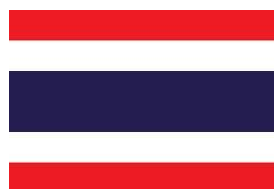




A handbook on  
Export opportunities in Thailand  
for  
Indian chemical companies



*December 2012*

For further enquiries, kindly contact at:

TATA Strategic Management Group  
B-1001, Marathon Futurex, N. M. Joshi Marg, Lower Parel East  
Mumbai 400013, INDIA  
Tel 91-22-6637 6789 Fax 91-22-6637 6600  
URL: [www.tsmg.com](http://www.tsmg.com) e-mail: [info@tsmg.com](mailto:info@tsmg.com)

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## **Executive summary**

After enjoying the world's highest growth rate from 1985 to 1996 (averaging 12.4% annually), an increased pressure on Thailand's currency (the baht) in 1997, year in which the economy contracted by 1.9% led to a crisis that uncovered financial sector weaknesses. However since then, Thailand has established itself as an emerging economy and is considered as a newly industrialized country. Thailand is heavily export-dependent, with exports accounting for more than two thirds of gross domestic product (GDP). Thailand exports over \$105 billion worth of goods and services annually. Thailand is the world's no.1 exporter of rice, exporting more than 6.5 million tons of milled rice annually. Thailand has the highest percentage of arable land, 27.25%, of any nation in the Greater Mekong sub-region.

The population of Thailand is ~66 million, making it a significant population base with large demand potential. Concerning the social and development indicators, Thailand is recognized by the World Bank as "one of the great development success stories". It is now an upper-middle income country.

As of 2011, Thailand's imports amount to ~\$230 billion. Major imports are capital goods, fuels, raw materials and consumer goods. Japan (18.5%), China (13.4%), UAE (6.3%), U.S. (5.9%), Malaysia (5.4%) and South Korea (4%) are Thailand's primary import partners. Thailand has signed numerous trade agreements with its major trading partners.

Overall analysis of opportunities in Thailand reveals that the main factors for Indian exporters will be to provide the products which Thai market needs and tailor their offerings as per their capability (e.g. quality, cost competitiveness, regional product needs etc.). This report gives you an insight regarding the key import requirements of Thailand and capabilities Indian companies should develop to maximize their exports to Thailand.

## 1. Country overview

Thailand formerly known as Siam, is a country located at the centre of the Indochina peninsula in Southeast Asia. It is bordered to the north by Burma and Laos, to the east by Laos and Cambodia, to the south by the Gulf of Thailand and Malaysia, and to the west by the Andaman Sea and the southern extremity of Burma. Its maritime boundaries include Vietnam in the Gulf of Thailand to the southeast, and Indonesia and India in the Andaman Sea to the southwest. (Refer figure 1).

Figure 1: Thailand overview



Thailand is the second largest economy in Southeast Asia, after Indonesia. The GDP of the country was \$369 Bn (nominal) in 2011. In terms of global rankings for GDP it stood at 29<sup>th</sup> position in 2011. Between 1993 until 2012 Thailand GDP Growth Rate hit an all-time high of 11.3% in March of 2012 and a record low of -10.8% in December of 2011. The devastation by floods in 2011 had severely affected the economy but in 2012, the Thai economy is expected to grow by 5.5-6 %, a V-shaped recovery from last year's flood. The Economy of Thailand is a newly industrialized economy. It is a heavily export-dependent economy, with exports accounting for more than two thirds of its gross domestic product (GDP). At present Thailand is ranked #18 in terms of a country to set up a business.

The industrial and the service sectors serve as the two main sectors in the Thai gross domestic product, with the former accounting for 39% share. Albeit often seen as an agricultural country, Thailand has an agricultural sector which shares only 8.6% of the GDP – lower than the trading sector and the logistics & communication sector which account for 13.5% and 9.6% of the GDP respectively. The construction & mining sector adds 4.3% to the country's gross domestic product. In addition to

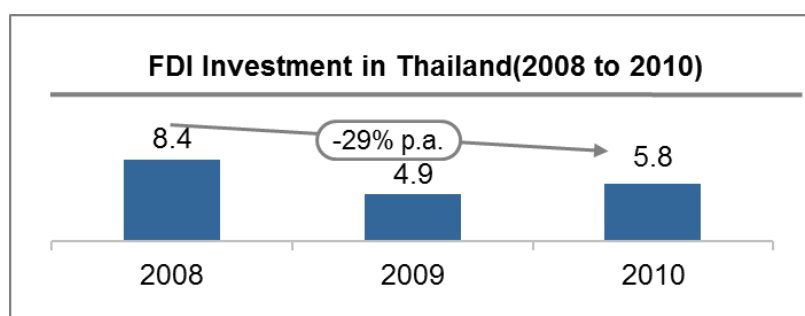
this, other service sectors - which include the financial, the educational, the hotel & restaurant sectors etc. - account for 25% of the country's GDP. The major import sources for Thailand have traditionally been Japan, China, UAE, USA and Malaysia. Machinery and parts, vehicles, electronic integrated circuits, chemicals, crude oil and fuels, iron and steel are among Thailand's principal imports. Most of Thailand's exports head to China, Japan, USA, Hong Kong, Malaysia and Singapore. Thailand is the world's largest cassava exporter, second largest exporter of gypsum, leading exporter of rice and a major exporter of shrimp. High-technology products such as integrated circuits and parts, electrical appliances, and vehicles are now leading Thailand's strong growth in exports.

### **Business Environment**

The impact of business environment could be both on trade as well as domestic production. In the past 31 years, the economy of Thailand has expanded quite considerably. The GDP at current prices shows that from 1980 to 2011, the size of the Thai economy has expanded nearly sixteen-fold when measured in the Thai Baht, or nearly eleven-fold when measured in the U.S. Dollar. After the Baht devaluation in 1984 and the Plaza Accord in 1985, a significant amount of foreign direct investment, mainly from Japan, came in and shifted the averaged growth rate per year to 8.8 percent in the period of 1985-1996, before slumping to the averaged growth rate of -5.9 percent per year during 1997-1998. In the period of 1999-2006, Thailand came back again with the averaged growth rate of 5.0 percent per year. Since 2007, however, the Kingdom has confronted a number of challenges - ranging from a military coup in late 2006, political turmoil from 2008 to 2011, the U.S. financial institution crisis reaching its peak from 2008 to 2009, floods in 2010 and 2011 to the Eurozone Crisis in 2012. As a result, during 2007-2011, the averaged GDP growth rate of the country has slumped once again to 2.6 percent per year. Despite from the recent policy issue in the previous years, the latest 2012 Expat Explorer Report, which is undertaken by HSBC Bank International, Thailand still remains top spot for the expatriates to work and live.

For Thailand the leading imports tend to be inputs into the production process, intermediates or semi-finished goods sent to Thailand for final assembly. Clearly, the role of inwards FDI is important in these forms of production since it is closely associated with the processing of semi-finished goods. But the instability has resulted in sluggish FDI investments in Thailand

Figure 2: FDI investment in Thailand (USD Bn)



Moreover, due to increased globalization there has been increase in competitiveness of actual and potential competitors to Thailand. This includes China, India and Vietnam all of which have lower production costs.

Thailand Chemicals Industry consists of a large number of manufacturers producing a variety of chemical products and industry plays a major role in Thailand's economy. Materials produced are generally used as raw materials in the production of finished goods by various industries, with basic chemical products being necessary for the intermediate production of other downstream chemical products.

In 2011, chemical imports (HS Code 28- 38, except 30, 35 and 36) were approximately 467 billion baht (15.5 Bn USD), which is an increase of 22.62% from the previous year. On the other hand, chemical exports (HS Code 28-38, except 30, 35 and 36) were 203 billion baht (6.7 Bn USD), which is an increase of 22.89% from the previous year.

The trend for Thailand's petrochemical industry in 2012 is of a continuous growth as the result of the country's post-flood restoration, led by the restoration and confidence stimulation program from the manufacturing sector. Private and household sectors are expected to have more expenditure to restore businesses and housing, resulting in more demand for products. The government will also stimulate domestic expenditure. The US financial crisis and the public debt crisis in the European Union are not expected to significantly impact Thailand's petrochemical industry because its primary markets are in Asia, such as China, India and Vietnam, all of which have a high growth of product demands, resulting in high demand for petrochemicals as the raw materials for production.



## 2. Trade agreements

The figure below represents the chronological order of some of the key milestones in the Thailand's trade relations.

Thailand has signed a number of bilateral and multilateral FTAs in part to try to respond to the increased competition, including the ASEAN Free Trade Area (AFTA), Japan-Thailand Economic Partnership Agreement (JTEPA), China-Thailand Free Trade Agreement (FTA), Thai-Peru Free Trade Agreement, Thailand-Australia Free Trade Agreement (TAFTA), Thailand-India Free Trade Agreement, European Free Trade Association (EFTA) and the Greater Mekong Sub-region and Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC).

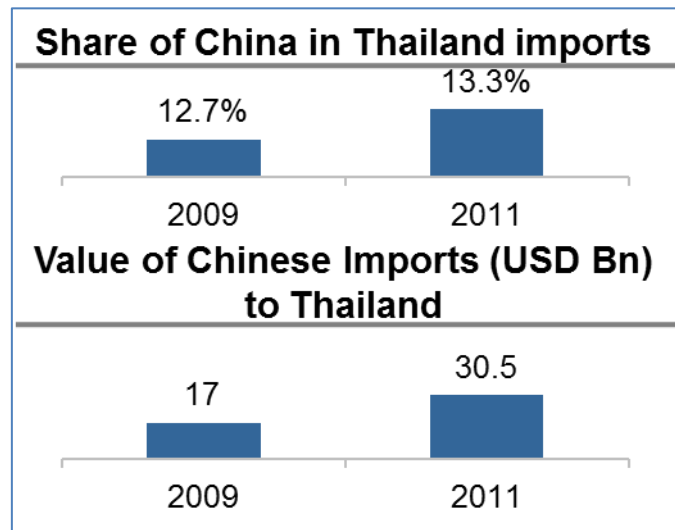
### Trade relation with China

Prior to 1975, Sino-Thai relations were one of mutual suspicion as China supported left leaning factions within the Thai political circle and Thailand was weary of Chinese involvement with Cambodia's conflicts. Sino-Thai developed positively in 1978 when China continued backing Thailand during Cambodia's internal conflict whereby communist forces from Vietnam ousted the Khmer Rouge from power and threaten the security of South East Asia. The bilateral trade relations have grown from year to year. Sino-Thailand bilateral trade volume in 1999 was of US \$4.22 billion. Trade volume between the two countries reached US \$25.3 billion in 2006, 31.07 billion dollars in 2007 and 36.2 billion dollars in 2008.

China is Thailand's second largest export market. China and Thailand have signed a Free Trade Agreement back in 2003 which covered agricultural products. A comprehensive agreement is still pending negotiations. China also takes advantage of the ASEAN-China Free Trade Area which came into effect January 1, 2010 which allows its goods to be exported through ASEAN countries with zero or reduced trade barriers. China has planned to create China City Complex in Thailand to boost trade and get around trade barriers in the ASEAN region as well as other large foreign markets which Thailand has trade agreements with such as the United States and European Union.

Figure below represents the increase import preference of China with the increased focus of China for Thailand's markets.

Figure 3: China Thailand trade relations



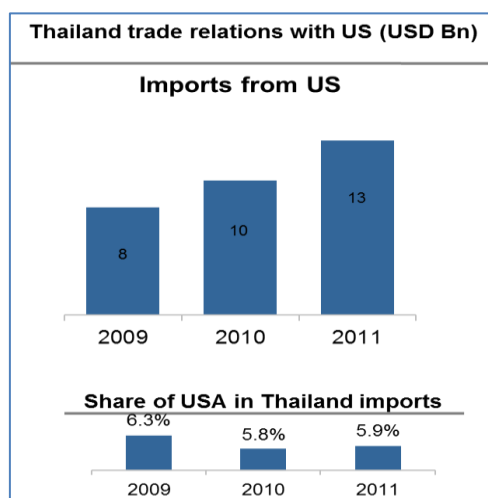
The ASEAN–China Free Trade agreement reduced tariffs on 7,881 product categories, or 90% of imported goods, to zero. This reduction took effect in China and the six original members of ASEAN: Brunei, Indonesia, Malaysia, the Philippines, Singapore and Thailand. The remaining four countries will follow suit in 2015. The average tariff rate on Chinese goods sold in ASEAN countries decreased from 12.8 to 0.6% on 1 January 2010 pending implementation of the free trade area by the remaining ASEAN members. Meanwhile, the average tariff rate on ASEAN goods sold in China decreased from 9.8 to 0.1%.

Riding on the ACFTA China has overtaken the United States as the third largest trading partner of ASEAN, after Japan and the European Union .China has ensured that certain demand centers for Chinese products are there. And when these companies leverage the low cost advantage, other companies in those markets are forced to strategically move to Chinese suppliers.

### Trade relation with USA

Thailand is a net exporter to the USA with exports amounting to around 22.5 billion USD while imports are only to the tune of 13 billion USD. President George W. Bush and Prime Minister Thaksin Shinawatra announced the intention to negotiate a US-Thailand free trade agreement in October, 2003 during President Bush's state visit to Thailand on the event of the APEC Leaders' meeting in Bangkok. But Mr. Thaksin was deposed in the 2006 Thai coup d'état without having had finished negotiating the agreement.

Figure 4: US Thailand Trade relations



### Trade relation with Japan

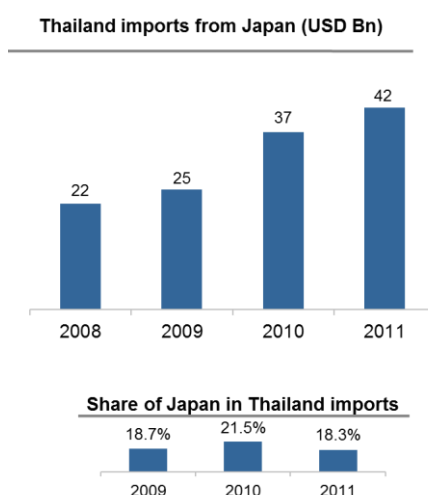
In 2007, Thailand and Japan entered into The Japan–Thailand Economic Partnership Agreement (JTEPA) which is a free-trade agreement between Thailand and Japan. The agreement was a deal that would eliminate tariffs on more than 90 per cent of bilateral trade within 10 years.

According to this agreement, Japan will immediately remove the tariffs on almost all industrial products from Thailand. Japan will also immediately remove the tariffs on processed shrimps and tropical fruits such as mango and papaya from Thailand.

Thailand will immediately remove the tariffs on half of all Japanese steel imports. The remainder will be duty-free by 2017. Over the next few years; Thailand will remove the tariffs on Japanese fruits such as apples, pears and yams. By 2011, Thailand will reduce the tariffs on Japanese automobiles with an engine displacement of 3000 cc or larger to 60% from 80%.

By 2012, Japanese auto parts except five will become duty-free. The remaining five will become duty-free in over the next 7 years. Japan will also reduce the tariff on Thai boneless chicken to 8.5% down from the current 11.9% and on cooked chicken to 3% down from 6%. By 2017, approximately 92% of tariffs on imports from Thailand to Japan and 97% of tariffs on imports from Japan to Thailand will become duty-free.

**Figure 5: Japan Thailand trade relations**



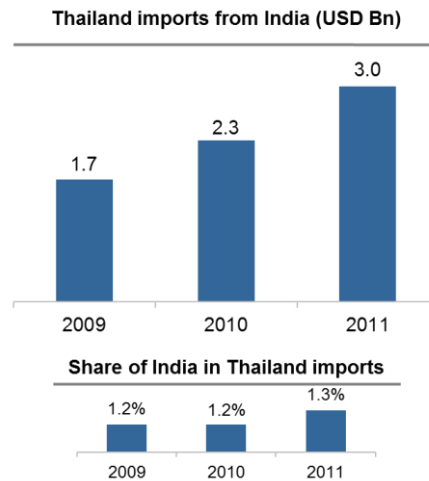
### **Trade relation with India**

India had inked a free trade agreement (FTA) with Thailand in 2003 for setting up of a free trade area covering goods, services and investment in 10 years. The Indo-Thai FTA covers as many as 84 items and several areas in the first phase including services, investment and goods like food items, tourism, auto parts, electronic goods.

