. Rubber is also commonly used to make rubber bands and pencil erasers. Many aircraft tires and inner tubes are still made of natural rubber due to the high cost of certification for aircraft use of synthetic replacements.

Additionally, rubber produced as a fiber sometimes called elastic, has significant value for use in the textile industry because of its excellent elongation and recovery properties.

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C: UsersmagrineDesktopdemand 2. png Estimates and projections for world rubber consumption in the tyre sector

C: UsersmagrineDesktopdemand1. png

Estimates and projections for world rubber consumption in the general rubber goods sector

Source : http://books.google.com.my/books?id=5nJ4TzFiE_MC&pg=PA105&lpg=PA105&dq=consumption+of+natural+rubber&source=bl&ots=XqdfUn04Dj&sig=q8bENLsH088sjnIJKPL-sZt2NL4&hl=en&ei=VBPHTMuTH9Okce_ysd8N&sa=X&oi=book_result&ct=result&resnum=6&ved=0CDYQ6AEwBTgU#v=onepage&q&f=true

Future of Rubber Industry

The Malaysian rubber industry was one of the major source of income of the country in past decades. Later on, the production of rubber has been declining and some investors even labeled rubber industry as a sunset industry. Somehow it is still early to predict the future of Malaysia rubber industry. However, currently the rubber industry is in its positive trend and there are some other positive signs of the future. Therefore, we believe that the future of Malaysian rubber industry is bright.

Malaysia is now the largest consumer of latex concentrate in the world. Besides, our country is also the world's largest supplier of medical rubber gloves and also the world's largest supplier of latex thread and cord.

According to Malaysian Export Promotion Council, many countries often

choose Malaysia to import rubber to their countries because the rubber <https://assignbuster.com/this-history-and-future-of-the-malaysian-rubber-industry/>

produced in Malaysia has high quality and the rubber price and the rubber product is competitive in the international market. (Source: Malaysian Rubber Export Promotion Council)

Regardless of competition from Thailand and Indonesia, and recently China, Malaysia is expected to remain as one of the major supplier of glove due to the dynamic and farsighted glove manufacturers. Malaysia has the advantage in term of lower cost source of energy such as natural gas and local productivity. Malaysia also exceeds China in raw material supply as the third largest natural rubber supplier after our neighbouring countries Thailand and Indonesia. On the other hand, Malaysian glove manufacturers are advanced in terms of technological manufacture of examination and medical grade gloves where their quality requirements are becoming more strict and stringent. (Source: Bursa Malaysia News, August 26, 2009)

Moreover, Malaysia is currently the third largest producer of natural rubber in the world. Even though the consumption of natural rubber has been increasing, Malaysia has been able to produce more than one million tonnes of natural rubber to be exported since 2004 as shown in table 1. Therefore, the consumers of natural rubber can still expecting Malaysia as a supplier of natural rubber.

Table 1: Rubber Production, Export and Consumption of Malaysia (Tonnes), 2000 – 2009

2000

2001

2002

2003

2004

2005

2006

2007

2008

2009

Production of NR1

927, 608

882, 067

889, 832

985, 647

1, 168, 735

1, 126, 023

1, 283, 632

1, 199, 553

1, 072, 365

857, 019

Export of NR1

977, 975

858, 993

927, 919

1, 646, 708

1, 369, 428

1, 322, 165

1, 184, 396

1, 018, 052

916, 599

703, 051

Consumption of NR1

363, 715

400, 888

407, 884

420, 775

402, 769

386, 472

383, 324

450, 246

468, 894

468, 706

Consumption of SR2

95, 000

96, 000

90, 000

90, 000

86, 500

96, 400

112, 400

122, 800

124, 500

129, 500

Source: Department of Statistics, Malaysia (DOS) and International Rubber Study Group (IRSG) Adopted from Malaysian Rubber Export Promotion Council

Furthermore, there are more than 160 countries in the world which import rubber products from Malaysia. For instance, USA and China are the two biggest export destination of Malaysian rubber products following by Germany, Japan and United Kingdom. Malaysian rubber products are famous for its high quality and the competitive price. The rubber product manufacturers include local and foreign small and medium sized enterprises which have the capabilities of supplying the downstream products such as automotive components, medical gloves, hoses and belting. (Source: Malaysian Rubber Export Promotion Council)

Malaysia is the top supplier of examination and surgical gloves which fulfilling almost half of the world's demand. For instance, the examination gloves are mostly utilized by the medical and health care facilities. Next, Malaysia is also the world's top supplier of Foley catheters and also the second largest supplier of condoms and latex threads. Basically, latex thread is usually in the clothing industry as elastic bands and supports. Some other examples of important latex products which are produced in Malaysia include finger stalls, balloons and others. Besides, Malaysia has a production comprises a wide range of industrial rubber products such as beltings, wires, hoses and cables for the international market. This is shown in table 2.