India is party to the India- ASEAN FTA in 2010 to intensify trade and investment relations. India-ASEAN FTA is currently functional with four members including Singapore, Thailand, Malaysia and Vietnam. The signing of the ASEAN-India Trade in Goods Agreement paves the way for the creation of one of the world's largest FTAs – a market of almost 1.8 billion people with a combined GDP of US\$ 2.8 trillion. The ASEAN-India FTA will see tariff liberalisation of over 90 percent of products traded between the two dynamic regions, including “special products,” such as palm oil (crude and refined), coffee, black tea and pepper. Tariffs on over 4,000 product lines will be eliminated by 2016, at the earliest.

Talks are on India-Thai Free Trade Agreement which will result in greater trade expansion up to the tune of 14 Billion dollars. Thailand and India are also cooperating in various multilateral fora like India's dialogue partnership with ASEAN, the ASEAN Regional Forum (ARF), and the East Asia Summit, the sub-regional grouping BIMSTEC (Bay of Bengal Initiative for Multi Sectoral Technical and Economic Cooperation ) involving Bangladesh, India, Sri Lanka, Thailand, Myanmar, Nepal and Bhutan, and trilateral transport linkages with Thailand, Myanmar and India.

**Figure 6: India Thailand Trade Relations (USD Bn)**



### Summary of trade agreements

Analysis of Thailand's trade relations with its major trade partners showcase that India needs to aggressively pursue trade relations to capture the upcoming window of opportunity for import in Thailand. India is already in the fray with the signing of the India-ASEAN FTA. Although the process had started long ago, the final terms are yet to be sealed.

Other countries like China, Japan and ASEAN countries have an advantage over India as they have established trade relations with Thailand and already have large dollar volumes. Since India has recently increased its focus on improving bilateral trade with Thailand, India needs to increase its focus towards developing a comprehensive FTA with Thailand to ensure its cost competitiveness as compared with other Asian exporters and develop trade agreements for niche segments where the needs of Thailand and capabilities of India are a good match.

### 3. Product segments

We look in detail at some of the focus segments and understand which products are the key import requirements of Thailand and what Indian companies (Especially SMEs) need to do to ensure a strong presence in Thailand.

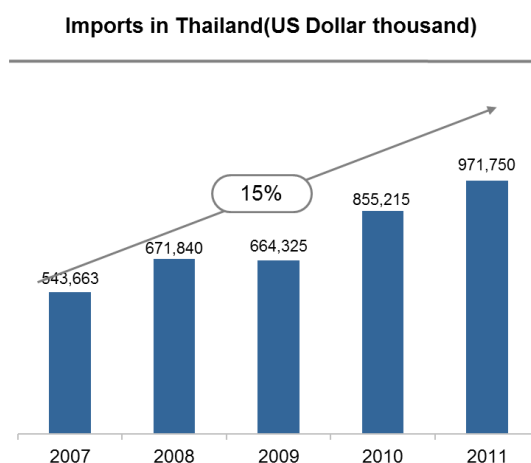
The key segments covered are :-

1. Essential oils, perfumes, cosmetics & toiletries (HS 33)
2. Inorganic chemicals (HS 28)
3. Castor Oil (HS 15)
4. Dyes (HS 32)
5. Soaps (HS 34)
6. Agrochemicals (HS 38)
7. Organic chemicals (HS 29)

#### 1. Essential oils, perfumes, cosmetics & toiletries

Thailand has seen a strong rise in imports of these products over the last few years. The imports have grown at ~15% p.a. during 2007-2011. Figure below represents the growth scenario:

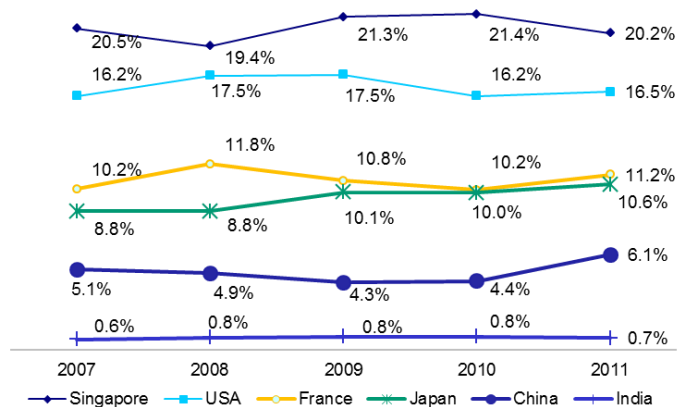
Figure7: Imports in Thailand ('000 \$)



Historically, Singapore and USA have been the leading exporters to Thailand in this category (Refer figure below). FTAs with Japan and China have also made them big exporters to Thailand.

Figure 8: Imports in Thailand (% share of total HS33 imports)

Imports in Thailand(US Dollar thousand)



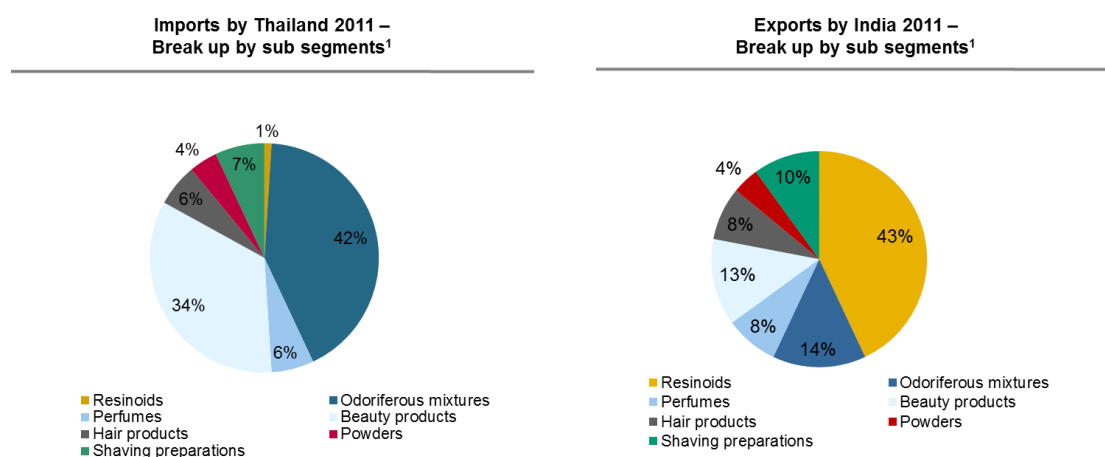
From the above, it is clear that percent share of countries other than China and Japan have remained almost at the same level. China and Japan have been able to increase their share in the last 5 years. This has been mostly due to their cost competitiveness and it is further accentuated in recent times due to lowering of tariff rates. However this growth is not just because of cost competitiveness but also because China has been able to provide products specific to Thai market needs.

The sub segments within this group are :

- 3301- Resinoids,
- 3302- Odoriferous mixtures,
- 3303- Perfumes,
- 3304- Beauty products,
- 3305- Hair products,
- 3306- Powder,
- 3307- Shaving preparations

From the figure below we conclude that odoriferous mixtures and beauty products are the major imports for Thailand and India has proven global competitiveness in these two segments along with the resinoids.

**Figure 9: Mapping of sub segment focus of Thailand and India**



For Thailand, odoriferous mixtures and beauty products contribute to 76% of overall imports with 42% and 34% share respectively. For India, resinoids, odoriferous mixtures and beauty products contribute to 70% of overall exports with 43%, 14% & 13% share respectively.

A direct mapping of needs of Thai market with India’s competitiveness suggests that Indian companies should focus on improving their export focus on odoriferous mixtures and beauty products for Thailand.

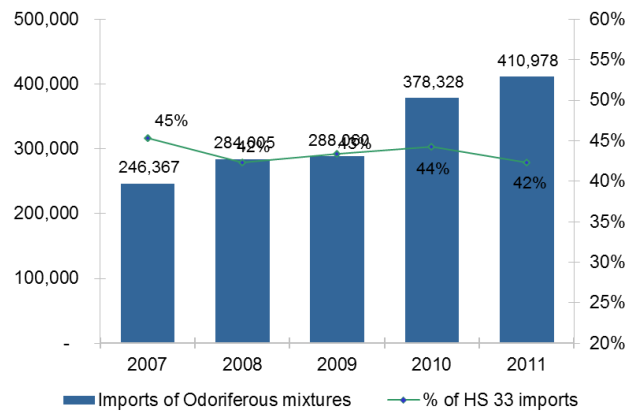
**i. Odoriferous mixtures**

Classification of odoriferous mixtures is based on the industries where it is used. The two basic classifications are “use of odoriferous mixtures for food & Beverages industry (HS code 330210)” and “other industries (HS Code 330290)”. The other industries include leather, soaps, textiles and pharmaceuticals.

Import of odoriferous mixtures has been consistent in Thailand. It has grown at ~13.6% p.a. in the last 5 years. Odoriferous mixture contributes ~42% of the overall imports of essential oils, perfumes, cosmetics & toiletries. This demand has proven to be more or less recession proof (Refer figure below).

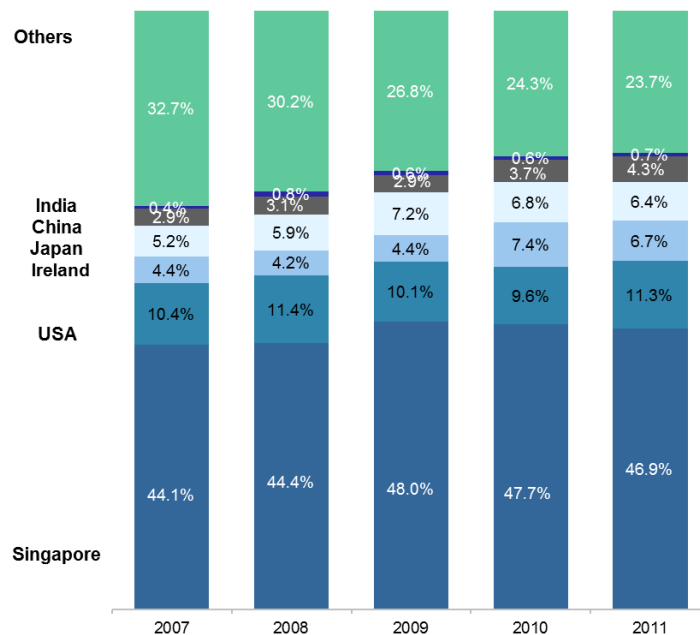


**Figure 10: Imports in Thailand ('000 \$)**



While evaluating the key importing countries for these products (Refer figure below), it is evident that India's share is negligible and more or less stagnated where as China and USA has been growing very strongly in this sector.

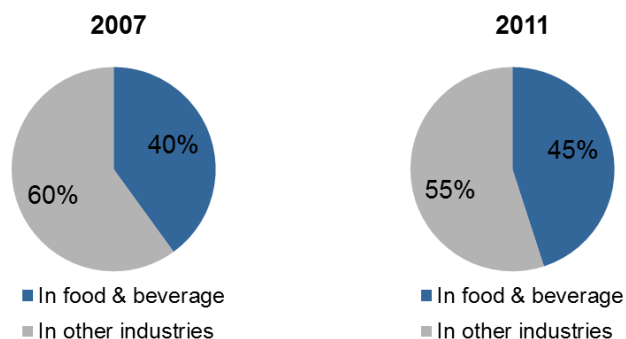
**Figure 11: Country wise import share**



India's share is stagnated at 0.6-0.8% and is lagging way behind China. Singapore has emerged as a strong exporter to Thailand and its share has increased to ~47% mostly because it has been able to achieve cost competitiveness due to economies of scale. Declining share of Japan & Ireland suggest low inclination towards high technology viz a viz the cost. Increasing share of China suggests cost competitiveness as the key differentiator. While mapping the requirement within odoriferous mixtures,

(refer figure below) Thailand's requirement seems to be increasing for odoriferous mixtures that are used in other industries.

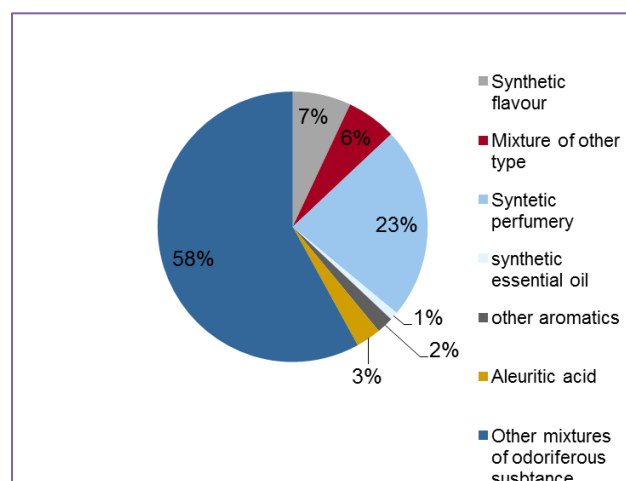
**Figure 12: Import requirements within odoriferous mixtures**



Overall the share between the food and beverages industry and other industries are evenly distributed but the food and beverages industry's demand is increasing at a faster pace. Nevertheless the market for other industries is still bigger than that of the demand in the food and beverages industry.

To better understand the segment to focus upon we need to look at where India currently stands in supplying these products (Refer figure below).

**Figure 13: India exports for sub segments of odoriferous mixture, 2011**



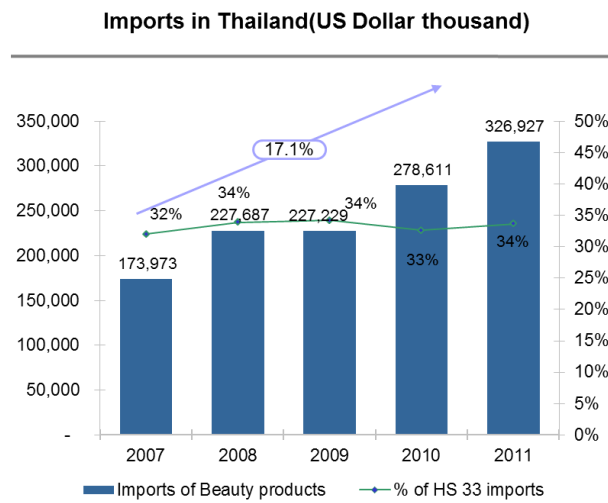
Analysis of exports by India suggests that India has strong competitiveness in odoriferous mixtures for other industries. India exports almost \$185 Mn of odoriferous mixtures however its focus is limited in Thailand (<1%). India's global competitiveness is currently in other mixtures odoriferous substance and synthetic perfumery compounds. Whereas in terms of competitiveness it has focus mostly on providing odoriferous mixtures for other industries as compared to food & beverages. Since this is a

key focus of Thailand also, India stands a good chance to capture significant import share if it strategically targets this segment.

**ii. Beauty products**

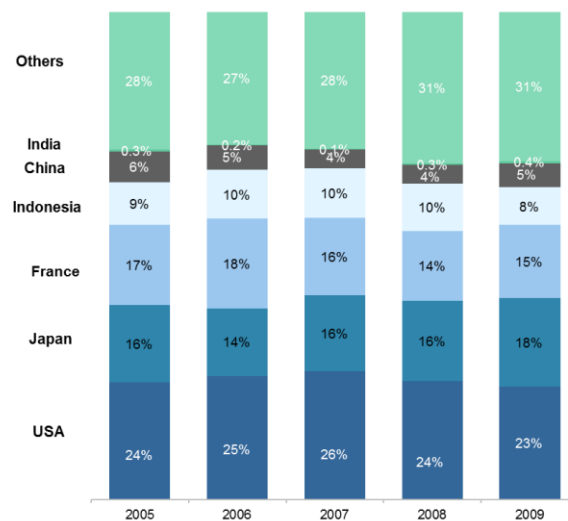
Beauty Products includes Beauty, make-up & skin-care preparations etc. These contribute ~34% of the overall imports of essential oils, perfumes, cosmetics & toiletries. Imports have grown in the last 5 years at a high growth rate of 17% p.a. (Refer figure below).

**Figure 14: Imports in Thailand ('000 \$)**



While evaluating the key countries for these products (Refer figure below), it is evident that US, Japan and France has a strong presence in this segment.

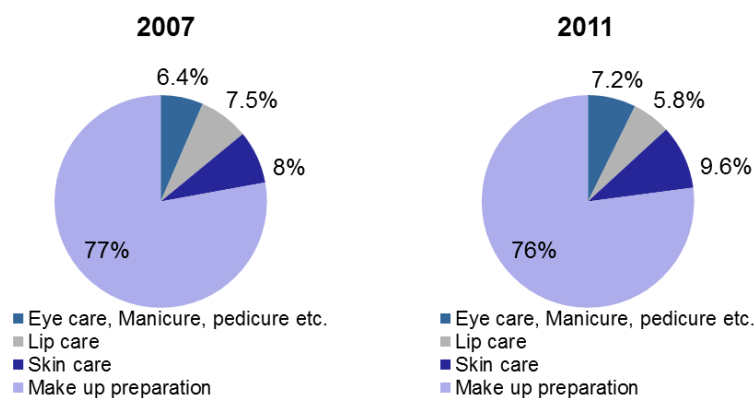
**Figure 15: Country wise import share**



Neither India nor China has been able to establish its presence in beauty products. Share of USA, France and Japan have remained almost constant over the last 5 years. Increase in disposable income and presence of youth consumers has led to increase in imports of these aspiration products. Also the novelty factor and brand value of the products from France, US and Japan has prevented India or China from gaining a firm foothold in this market. Also many of the multinationals have established themselves in Thailand and beauty & healthcare products form a major component of Thailand's exports.

While mapping the requirement within beauty segments, (refer figure below) Thailand's requirement seems to be the most for make-up preparation which includes "Beauty or make-up preparations; sunscreen or sun tan preparations".

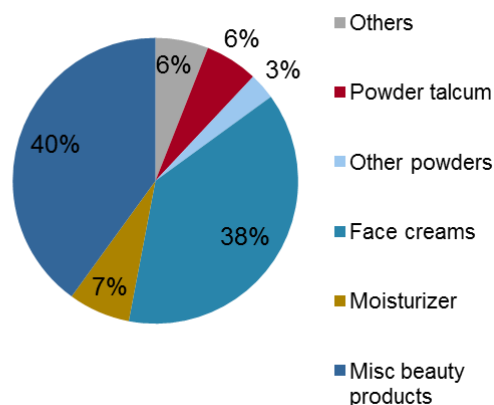
**Figure 16: Import requirements within beauty products**



Import of make-up preparations make up ~76% of the total imports in the category while import of other segments forms a very small proportion of the total beauty products category. Other beauty product segments are "Powders, skin care, lip make-up preparations, eye make-up preparations manicure or pedicure preparations". Focus on import for make-up preparation has further gained prominence for Thailand in recent years.

To better understand the segment to focus upon we need to look at where India currently stands in supplying these products also (Refer figure below).

Figure 17: India exports for sub segments of beauty products, 2011



Analysis of exports by India suggests that Indian SME players lack advanced product formulations & established brands; which are a requirement in Thailand for beauty products. Indian exports in this segment are mostly based on planning of large MNCs who have set up production facility in India to cater to Indian market and near-by countries.

### iii. Strategic recommendations

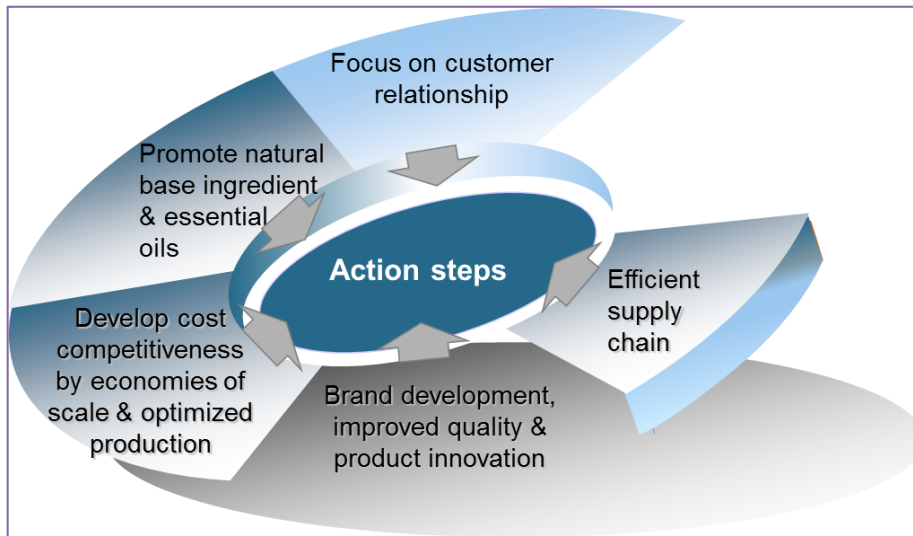
Based on the detailed analysis of the products in these segments, the requirements of Thai markets and the capability of Indian players, the following are the key recommendations:

- *Indian exporters could target odoriferous mixtures segment as they are competitive in this segment and could increase their share in coming years by targeting price sensitive importers*
- *Indian SMEs could approach beauty products segment by becoming “approved” vendors for MNCs such as Unilever, P&G etc; Selling directly or through distribution is not recommended*
  - *On the downside Thailand already has a booming beauty products industry and other economies like France, US & Japan already have a strong foothold in these markets*
- *Indian SME players could promote natural base ingredient & essential oils; as the demand for such products is increasing and India could leverage its Herbal/ Ayurveda roots*

These recommendations are the starting point, Indian players should also look on developing capabilities which provide them long term advantages and position them as preferred source for imports.

Some of the key action steps are listed below (refer figure below)

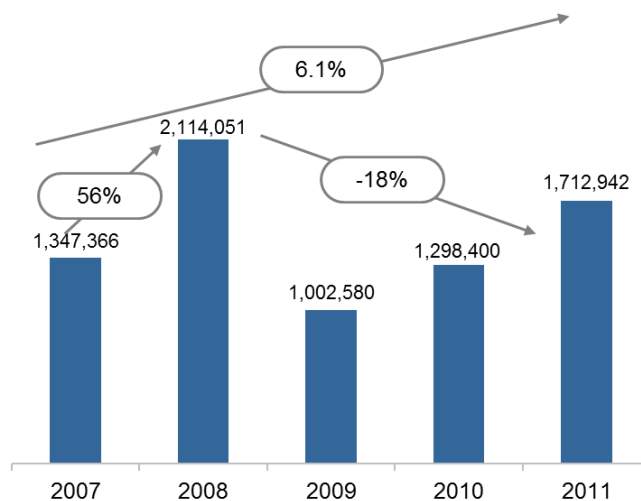
Figure 18: Required action steps by Indian players



## 2. Inorganic chemicals, precious metal compound, isotopes

Thailand has seen a strong rise in imports of these products over the last few years but has sharply declined since the economic slowdown in 2009. The imports have grown at a CAGR of ~56% from 2007 to 2008 and but has declined by -18% from 2008 to 2011. The good news is that the imports have been steadily increasing since the slump in 2009. Figure below represents the growth scenario:

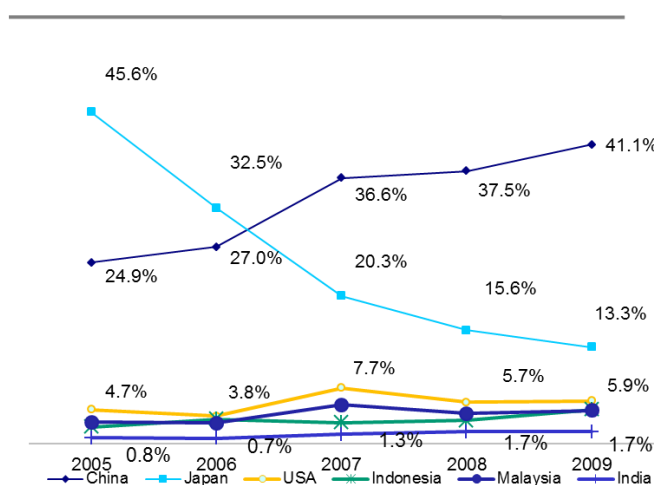
Figure 19: Imports in Thailand ('000 \$)



Historically, Japan had been the leading exporter to Thailand in this category with ~50% but in the last 5 years Japan's share has declined to ~13% while China's share has grown from 25% to 41% during 2007-2011. FTA with China has been the major contributor to this trend.

Figure 20: Major exporting nations to Thailand (% share of total HS28 imports)

### Imports in Thailand (US Dollar thousand)



This is primarily due to the lower tariff rates offered to Chinese products as well as the ability of China to provide products specific to Thai market needs. Other countries like Indonesia, India and United States have not been able to increase their share in imports significantly.

The sub segments in this category are -

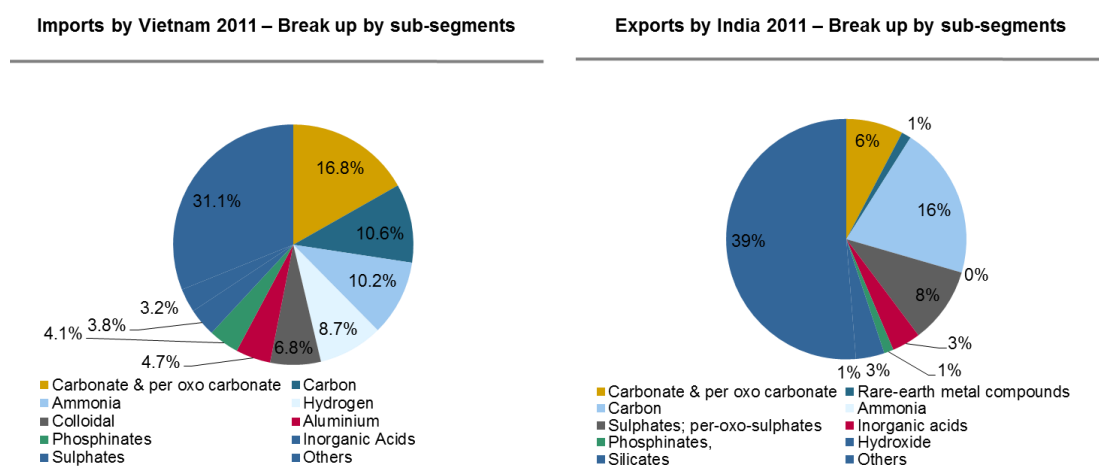
- 2836 - Carbonate; peroxy carbonate, commercial ammonium carbonate
- 2846 - Rare-earth metal compounds of yttrium or scandium
- 2803 - Carbon (carbon blacks & other forms of carbon)
- 2814 - Ammonia, anhydrous or in aqueous solution
- 2833 - Sulphates; alums; per-oxo-sulphates (per-sulphates)
- 2811 - Inorganic acids, other inorganic oxygen compounds of non-metals
- 2835 - Phosphinates, phosphonates, phosphates & polyphosphates hypophosphites
- 2815 - Hydroxide, sodium (caustic soda)&caustic potash; peroxide of sodium & pot
- 2839 - Silicates; commercial alkali metal silicates
- Others – Including 2818 (Aluminium oxide (including artificial corundum); aluminium hydroxide), 2840 (Borates; per-oxo-borates ( per-borates)), 2817 (Zinc oxide; zinc peroxide), 2827 (Chlorides, bromides, iodides & their oxides; chloride hydroxides), 2825 (Hydrazine & hydroxylamine & their inorganic salts; other inorganic bases), 2843 (Colloidal precious metals; precious metal compounds; amalgams of precious metals), 2823 (Titanium oxides), 2828 (Hypochlorite; commercial calcium hypochlorite; chlorites; hypobromites), 2847 (Hydrogen peroxide), 2804 (Hydrogen, rare gases & other non-metals), 2807 (Sulphuric acid), 2821 (Iron oxides & hydroxides), 2849 (Carbides, whether or not chemically defined), 2844 (Radioactive chemical elements & isotopes, their compounds, mixtures & residues), 2842 (Salts of inorganic acids or per-oxo-acids, excluding azides), 2841 (Salts of oxo metallic or per oxo metallic acids), 2834 (Nitrites; nitrates), 2831 (Dithionites and sulphoxylates), 2819 (Chromium oxides and hydroxides), 2809 (Di-phosphorus pentoxide; phosphoric acid and polyphosphoric acids), 2829 (Chlorates & perchlorates; bromates & perbromates; iodates & periodates), 2808 (Nitric acid; sulphonitric acids), 2820 (Manganese oxides), 2837 (Cyanides, cyanide oxides and complex cyanides), 2853 (Inorganic and organic compounds, incl. distilled or conductivity water), 2832 (Sulphites; thio sulphates), 2805 (Alkali/alkaline-earth metal; rare



earth metal, scandium & yttrium; mercury), 2810 (Oxides of boron; boric acids), 2802 (Sulphur, sublimed or precipitated; colloidal sulphur), 2830 (Sulphides; polysulphides), 2826 (Fluorides; fluorosilicate, fluoro aluminates & other complex fluorine salt), 2824 (Lead oxides; red lead and orange lead), 2822 (Cobalt oxides and hydroxides; commercial cobalt oxides), 2848 (Phosphides, excluding ferrophosphorus), 2816 (Hydroxide & peroxide of magnesium; oxide, hydroxide & peroxide of strontium), 2852 (Compounds, inorganic or organic, of mercury (excl. amalgams)), 2845 (Isotopes, and their compounds), 2806 (Hydrogen chloride (hydrochloric acid); chloro sulphuric acid), 2801 (Fluorine, chlorine, bromine and iodine), 2812 (Halides and halide oxides of non-metals), 2850 (Hydrides, nitrides, azides, silicides & borides), 2813 (Sulphides of non-metals; commercial phosphorus trisulphide), 2851 (Other inorganic compounds; liquid & compressed air), 2838 (Fulminates, cyanates and thiocyanates)

From the figure below we could conclude that the leading sub segments in imports of Thailand are carbonates, rare earth metal compounds, carbon, ammonia, sulphates, inorganic acids, phosphates and sodium & potassium compounds. India has also proved its global competitiveness in some of these segments like carbon, carbonates and inorganic acids along with aluminium compounds, chlorides, and sulphates among others

**Figure 21: Mapping of sub segment focus of Thailand and India**



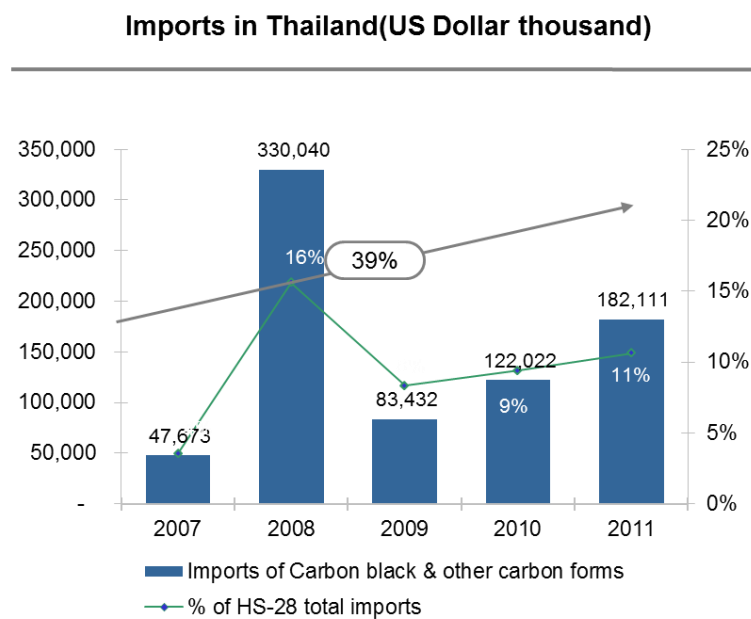
From the above analysis, we conclude that there is no major sub segment in the imports of Thailand as well as exports from India; however, top 5-6 sub segments hold at least 5-15% share each in the overall imports & exports.

A direct mapping of needs of Thai market with India's competitiveness reveals that Indian companies could focus on improving their export focus on carbonates & peroxy-carbonates and Carbon Black & other forms for Thailand.

**i. Carbon (carbon blacks & other forms of carbon)**

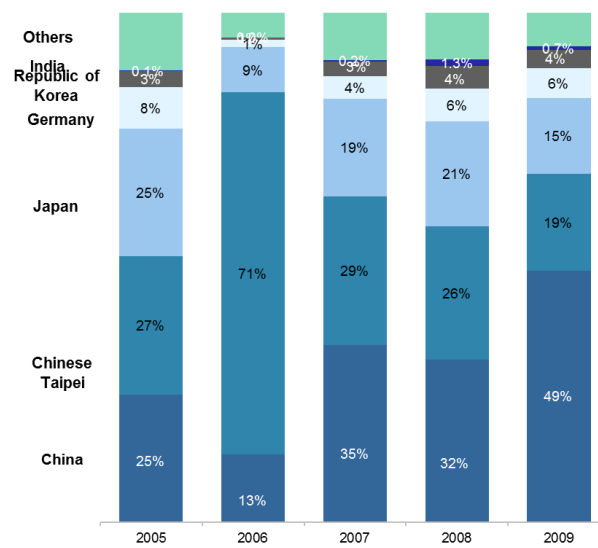
Import of carbon in carbon black and other forms have grown over the years except for a sharp decline in 2009 due to economic recession. Carbon products contribute ~11% of the overall imports of Inorganic chemicals, precious metal compounds & isotopes (Refer figure below).