Table 2: Malaysia's Export of Selected Rubber Products, 2005 - 2009
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Rubber Product

2005

Value (RM Million)

2006

Value (RM Million)

2007

Value (RM Million)

2008

Value (RM Million)

2009

Value (RM Million)

Gloves, other than surgical gloves

3, 793. 23

4, 624. 52

5, 095. 24

5, 991. 92

6, 279. 86

Surgical gloves

706. 87

758. 39

780. 41

916. 34

866. 21

Catheters

647. 71

469. 92

670. 02

285. 22

96. 87

Vulcanized rubber thread and cord

574. 20

745. 66

720. 86

615. 48

707. 60

Wire, cable and other electrical conductors

60. 96

86. 74

103. 04

22. 84

20. 16

Piping and tubing

216. 72

223. 08

307. 60

338. 31

218. 39

Sheath contraceptives

115. 78

143. 75

151. 71

212. 50

233. 65

Belting

55. 22

57. 92

62. 15

59. 31

45. 05

Balloons

33. 69

33. 51

38. 89

10. 88

8. 65

Precured tread of non-cellular rubber

32. 26

32. 18

19. 17

26. 95

54. 19

Cellular rubber lined with textile fabric on one side

24. 94

17. 23

13. 40

6. 56

13. 99

Finger stalls

9. 51

9. 85

8. 67

4. 46

3. 34

Teats & soothers

9. 30

12. 32

17. 36

14. 14

11. 76

Pipe seal rings of unhardened vulcanized rubber

3. 43

2. 38

1. 53

0. 50

5. 19

Source: Department of Statistics, Malaysia (Adopted from Malaysian Export Promotion

Council)

The other reason why future of rubber industry is said to be bright is because of the recovery of the automation sector. This is because rubber is one of the major materials needed in automobile manufacturing such as tyres, piping and tubing. With this, Malaysia's natural rubber for 2010 is expected to increase by 16 percent to one million tonnes beared by higher prices compare with 900, 000 tonnes in 2009. The Director General of the Malaysian Rubber Board, Dr Salmiah Ahmad, said that the position of natural rubber for 2010 is believed to be positive because of the recovery and the growing demand in the global automotive sector. She also claimed that the higher production of rubber estimated this year would be due to the more attractive price of natural rubber which would probably encourage

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smallholders to tap for more latex. Besides, she added that during the first quarter of 2010, the normal price of Standard Malaysian Rubber (SMR20), which is the major rubber grade utilised in the manufacturing tyre has increased more than twice to RM10, 140 per tonne from RM 4, 990 per tonne recorded in the first quarter of 2009. (Source: The Star Online, April 13, 2010)

The increase in rubber price nowadays which has benefited all rubber small holders is due to several reasons. Firstly, with the increasing demand from China due to its rapid economic growth in that particular country increase the demand for natural rubber. Secondly, the increase in petroleum price which subsequently increase that price of synthetic rubber, which means the increase in price of competitors of natural rubber. Thirdly, the wintering seasons in the major country which produces rubber causes the tightness in rubber supply. Next, the cooperation and agreement between three major producer countries, Indonesia, Malaysia and Thailand named " Tripartite Rubber Cooperation" has balanced the world's demand and supply of rubber and continue to provide positive outlook toward the rubber market. The last factor which causes the increase in rubber price is the instability in South Thailand which affects the production of rubber in that region to decrease. However, the increase in the rubber price has made this industry attractive and this encourages small holders to tap more rubber. In addition, according to economists which predict that the world economics will turn better especially due to the recovery of automobile industry in China and India which would increase the demand of natural rubber production. It was given that in year 1990, the price of SMR20 is 214. 00 sen/kg. The price of SMR 20

has surged to 631. 50 sen/kg. (Source: Ministry of Plantation Industries and Commodities Malaysia, 2010). In short, the increase in the rubber price will make this industry more attractive to get involved in this sector. The table below shows the recent price of SMR20 in several states in Malaysia.

Table 3: Daily SMR20 Price from different states in Malaysia

Date

States

Skrap price (sen/kg)*

1 day

3 days

26/10/2010

Kelantan

541

563

26/10/2010

Terengganu

544

565

26/10/2010

Pahang

541

563

26/10/2010

Johor

536

557

26/10/2010

Negeri Sembilan

544

565

26/10/2010

Melaka

539

560

26/10/2010

Selangor

539

560

26/10/2010

Perak

539

560

26/10/2010

Kedah

536

557

26/10/2010

Perlis

536

557

26/10/2010

Pulau Pinang

536

557

Source: Rubber Industry Smallholders Development Authority

Next, the Economic Transformation Programme (ETP) is a programme to transform Malaysia into a high income economy by year 2020 by the Malaysian government. ETP will bring back Malaysia's position as the major producer of natural rubber and reinforce its competitive exporter status in the international market. Under ETP, Malaysian rubber sector can maintain its hectareage at one million hectares. In addition, there will be additional zone of one million hectares by exploiting appropriate land bank in Sabah and Sarawak. There are also replanting activities which increased to 40,000ha every year year from 20,000ha. Indeed, the ETP has three entry point projects (EPPs) for rubber, which including rubber area or yield improvement, focusing and speeding up in downstream products and produce new products aimed by 2020.(Source: The Star Online, September 28, 2010).

In conclusion, rubber industry is an important part of agriculture sector that should not be neglected. The related author