**Figure 22: Imports of Carbon (Carbon black & other forms) in Thailand ('000 \$)**



While evaluating the key countries for these products (Refer figure below), it is evident that China, Chinese Taipei and Japan supply the bulk share. China has been steadily increasing its share while that of Taipei and Japan are gradually decreasing.

**Figure 23: Country wise import share**



India's share is negligible in this segment. China has remained a strong exporter to Thailand;

To better understand the segment to focus upon we need to look at where India currently stands in supplying these products (Refer figure below).

**Figure 24: Country wise export share – India'2011**

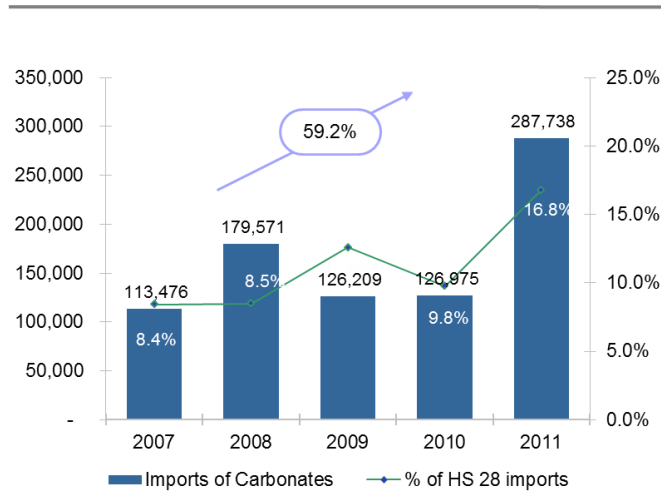
Countries	% of total carbon products exports from India
United Arab Emirates	59%
Sri Lanka	9%
Japan	7%
Indonesia	7%
Vietnam	6%
Iran	3%
Turkey	2%
Philippines, Chinese Taipei, Malaysia, Thailand	1%
Others	4%

Analysis of exports by India suggests that India has major focus towards UAE for carbon products exports. South East Asian countries hold a relatively smaller share in India's exports. Since, India has close to USD 5 bn trade with Thailand, India stands a good chance to capture significant share if it strategically targets this segment.

**ii. Carbonate, per-oxo-carbonate, commercial ammonium carbonate**

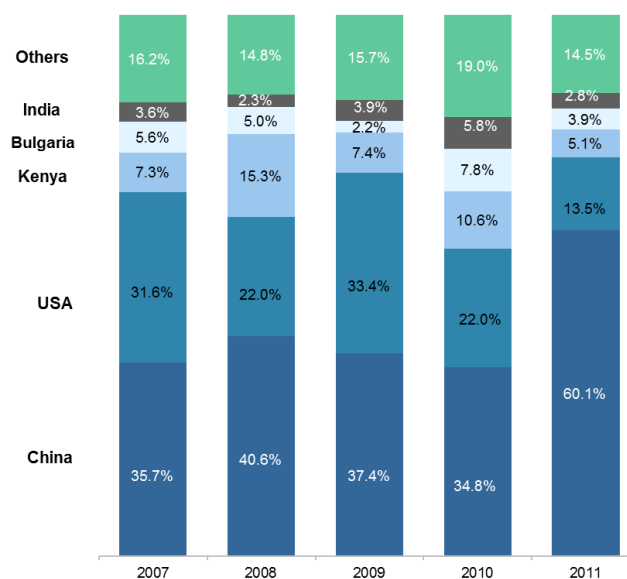
Import of carbonates and per-oxo-carbonates has increased significantly in Thailand after the economic slowdown of 2009. It has grown at a CAGR of ~59% during 2007-11. Carbonates & per-oxo-carbonates contribute ~17% of the overall imports of Inorganic chemicals, precious metal compounds & isotopes (Refer figure below).

**Figure 25: Imports of carbonates & per-oxo-carbonates in Thailand ('000 \$)**



While evaluating the key suppliers for these products (Refer figure below), it is evident that China and USA are the largest exporters to Thailand in this category whereas India's share has declined over the years.

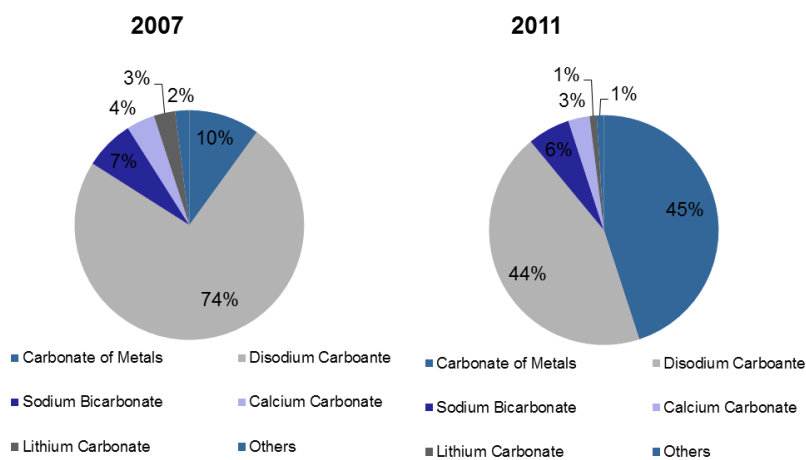
**Figure 26: Country wise import share**



China's share has increased to ~60% from ~35% during 2007-11. USA's share has been steadily reducing over the years and in 2011 USA has ~14% share in the total imports in the category.. However, India's share has declined from ~3.6% in 2007 to 2.8% in 2011 in Thailand's imports. Increasing cost competitiveness and FTA with China could be the reasons for China's strong leadership Thai markets.

While mapping the requirement within carbonates segment, (refer figure below) Thailand's requirement seems to be increasing for Disodium carbonates

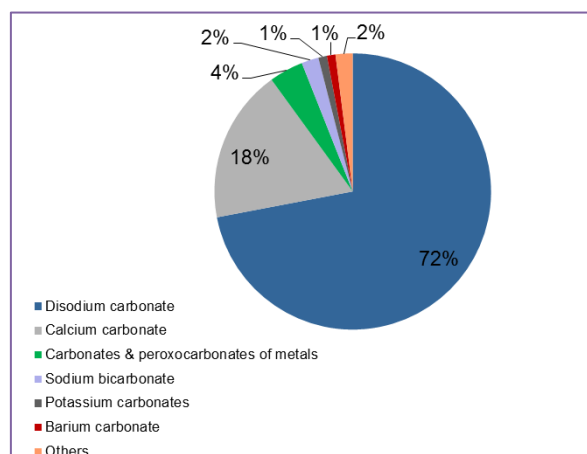
**Figure 27: Import requirements within carbonates segment**



Share of Disodium carbonates in the overall carbonates imports in Thailand have decreased from 2007 to 2011, while the share of Carbonates & Peroxocarbonates of metals had increased.

To better understand the segment to focus upon we need to look at where India currently stands in supplying these products (Refer figure below).

**Figure 28: India exports for sub segments of carbonates, 2011**



Analysis of exports by India suggests that India has strong competitiveness in Disodium carbonate and calcium carbonates. Although the percentage share of Disodium Carbonates of total imports is decreasing still it is the best bet for Indian companies given the Indian companies strengths.

### **iii. Strategic recommendations**

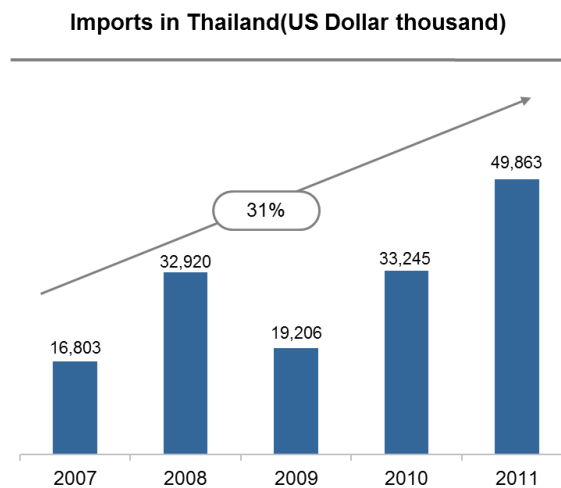
Based on the detailed analysis of the products in these segments, the requirements of Thai markets and the capability of Indian players, the following are the key recommendations:

- *Indian exporters could target carbon black & other forms of carbon as they are competitive in this segment and could increase their share in coming years by targeting price sensitive importers*
  - *India does not have a strong foothold in Thailand but with competitive prices and superior quality Indian companies can increase their market share.*
- *Within the carbonates and per-oxo-carbonates segment, although Thailand's demand (as a % of total imports) is decreasing for Disodium carbonate and India is also strongly placed for this product category. Hence, Indian SMEs should focus on achieving more market share in Thailand imports for Disodium carbonates*
  - *Cost could be a major factor here as China holds the major part of Thailand imports for this segment with ~60% share.*

### 3. Fixed vegetable fats & oils & their fractions

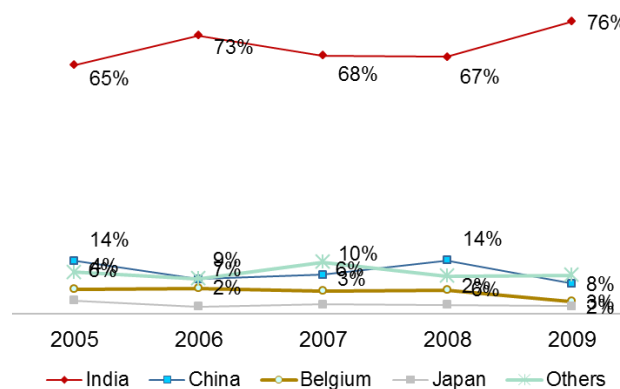
Thailand has seen a strong rise in imports of these products over the last few years except for a small decline in 2009. The imports have grown at a CAGR of ~31% during 2007-11. Figure below represents the growth scenario:

Figure 29: Imports in Thailand ('000 \$)



India has been the leading exporter to Thailand in this category with 70% to 75% share in the imports, (Refer figure below). China's share has been fluctuating over the years and was around 8% in 2011.

Figure 30: Major exporting nations to Thailand (% share of total HS1515 imports)



Other countries like Japan and Belgium have not been able to increase their share in imports significantly.

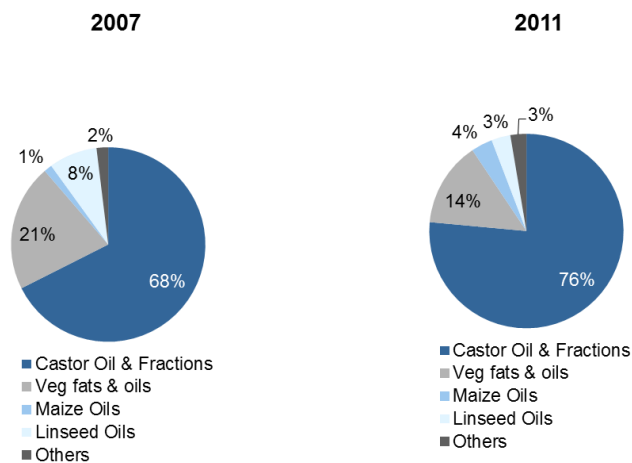
The sub segments in this category are -

- 151529 - Maize (corn) oil and its fractions, refined but not chemically modified

- 151590 - Veg fats & oils & their fractions, refined or not but not chemically modified
- 151519 - Linseed oil and its fractions, refined but not chemically modified
- 151550 - Sesame oil & its fractions whether/not refined, but not chemically modified
- 151530 - Castor oil & its fractions, whether/not refined, but not chemically modified
- 151511 - Linseed oil, crude
- Others – Including 151560 (Jojoba oil & its fractions whether/not refined, but not chemically modified), 151540 (Tung oil & its fractions, whether or not refined, but not chemically modified) and 151521 (Maize (corn) oil crude)

From the figure below we conclude that the share of Castor oil & its fractions and vegetable fats, oils & its fractions in the overall vegetable oil & fats segment is the biggest and has also increased from 2007 to 2011, while share of the other sub-segments have decreased or largely remained constant.

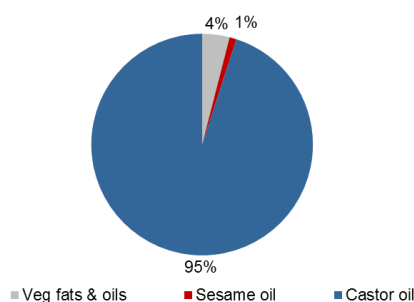
**Figure 31: Import requirements within Vegetable oils and fats segment, Thailand**



To better understand the segment to focus upon we need to look at where India currently stands in supplying these products (Refer figure below).



**Figure 32: India exports for Vegetable oils and fats segment, 2011**

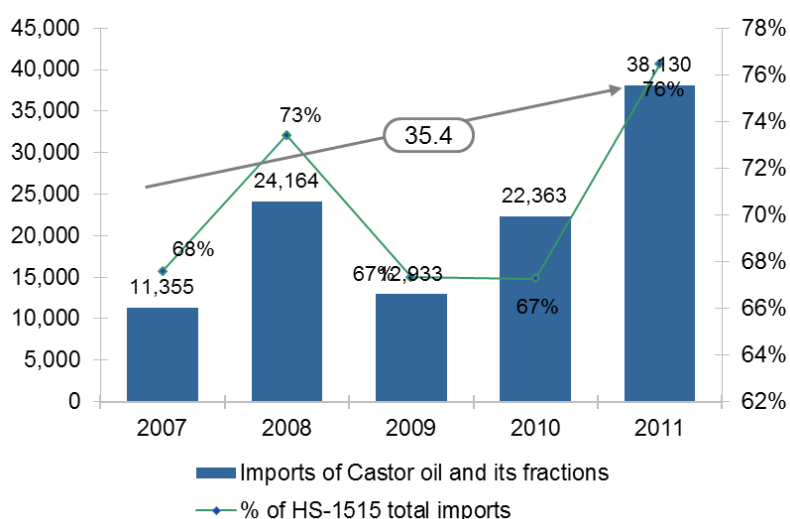


Analysis of exports by India suggests that India has strong competitiveness in castor oil as India is the main producer of castor seed in the world with 74% of the world production in 2010-11. India also has an advantage over other leading producers like China and Brazil since India's production has increased at a CAGR of 2% over the last four years giving advantage to small farmers as castor seeds can be cultivated on marginal land not suitable for other crops while China and Brazil have not seen significant increase in production over the last four years owing to low market prices

**i. Castor Oil and its fractions**

Import of castor oil and its fractions have increased at a CAGR of ~35.4% during 2007-11 with decline in 2009. Castor Oils contribute more than 70% of the overall imports of vegetable oil, fats & its fractions; the segment presents significant growth opportunities (Refer figure below).

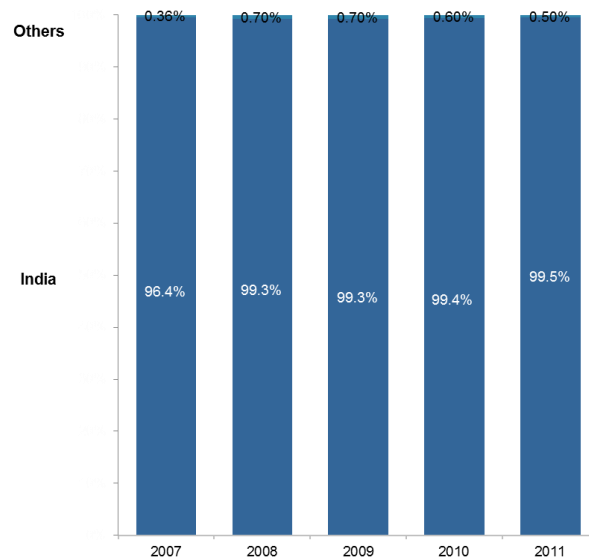
**Figure 33: Import of Castor oil and its fractions, Thailand ('000 \$)**



While evaluating the key countries for these products (Refer figure below), it is evident that India is the largest and only significant exporter to Thailand in this category with around 99% share due to its

strength as the major castor oil producer. India has managed to grow its share over the last 5 years and has now captured almost the entire market.

**Figure 34: Country wise import share, Thailand**



To better understand the segment to focus upon we need to look at where India currently stands in supplying these products also (Refer figure below).

**Figure 35: India exports for castor oil, 2011**

Countries	% of total 151530 exports from India
China	36%
France	16%
Netherland	15%
USA	12%
Thailand, Japan	4%
Belgium, UK	2%
Korea RP, Russia, Brazil, Turkey, Mexico, South Africa	1%
Vietnam	0.1%
Others	5%

Analysis shows that India exports almost \$883 Mn of castor oil & its fractions; however its focus is limited in Thailand (~2%). There is huge scope of increasing the exports further as India already has the advantage of being the leading exporter of Castor Oil to Thailand.

## **ii. Strategic recommendations**

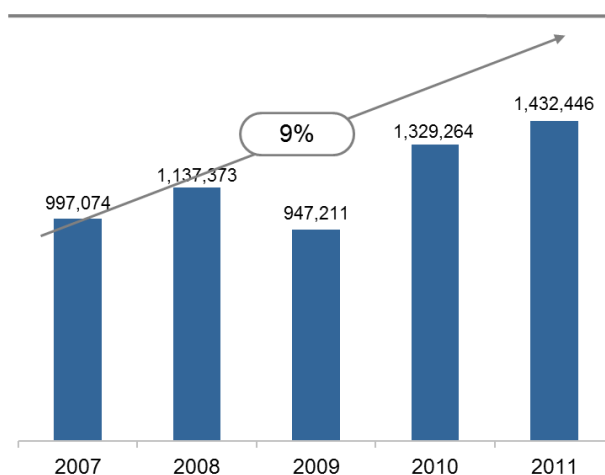
Based on the detailed analysis of the products in these segments, the requirements of Thai markets and the capability of Indian players, the following are the key recommendations:

- *India has captured almost the entire castor oil import demand of Thailand. Going forward Indian players need to defend this market share and at the same time create new demand for castor oil in Thailand to increase volumes in the future.*
- *Castor oil market is dominated by few big players who are competitive and have the ability to drop prices to increase their market sales*
  - *SMEs would need to establish good networks among the intermediaries and crushers to enter the market*
  - *Consolidation of the fragmented agri-value chain would bring more efficiency*
- *SMEs could capture the incremental demand for castor oil which is expected to grow in future owing to the following factors*
  - *Environmental concerns of using synthetic lubes is seen as a major demand driver for castor oil in future*
- *Indian exporters are strong in export of castor oil owing to strong production and manufacturing competitiveness; However more focus can be given to increase the exports further in Thailand market*

#### 4. Tanning or dyeing extracts, tannins & their derivatives, pigments etc.

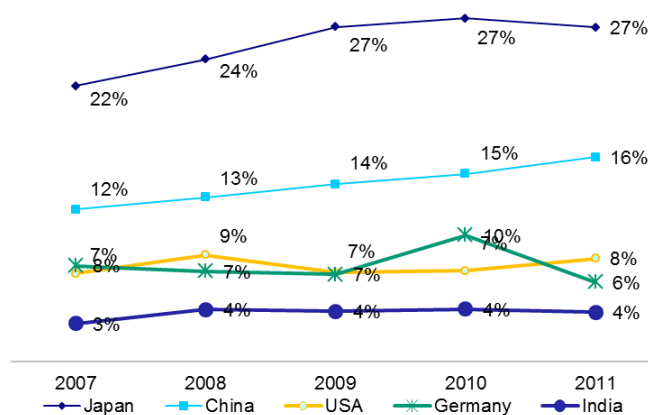
Thailand has seen a rise in imports of these products over the last few years. The imports have grown at a CAGR of ~9% during 2007-11. Figure below represents the growth scenario:

Figure 36: Imports in Thailand ('000 \$)



Japan has been the leading exporter to Thailand in this category with ~27% share in the imports followed by China, USA and Germany. (Refer figure below).

Figure 37: Major exporting nations to Thailand (% share of total HS32 imports)



Japan's share has been steady at the 27% range for the last 3 years while China has been steadily increasing their volumes. In 2011 China exports 16% of the total volumes into Thailand.. This is primarily due to the lower tariff rates offered to Chinese products as well as the ability of China to provide products specific to Thai market needs. India's share has remained stagnant at 4% during 2008-11 and can be improved upon.

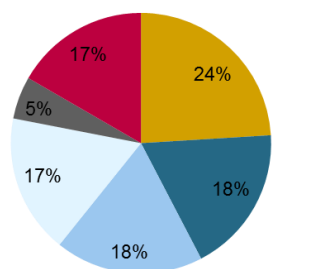
The sub segments in this category are -

- 3206 - Other colouring matter; inorganic products used as luminophores
- 3204 - Synthetic organic colouring matter & preparations
- 3208 – Non-aqueous solution of paint & varnish
- 3215 - Printing, writing or drawing inks & inks
- 3207 - Pigments, opacifiers, colours; enamels & glazes; engobes; liquid lustre
- 3214 - Glaziers putty, grafting putty, resin cements, painters fillings
- Others – Including 3209 (Aqueous solution of paint & varnish), 3212 (Pigments non-aqueous media, (liquid, paste) for paints and dyes), 3210 (Paints & varnishes), 3202 (Synthetic organic or inorganic tanning substances; tanning preps; enzymes), 3205 (Colour lakes and preparations based thereon), 3203 (Colouring matter of vegetable/animal origin), 3213 (Artists' colours, modifying tints, amusement colours), 3211 (Prepared driers), 3201 (Vegetable tanning extracts; tannins & their salts)

From the figure below we conclude that the leading sub segments in imports of Thailand are other coloring matter, inorganic products used as luminophores, Synthetic organic coloring matter & preparations, Non-aqueous solution of paint & varnish and Printing, writing or drawing inks. India has also proved its global competitiveness in some of these segments like Synthetic organic coloring matter & preparations, other coloring matter, inorganic products used as luminophores and Printing, writing or drawing inks.

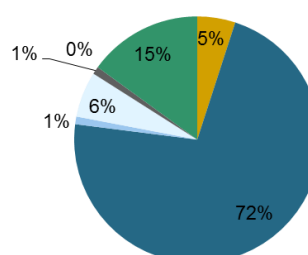
**Figure 38: Mapping of sub segment focus of Thailand and India**

**Imports by Thailand 2011 –  
Break up by sub segments**



- Inorganic products and coloring matter
- Synthetic organic colouring matter
- Non-aqueous solution of paint & varnish
- Printing, writing or drawing inks & inks
- Glaziers putty, resin cements
- Others

**Exports by India 2011 –  
Break up by sub segments<sup>1</sup>**



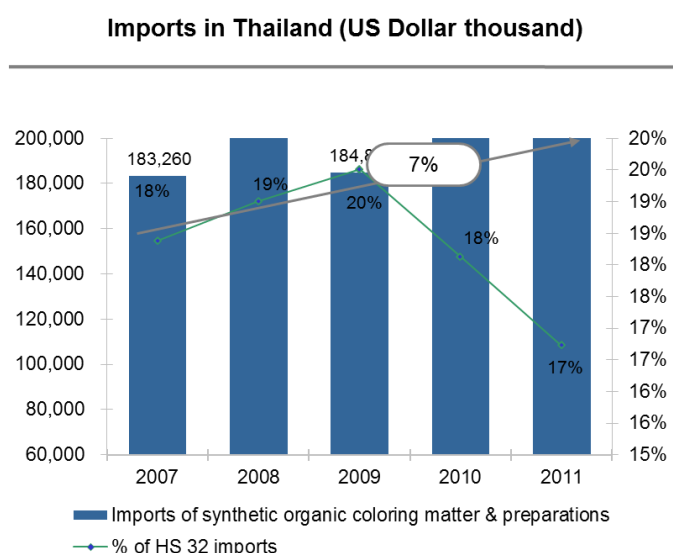
- Inorganic products and coloring matter
- Synthetic organic colouring matter
- Non-aqueous solution of paint & varnish
- Printing, writing or drawing inks & inks
- Pigments, opacifiers, colours
- Glaziers putty, resin cements
- Others

A direct mapping of needs of Thailand's market with India's competitiveness tells us that Indian companies could focus on improving their export focus on Synthetic organic coloring matter & preparations, other coloring matter, inorganic products used as luminophores and Printing, writing or drawing inks for Thailand. The next section covers these three segments and their sub segments for more clarity.

**i. Synthetic organic coloring matter & preparations**

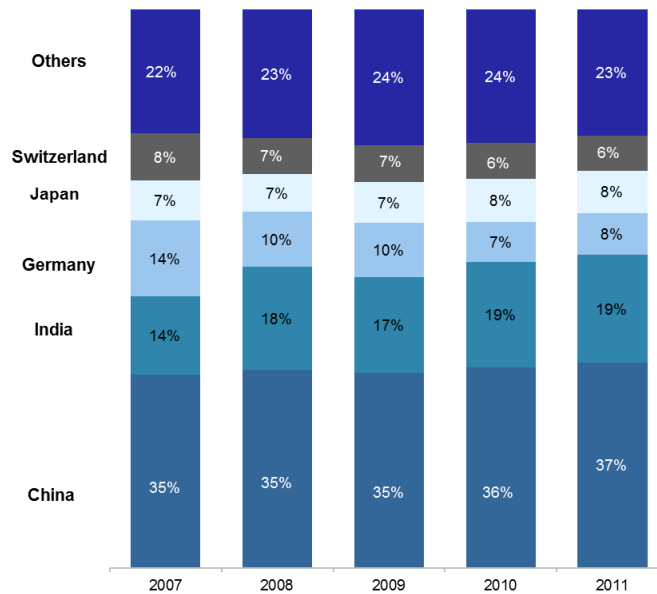
Import of synthetic organic coloring matter & preparations have grown over the years at a CAGR of ~7% during 2007-11. This segment contributes ~17% of the overall imports of tanning or dyeing extracts, tannins & their derivatives, pigments etc. (Refer figure below).

**Figure 39: Imports of Synthetic organic coloring matter & preparations in Thailand ('000 \$)**



While evaluating the key countries for these products (Refer figure below), it is evident that China is the leading exporter to Thailand in this segment followed by India and Germany.

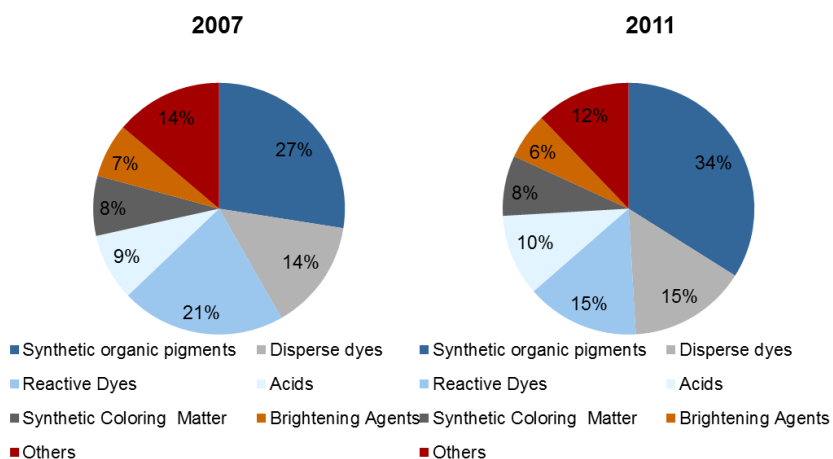
Figure 40: Country wise import share



Cost competitiveness and FTAs for China could be the major factors which have contributed to this trend. India has marginally improved its share in the overall exports to Thailand in the 5 years starting 2007.

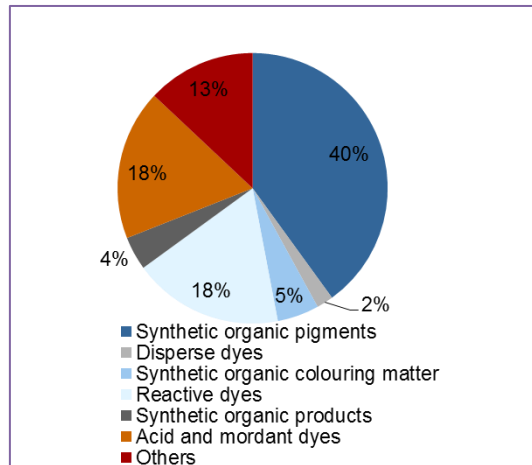
While mapping the requirement within synthetic organic coloring matter & preparations segment, (refer figure below) Thailand's requirement seems to be increasing for synthetic organic pigments and preparations, synthetic organic coloring matter, reactive dyes and acid and mordant dyes.

Figure 41: Import requirements within synthetic organic coloring matter & preparations segment, Thailand



To better understand the segment to focus upon we need to look at where India currently stands in supplying these products (Refer figure below).

**Figure 42: India exports for sub segments of synthetic organic coloring matter & preparations segment, 2011**

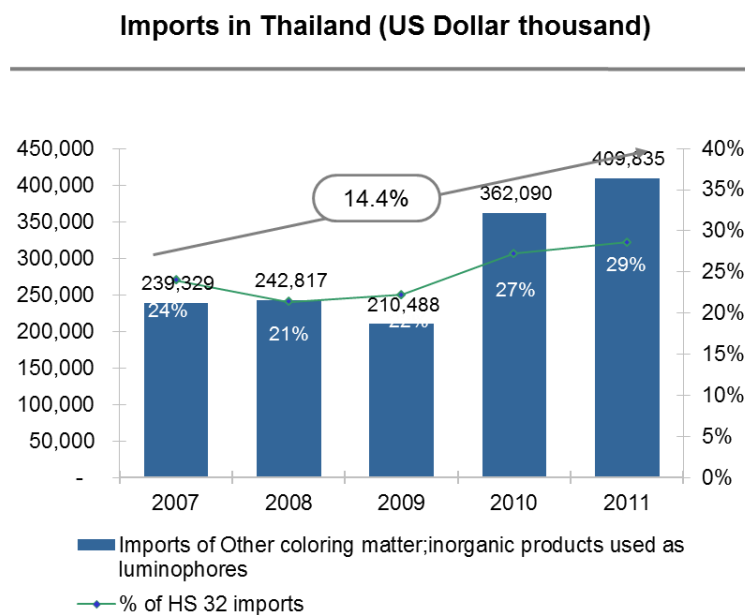


Analysis of exports by India suggests that India has strong competitiveness in Synthetic organic pigments and preparations, Acid and mordant dyes and preparations, and Reactive dyes and preparations. Since these segments are also key focus of Thailand, India has a good position to capture significant share if it strategically targets this segment.

**ii. Other coloring matter, inorganic products used as luminophores**

Import of other coloring matter, inorganic products used as luminophores, has increased at a CAGR of ~14.4% during 2007-11. This segment contributes 27-29% of the overall imports of Tanning or dyeing extracts, tannins & their derivatives, pigments etc. (Refer figure below).

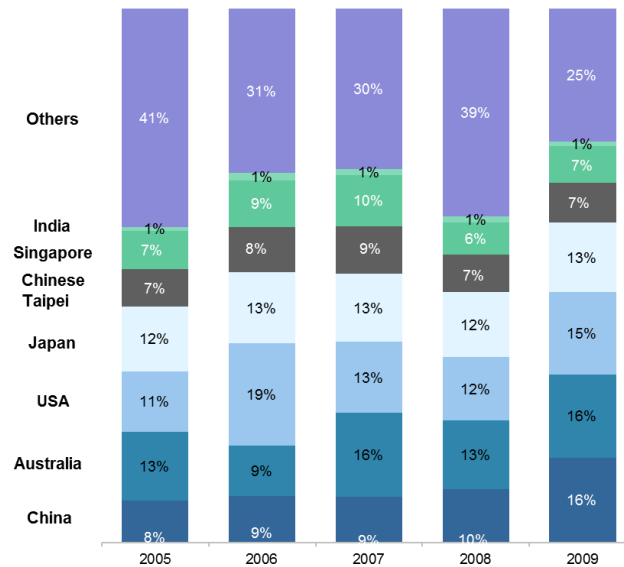
**Figure 43: Import of other coloring matter, inorganic products used as luminophores, Thailand ('000 \$)**





While evaluating the key countries for these products (Refer figure below), it is evident that Australia, China, USA and Japan are the leading exporters to Thailand in this category whereas India's share has remained negligible over the years.

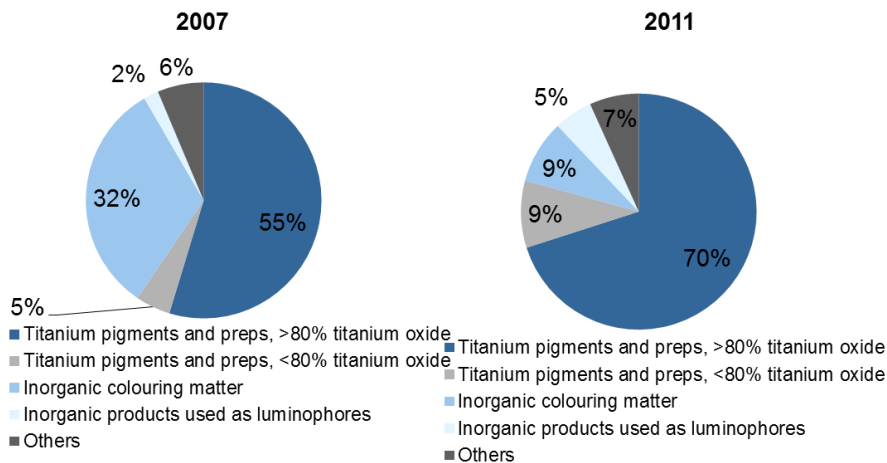
**Figure 44: Country wise import share, Thailand**



Australia, China and USA have increased their share in the 2007-11 period while share of the smaller players has come down.

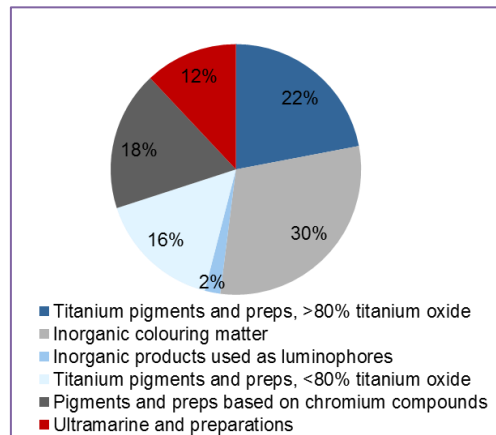
While mapping the requirement within other coloring matter, inorganic products used as luminophores segment, (refer figure below) Thailand's requirement seems to be increasing for Titanium pigments and preps, >80% titanium oxide while that of inorganic coloring matter is decreasing.

**Figure 45: Import requirements within other coloring matter, inorganic products used as luminophores segment, Thailand**



To better understand the segment to focus upon we need to look at where India currently stands in supplying these products (Refer figure below).

**Figure 46: India exports for sub segments of other coloring matter, inorganic products used as luminophores, 2011**

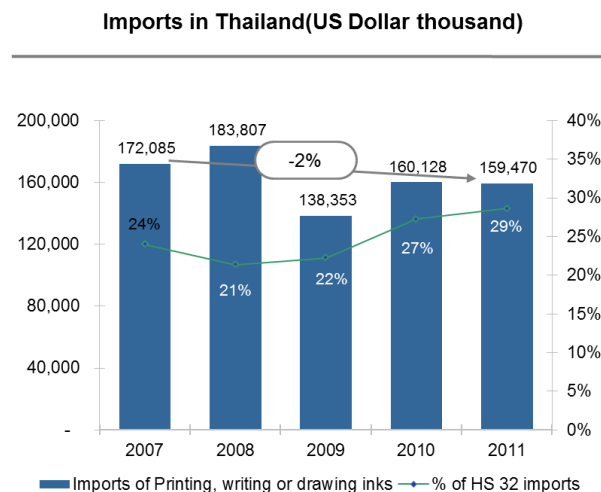


Analysis of exports by India suggests that India has strong competitiveness in Titanium pigments and preps, >80% titanium oxide and Inorganic colouring matter and preparations. Since the demand of inorganic coloring matter and preparations are going down in Thailand, India companies should concentrate more on the Titanium pigments and preps (>80% titanium oxide) sub-segment.

### iii. Printing, writing or drawing inks & inks

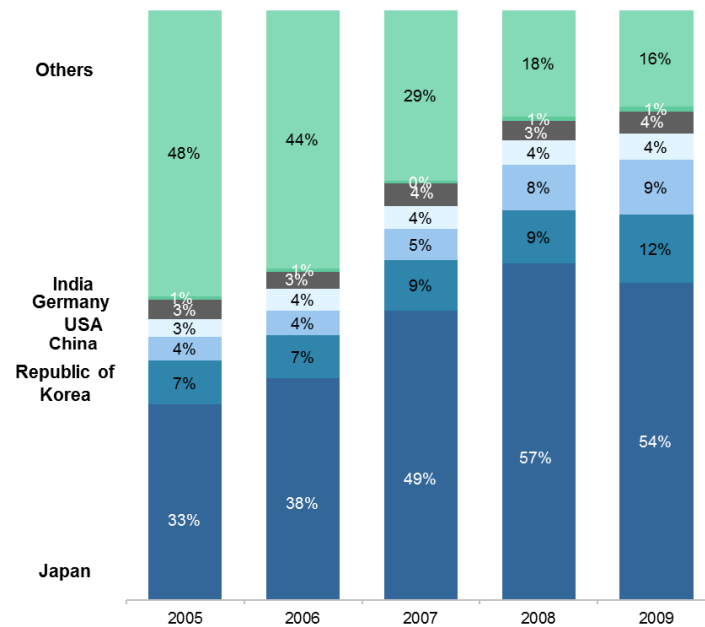
Import of Printing, writing or drawing inks has been fluctuating over the past few years in Thailand. This segment contributes ~29% of the overall imports of Tanning or dyeing extracts, tannins & their derivatives, pigments etc. but in the period 2007-11 its volumes have gone down by ~2% CAGR. (Refer figure below).

**Figure 47: Import of Printing, writing or drawing inks, Thailand ('000 \$)**



While evaluating the key countries for these products (Refer figure below), it is evident that Japan, Republic of Korea and China are the leading exporter to Thailand in this category whereas India's share has remained negligible over the years.

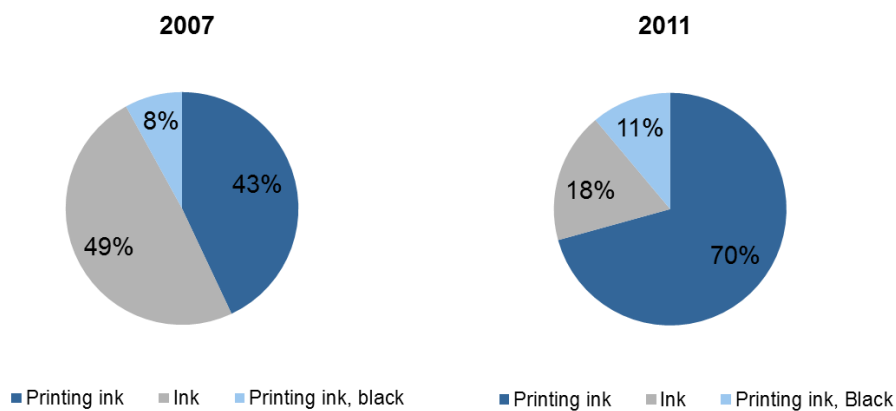
**Figure 48: Country wise import share, Thailand**



Japan has captured a large part of the market and has been steadily increasing its share to 54% in 2011. Korea and China has also been successful in increasing their market share steadily.

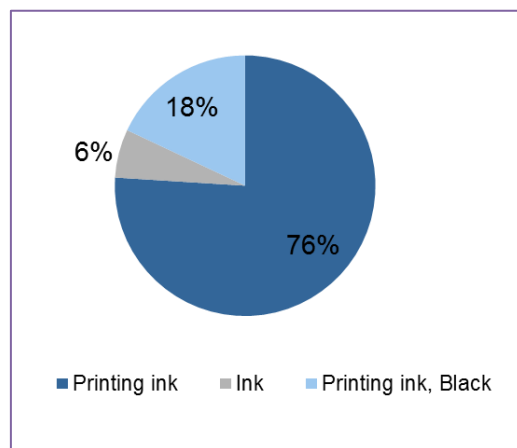
While mapping the requirement within Printing, writing or drawing inks segment, (refer figure below) Thailand's requirement seems to be increasing for printing ink.

**Figure 49: Import requirements within Printing, writing or drawing inks segment, Thailand**



To better understand the segment to focus upon we need to look at where India currently stands in supplying these products (Refer figure below).

**Figure 50: India exports for sub segments of Printing, writing or drawing inks, 2011**



Analysis of exports by India suggests that India has strong competitiveness in Printing Ink. Since this is a key focus of Thailand also, India has a good opportunity to capture significant share if it strategically targets this segment.

#### **iv. Strategic recommendations**

Based on the detailed analysis of the products in these segments, the requirements of Thailand markets and the capability of Indian players, the following are the key recommendations:

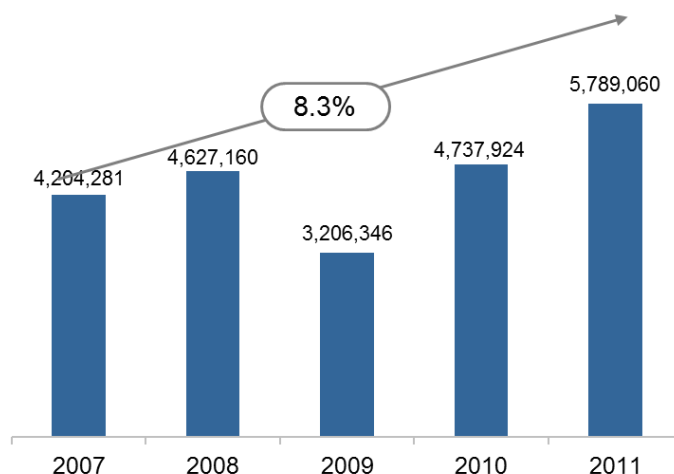
- *Tanning or dyeing extracts, tannins & their derivatives, pigments etc. segment presents good opportunity for Indian players as this segment is growing at ~9% CAGR over the last five years in Thailand.*
  - *Based on requirement-competency match between Thailand and India, three segments emerge as the major focus areas-*
    - *Synthetic organic coloring matter & preparations*
    - *Other coloring matter; inorganic products used as luminophores*
    - *Printing, writing or drawing inks*
- *Indian exporters could target Synthetic organic coloring matter & preparations as they are competitive in this segment and could increase their share in coming years by targeting price sensitive importers*

- *Synthetic organic pigments and preparations, Acid and mordant dyes and preparations, and Reactive dyes and preparations could be the major focus areas for Indian exporters*
- *Within the other coloring matter and inorganic products used as luminophores segment, Thailand's demand is increasing for Titanium pigments and preps, >80% titanium oxide and India is also strongly placed for this product category. Hence, Indian SMEs should focus on achieving more market share in Thailand imports for these products*
- *Within Printing, writing or drawing inks, printing ink could be the focus segment for Indian players as it holds ~70% of Thailand's imports in this category.*
  - *Strong trade relations and cost competitiveness could be the key to increase share in this segment as Japan, South Korea, Chinese Taipei and China hold the major market share in this segment*

## 5. Organic chemicals

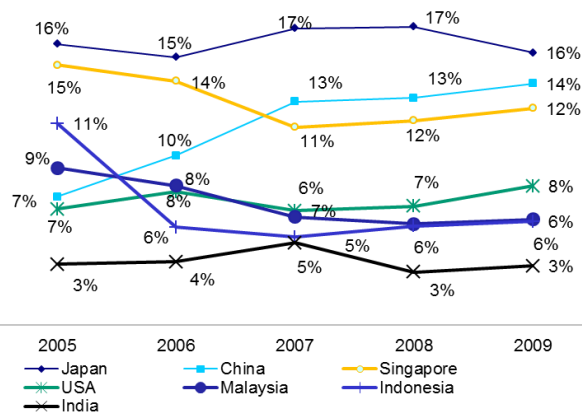
Thailand has seen a rise in imports of organic chemicals products over the last few years. The imports have grown at a CAGR of ~8.3% during 2007-11. Currently the imports stand at ~\$5.7Bn. The growth has been steady with the exception of a dip in 2009, however post-recession the growth has picked up significantly. Figure below represents the growth scenario:

Figure 51: Imports in Thailand ('000 \$)



Japan has been the leading exporter to Thailand in this category with ~16-17% share in the imports followed closely by China and Singapore who now hold 14% and 12% share respectively. (Refer figure below).

Figure 52: Major exporting nations to Thailand (% share of total HS28 imports)



China has increased its share to become one of the leading exporters to Thailand in this category. China has doubled its share from 7% to 14% in a period of 5 years. China has been able to leverage its economies of scale to match the lower costs. While at the same time has been able to deliver higher quality products based on good technology and better understanding of market needs. Also the

lower tariff rates on imports from China have helped it ward off any threat. Singapore's share has reduced marginally in a period of 5 years. Other Asian countries like Malaysia, Indonesia and India have small presence and account for 3%-6% share each. These other Asian countries have not been able to increase their share in imports significantly.

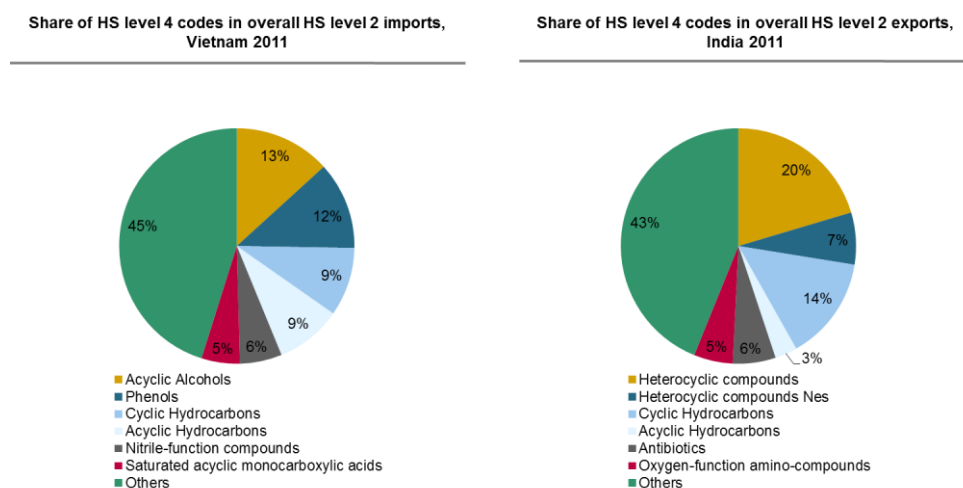
The sub segments in this category are -

- '2917 Polycarboxylic acids, their anhydrides, halides etc & their derivative
- '2905 Acyclic alcohols and their derivatives
- '2903 Halogenated derivatives of hydrocarbons
- '2915 Saturated acyclic monocarboxylic acids & their derivatives
- '2922 Oxygen-function amino-compounds
- '2902 Cyclic hydrocarbons
- '2933 Heterocyclic compounds with nitrogen hetero-atom; nucleic acids
- '2916 Unsaturated acyclic & cyclic monocarboxylic acid & anhydrides, halides
- '2941 Antibiotics
- Others –Including 2936 Provitamins&vitamins, natural/reproduced by synthesis, 2929 Compounds with other nitrogen function, 2930 Organo-sulphur compounds, 2914 Ketones & quinones, & their derivatives, 2934 Heterocyclic compounds, 2932 Heterocyclic compounds with oxygen hetero-atom(s) only, 2924 Carboxyamid-functn compound; amide function compound of carbonic acid, 2923 Quaternary ammonium salts & hydroxides; lecithins, 2918 Carboxylic acids & their derivatives, 2909 Ethers, ether-alcohols, ether-phenols & peroxides & their derivatives, 2921 Amine-function compounds, 2906 Cyclic alcohols & their derivatives, 2931 Organo-inorganic compounds, 2927 Diazo-, azoor azoxy-compounds, 2912 Aldehyde;cyclic polymer of aldehyde;paraformaldehyde, 2920 Esters of inorganic acids nes, their salts and their derivatives, 2919 Phosphoric esters, their salts and their derivatives, 2937 Hormones; their derivatives; steroids, 2926 Nitrile-function compounds, 2939 Vegetable alkaloids & their salts, ethers, esters & other derivatives, 2935 Sulphonamides, 2904 - Hydrocarbon derivatives, sulfonated, nitrated, 2907 Phenols; phenol-alcohols, 2901 Acyclic hydrocarbons, 2940 Sugars, chemically pure, their ethers, esters and their salts, 2925 Carboxyimide-function compounds; imine-

function compounds, 2942      Organic compounds, 2908      Derivatives of phenols, 2928  
 Organic derivatives of hydrazine or of hydroxylamine, 2938      Glycosides & their salts,  
 ethers, esters & other derivatives, 2910      Epoxides, epoxy alcohols, epoxy phenols & epoxy  
 ethers & their derivatives, 2911      Acetals & hemiacetals & their derivatives, 2913      Derivatives  
 of aldehydes, cyclic polymers of aldehydes

From the figure below we conclude that the leading sub segments in imports of Thailand are Acyclic alcohols and their derivatives (2905) & Phenols (2907), Cyclic hydrocarbons (2902) & Acyclic Hydrocarbons (2901).

**Figure 53: Mapping of sub segment focus of Thailand and India**



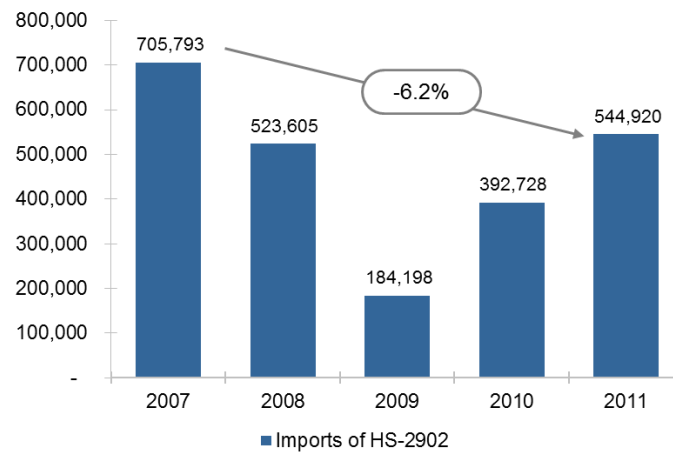
A direct mapping of needs of Thai market with India's competitiveness tells us that Indian companies could focus on improving their export focus on Cyclic hydrocarbons (2902) The next section will cover these two segments and their sub segments for more clarity.

**i. Cyclic hydrocarbons**

Cyclic hydrocarbons represent products like toluene, styrene, benzene etc. Import of cyclic hydrocarbons has been growing strongly in the recent time since 2009. Overall the imports declined strongly in 2009 riding on global recession, however post 2009 it has picked strongly with a ~80% p.a. rise over the next two years (Refer figure below).

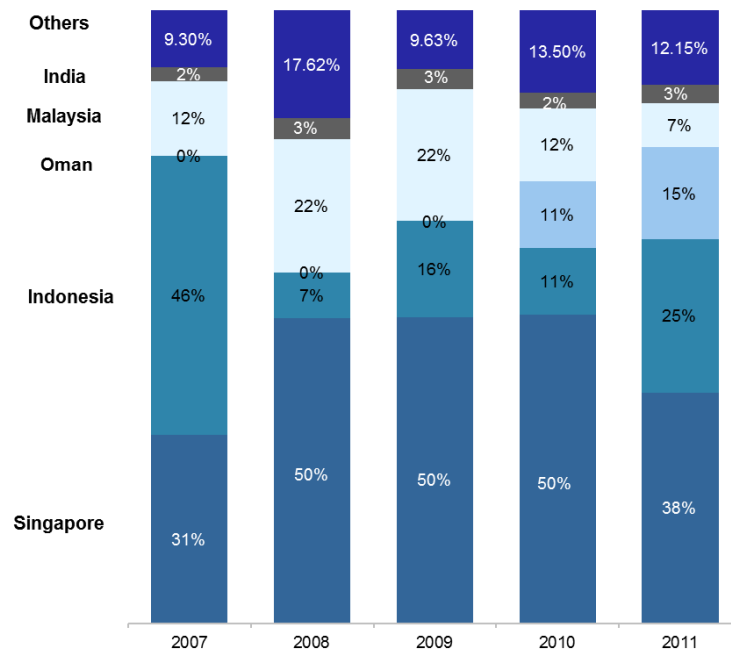


**Figure 54: Imports of cyclic hydrocarbons ('000 \$)**



While evaluating the key countries for these products (Refer figure below), it is evident that Singapore, Indonesia and Oman are the leading exporters to Thailand in this segment.

**Figure 55: Country wise import share**

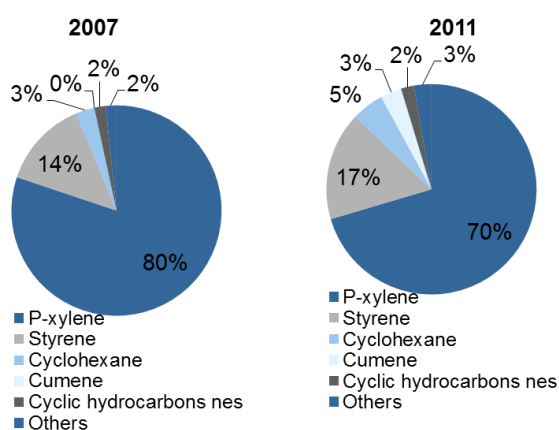


Singapore's share has declined from 50% in 2008 to 38% in 2011. Indonesia's share has been fluctuating. Interesting to notice is that Oman in 2007 did not supply Thailand any cyclic hydrocarbons but by 2011, Oman had become a major exporter with 15% share of Thailand's total imports in the sub-category.

Setting up of aromatic complex in Thailand, Malaysia etc. have ensured surplus of cyclic hydrocarbons in the region. While coming up of downstream industries in Singapore has decreased its surplus for these cyclic hydrocarbons and hence also decreased its focus on export of these. India's share is stagnated at ~3% and is lagging far behind other Asian countries; Also China does not have a significant presence either. Both these countries have been exporting surplus cyclic hydrocarbons to other destinations with larger and consistent demand. Also India is surplus in benzene whereas the requirements of Thailand are mostly for other cyclic hydrocarbons.

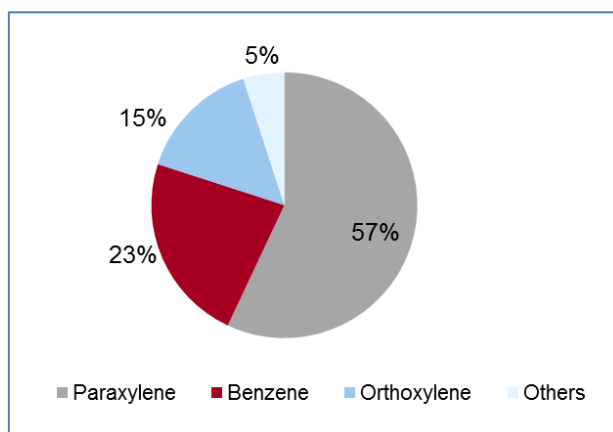
While mapping the requirement within cyclic hydrocarbons the two largest import requirements of Thailand are for p-xylene and styrene. Over the years, Import requirements for p-xylene have reduced relatively whereas the imports for styrene have increased.

**Figure 56: Import requirements within cyclic hydrocarbons, Thailand**



To better understand the segment to focus upon we need to look at where India currently stands in supplying these products (Refer figure below).

**Figure 57: India exports for sub segments of cyclic hydrocarbons, 2011**



Analysis of exports by India suggests that India has strong competitiveness and is surplus in Paraxylene (p-xylene), Benzene and Ortho-xylene whereas its export capacity is very limited in Styrene. Hence the p-xylene market should be targeted at by India

**ii. Strategic recommendations**

Based on the detailed analysis of the products in these segments, the requirements of Thai markets and the capability of Indian players, the following are the key recommendations:

- *Based on the mapping between Indian exports and Thai imports Indian players should focus in the Cyclic Hydrocarbons market*
- *Within the Cyclic Hydrocarbons market, p-xylene appears to be the biggest market and India also has large production capability for p-xylene.*
- *This is a large segment of the Thai import market and increase in India's production capability would be a step in the direction of capturing additional market share.*

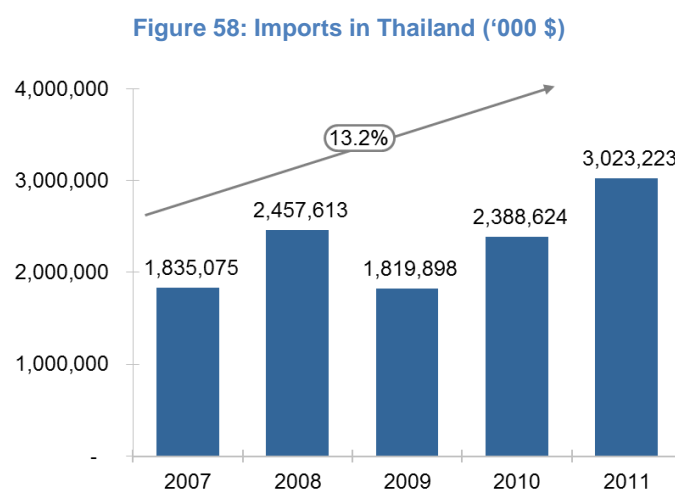
## 6. Agrochemicals

Thai agriculture is highly competitive, diversified and specialised and its exports are very successful internationally. Rice is the country's most important crop; Thailand is a major exporter in the world rice market. Other agricultural commodities produced in significant amounts include fish and fishery products, tapioca, rubber, grain, and sugar. Although agriculture declined in relative financial importance in terms of income with rising industrialization and Americanization of Thailand from the 1960s, but it has continued to provide the benefits of employment and self-sufficiency, rural social support, and cultural custody.

Its fertilizer consumption per hectare is comparable to the global average and stands at ~120 kg/Ha. The use of chemical fertilizers in Thailand started to increase exponentially in the 1970s; between 1961 and 2003 fertilizer use increased 94 times. Similarly its consumption for agrochemicals is also high. The current industrial agriculture system promotes the reliance on agrochemicals, both synthetic fertilizers and pesticides. In the last 15 years imports of Pesticides into Thailand has increased over 500% from 20000 tonnes to around 120000 tonnes.

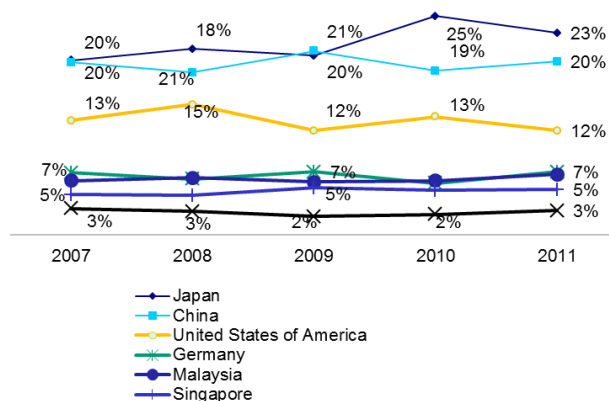
Overall the imports of agrochemicals in Thailand have increased at a CAGR of 13.2% in the period 2007-11.

Figure below represents the import scenario for last four years:



Japan and China has been the leading exporter to Thailand in this category followed by the United States. Imports from other countries are in the 5%-8% range. (Refer figure below). India's market share which was 5% in 2007 has reduced to 3% in 2011.

Figure 59: Major exporting nations to Thailand (% share of total HS38 imports)



As other sectors developed, laborers went in search of work in other sectors of the economy and agriculture was forced to become less labor intensive and more industrialized. The Thai market is both price and quality sensitive. While Japan has been able to provide products of higher quality required, China is a front runner in the cost front. With many subsidies coming into play, China has been able to establish its low cost advantage and hence garner higher market share.

Other countries have specific molecules whose demand has ensured consistent market share, whereas China is the only country with products across the entire miscellaneous chemical products which it supplies.

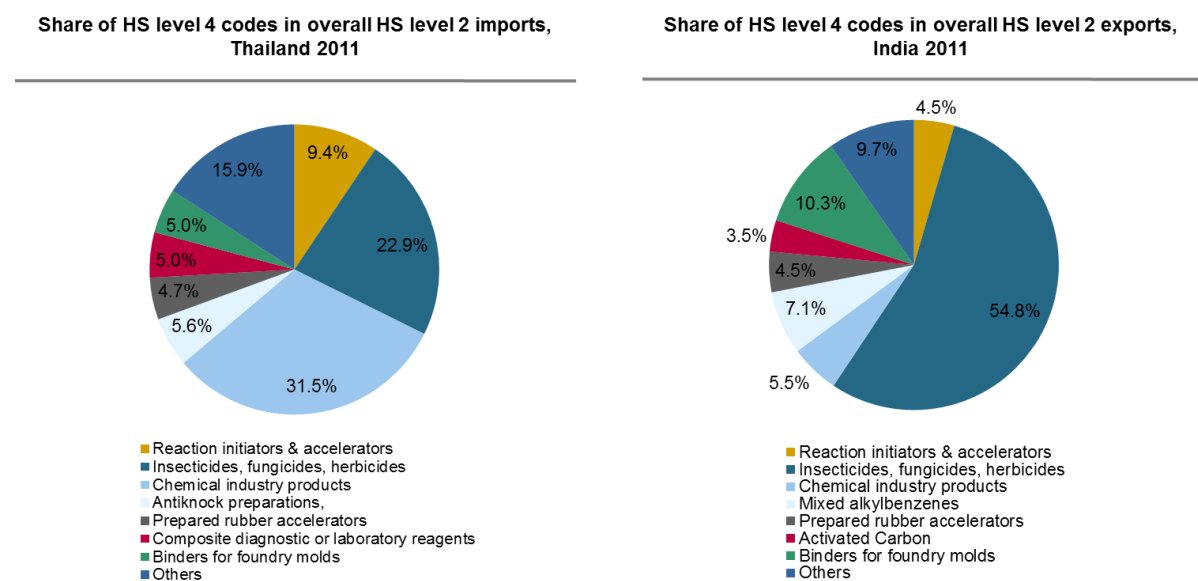
The sub segments in this category are -

- 3808 Insecticides, fungicides, herbicides packaged for retail sale
- 3824 Chemical industry products and residuals nes
- 3817 Mixed alkylbenzenes & mixed alkylnaphthalenes, nes
- Others - 3809 Finishing agents, dye carriers or fixing for text., paper, leather etc., 3812 Prepared rubber accelerators; compound plasticizers, & other compound, 3811 Antiknock preparations, oxidation & gum inhibitors, viscosity improver, 3822 Composite diagnostic or laboratory reagents, 3814 Organic composite solvents & thinner, paint/varnish removers 3810 Pickling preparations for metal surfaces; powders, pastes, coatings, 3823 Binders for foundry molds or cores; chemical products and residuals, 3815 Reaction initiators & accelerators, catalytic prep, 3816 Refractory cements, mortars, concretes and similar compositions., 3801 Artificial graphite; colloidal or semi-colloidal graphite, 3802

Activated carbon; activated natural mineral products; animal black, 3818 Chemical compound in form of disc, 3806 Rosin & resin acids, and derivatives; rosin spirit & oils; run gums, 3804 Residual lyes from the manufacture of wood pulp, ecl. Tall oil, 3819 Hydraulic brake fluids & liquids for hydraulic transmission,

From the figure below we conclude that the leading sub segments of miscellaneous chemical products in terms of imports by Thailand are Agrochemicals (3808) and Chemical industry products (3824). While India's major exports are agrochemicals and Chemical products & residuals.

**Figure 60: Mapping of sub segment focus of Thailand and India**

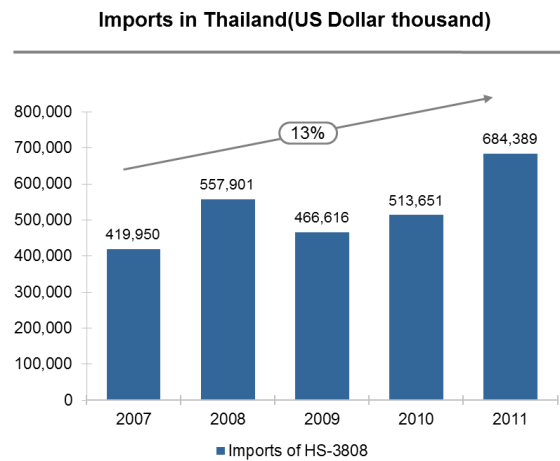


A direct mapping of needs of the Thai markets with India's competitiveness tells us that Indian companies could focus on improving their export focus on agrochemicals-Insecticides, fungicides & herbicides (3808). The next section covers this segment and its sub segments for more clarity.

**i. Agrochemicals (3808)**

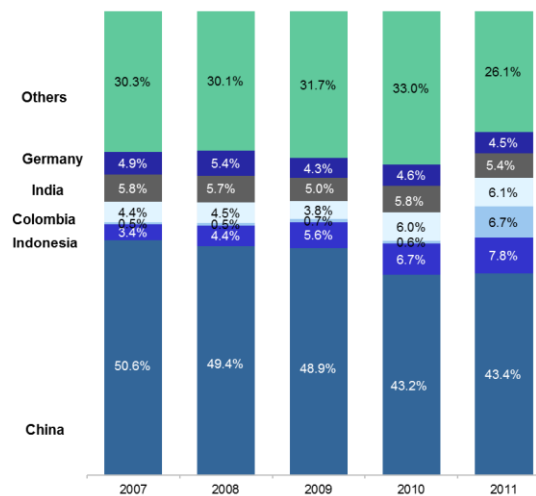
Agrochemicals represent products like Insecticides, fungicides, herbicides etc. The import trend of agrochemicals has been very volatile as it a pull driven market. Here based on the natural conditions and the demand varies (thought only slightly). And the variation is revenue is due to the fluctuation in global prices. Also the shelf life of many products is high hence based on global prices the stocking and destocking happens resulting in varying demand for imports. (Refer figure below). Imports to Thailand have increased at CAGR 13% for the period 2007-11. In 2011 the total import size was ~700 million dollars.

**Figure 61: Imports of agrochemicals ('000 \$)**



While evaluating the key countries for these products (Refer figure below), it is evident that China is the leading exporter with Indonesia a distant second. Other major suppliers to Thailand are Germany, India and Colombia.

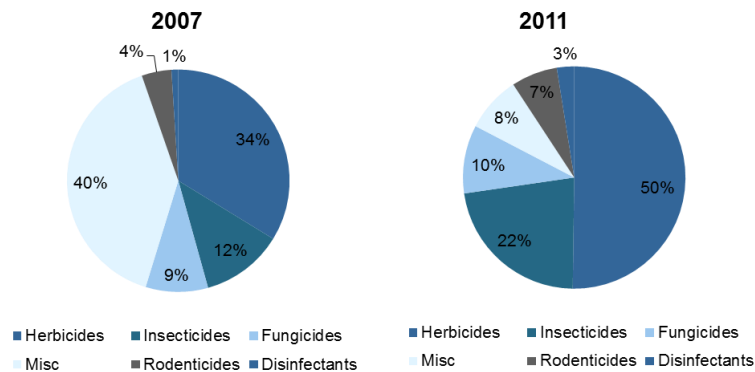
**Figure 62: Country wise import share**



India and China have strong focus on agriculture sector in their respective countries. Hence their capabilities in these sectors are high, especially for China. China has been able to keep abreast with the changing requirements for different crops and type of pests. By leveraging their economies of scale and good trade relations with Thailand, they have been able to establish leadership position and strengthen it. India however has not been able to grow, partly due to their limited focus & limited indigenous R&D, lack of operative free trade treaties and higher cost than China. India's share has been stagnant in the 5%-5.8% range.

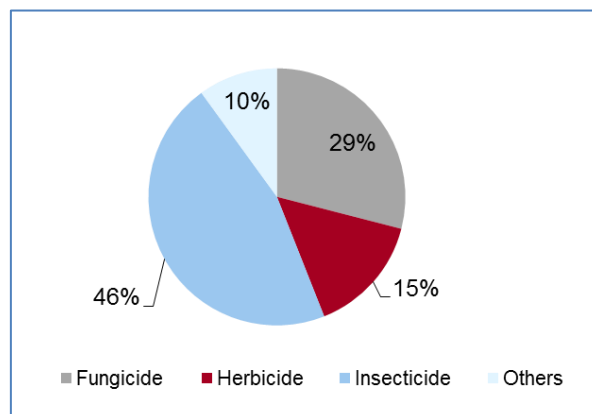
While mapping the requirement within agrochemicals the largest import requirements of Thailand in agrochemicals are for Herbicides, Insecticides and Fungicides. The rise in imports for Herbicide is quite significant.

**Figure 63: Import requirements within agrochemicals, Thailand**



To better understand the segment to focus upon we need to look at where India currently stands in supplying these products (Refer figure below).

**Figure 64: India exports for sub segments of agrochemicals, 2011**



Analysis of exports by India suggests that India has strong competitiveness in all the products which are the key requirement of Thailand. Especially in fungicide and herbicide there is a scope of huge growth while for insecticides a consistent growth could be expected. Since the key focus of India exports and the requirements of Thailand imports match, agrochemicals and specifically Herbicides and Insecticides is an excellent segment for India companies to target Thailand's markets.

**ii. Strategic recommendations**

Based on the detailed analysis of the products in these segments, the requirements of Thai markets and the capability of Indian players, the following are the key recommendations:



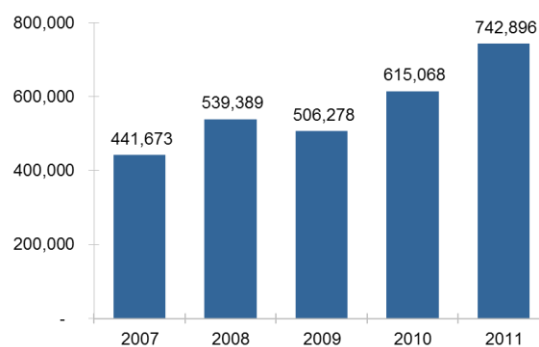
- *Indian companies should focus on providing agrochemicals to the Thailand market as it is a consistent and growing demand.*
- *Within agrochemicals companies could focus on herbicides and insecticides (as the demand for these products is high for imports by Thailand) and these segments have been the fastest growing amongst all agrochemicals*
- *Indian companies need to provide newer & more reliable molecules at lower cost to compete with China.*

## 7. Soaps

Thailand's imports for Soaps, lubricants, waxes, candles, modelling pastes (HS code 34) has been growing strongly in the past 5 years. The overall imports have grown at the rate of ~13% p.a. over the last 5 years except for the marginal decline in 2009. During recessionary times the demand slugged a bit in 2009 however it quickly bounced back in 2010, suggesting a very robust demand for these products by the Thai markets. The imports currently stand at ~\$750 Mn.

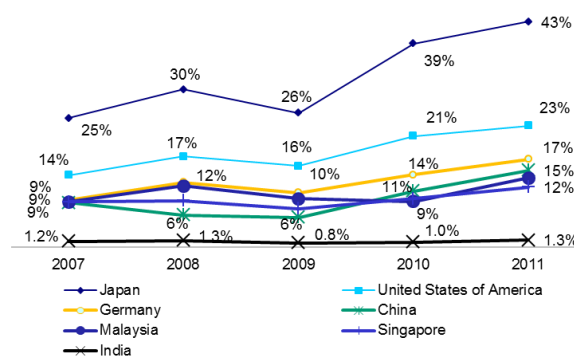
Figure below represents the import scenario for last 5 years:

Figure 65: Imports in Thailand ('000 \$)



For this segment there are many suppliers who have got presence in Thailand market. Japan is the leader with ~43% market share followed by the United States at 23%. However they are closely followed by Germany (~17%), China (~15%) and Malaysia (12%). India has only managed a share of ~1.3% in the total imports. (Refer figure below).

Figure 66: Major exporting nations to Thailand (% share of total HS34 imports)



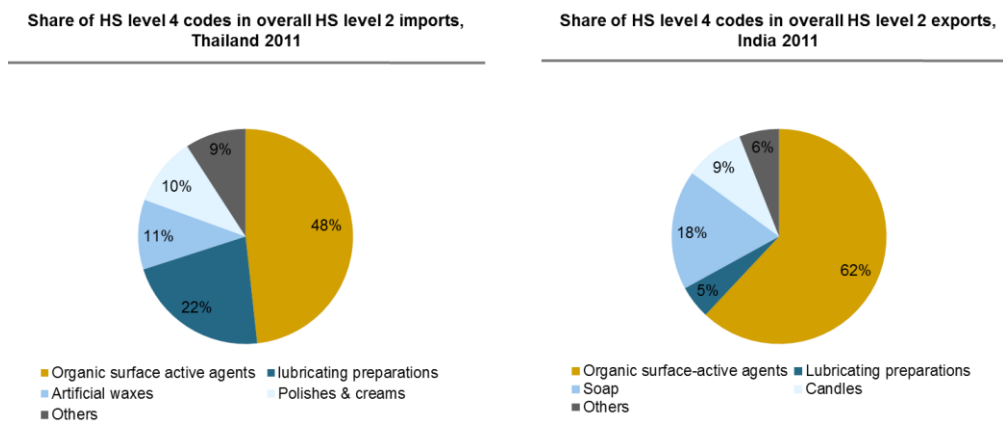
The sub segments in this category are -

- 3402 Organic surface-active agents, washing & clean preparations, nes

- 3403 Lubricating preparations, antirust or for treating textiles, leather
- 3401 Soap; organic surface-active preparations for soap use
- Other - 3405 Polishes & creams for footwear, furn, floors, glass, metal etc., 3404 Artificial waxes & prepared waxes, 3407 Modelling pastes including those for children; dental wax, 3406 Candles, tapers & the like

From the figure below we conclude that the leading sub segments of Soaps, lubricants, waxes, candles, modelling pastes segments in terms of imports by Thailand are the Organic surface active agents (3402) and lubricating preparations (3403). While India's major exports are in organic surface active agents (3402) and Soaps (3401),

**Figure 67: Mapping of sub segment focus of Thailand and India**

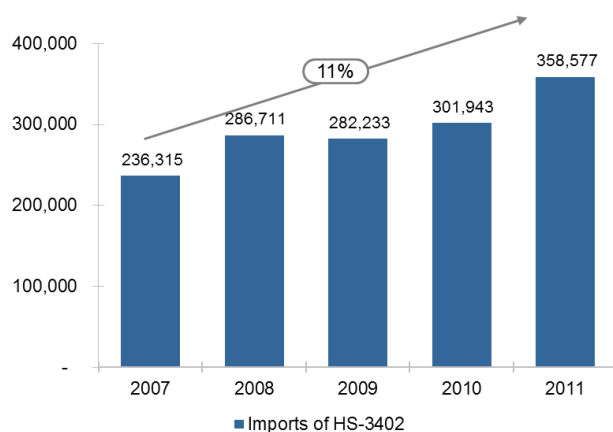


A direct mapping of needs of Thailand's market with India's competitiveness tells us that Indian companies could focus on improving their export focus on Organic surface active agents (3402). The next section covers this segment and its sub segments for more clarity.

**i. Organic surface active agents**

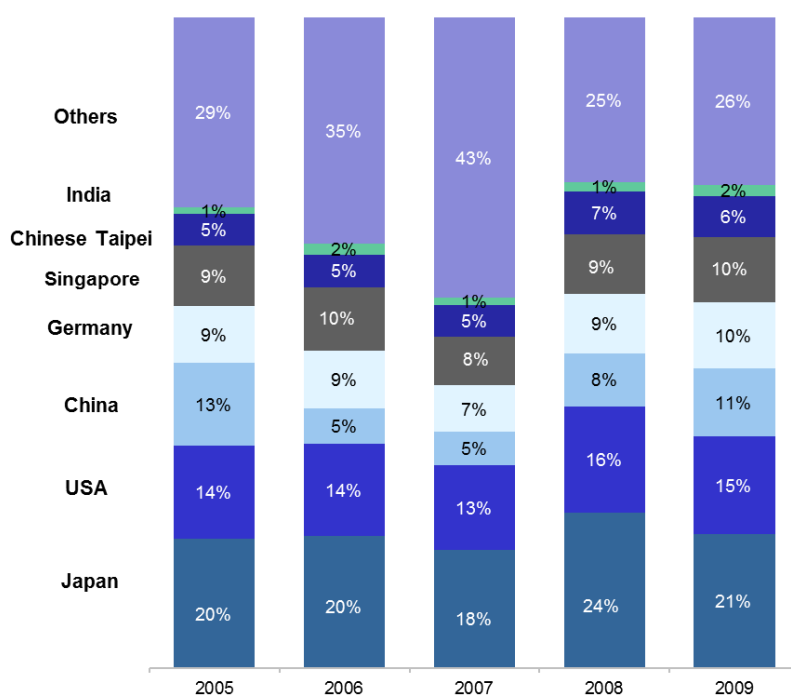
Organic surface active agents import has been growing steadily at the rate of ~11% p.a. over the last four years to reach ~\$350 Mn in 2011. The growth slowed a bit in 2009 (during recession) but quickly bounced back in 2010 and maintained the growth in 2011 also. (Refer figure below).

**Figure 68: Imports of organic surface active agents ('000 \$)**



While evaluating the key suppliers for these products (Refer figure below), it is evident that Japan is the leading exporter closely followed by USA, China, Germany and Singapore. India supplies a meager 2% of the total import demand.

**Figure 69: Country wise import share**

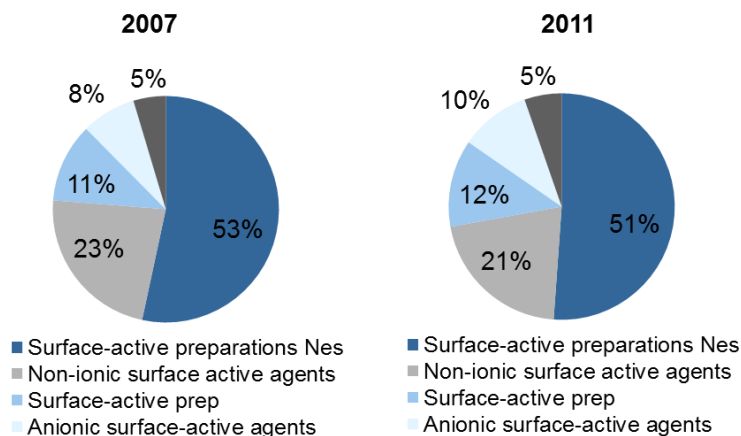


This market for organic surface active agents is a cost sensitive market as well as it has certain loyalist large MNC consumers which are ready to pay premium for quality too.

While mapping the requirement within organic surface active agents the largest import requirements of Thailand are for Anionic agent who is closely followed by surface active preparations (HS 340290)

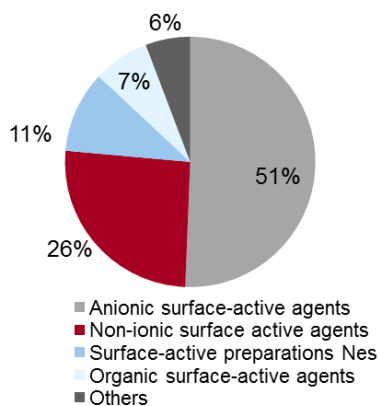
and non-ionic agents (HS340213). Demand for both these products has remained stable over the last 4 years.

**Figure 70: Import requirements within Organic Surface Active Agents, Thailand**



To better understand the segment to focus upon we need to look at where India currently stands in supplying these products (Refer figure below).

**Figure 71: India exports for sub segments of agrochemicals Organic Surface Active Agents, 2011**



Analysis of exports by India suggests that India has strong competitiveness in anionic surface-active agents, non-ionic agents and surface active preparations. Since the key focus of India exports and the requirements of Thailand imports largely match, Surface Active Preparations Nes, Non-Ionic Surface Active Agents and Anionic Surface Active Agents are good segments for India companies to target Thailand import markets.

**ii. Strategic recommendations**

Based on the detailed analysis of the products in these segments, the requirements of Thailand markets and the capability of Indian players, the following are the key recommendations:

- *Indian companies should focus on providing organic surface active agents*
- *Within this segment the focus should be on supplying Surface Active Preparations Nes, Non-Ionic Surface Active Agents and Anionic Surface Active Agents*
- *Most of the consumers of organic surface active agents have integrated usage of all the sub products i.e. including surface active preparations along with anionic agent or non-ionic agents. It will be prudent to ensure that Indian suppliers act as one stop solution for the Thailand importers.*

## References

The following resources were looked at for reference and data:

1. International Trade centre (Intracen)
  2. ASEANsec ( Association of Southeast Asian Nations)
  3. Annual Report 2011-12, Department of Chemicals & Petrochemicals
  4. Working Group on Indian chemical industry for formulation of the 12th Five Year Plan, Planning Commission, Government of India
  5. The Board of Investment of Thailand, [www.boi.go.th/](http://www.boi.go.th/)
  6. [www.gcimagazine.com](http://www.gcimagazine.com)
  7. [www.worldtrade.net](http://www.worldtrade.net)
  8. Council of European Union
  9. [www.asean.org](http://www.asean.org)
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