The Israel Export & International Cooperation Institute

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FEDERATION OF INDIAN CHAMBERS OF COMMERCE & INDUSTRY

ECONOMIC DIVISION
EMBASSY OF ISRAEL, NEW DELHI

Foreign Trade Administration
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MANUFACTURERS' ASSOCIATION OF ISRAEL
The Backbone and Voice of Industry

ISRAEL-INDIA BUSINESS GUIDE

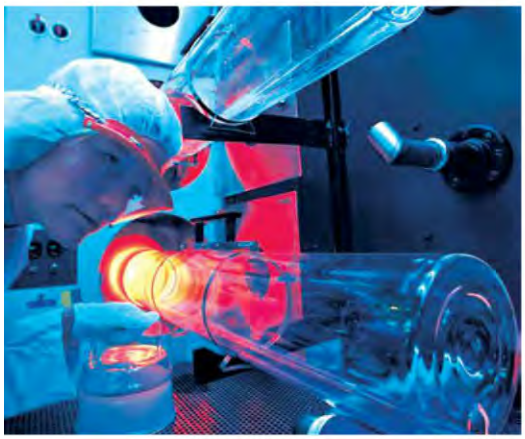
New initiatives strengthen business ties

Official: New Israeli consulate in Bangalore

Tourism: Israel & India ink pact to boost tourism

Academia: Israel and India to launch Joint Academic Program



Zero in on your business connection: Various Industry Sectors inside

Israel and India 20 years of diplomatic relations

MATIMOP מתימו"פ
מרכז התעשיה הישראלית למחקר ופיתוח
Israeli Industry Center For R&D

Israel beyond expectations

ZIM GLOBAL REACH LOCAL TOUCH

PAPRIKA

Facts about the State of Israel



The Land of Israel (Eretz Yisrael) is the birthplace of the Jewish people. It is in Israel where a significant part of the nation's history was enacted and its cultural, religious and national identity was formed; and there, its physical presence has been maintained through the centuries, even after the majority was exiled.

Declaration of Independence: 14th May 1948

Flag: The colours blue and white were chosen according to the colours of the 'Tallit' – the Jewish prayer shawl. The Star of David has been a Jewish symbol for many centuries.
State emblem: The Menorah – a candelabrum, and olive branches representing peace.
Official languages: Hebrew, Arabic.
Currency: The New Israeli Sheqel (NIS), which is divided into 100 Agorot.
Capital: Jerusalem.
Governing system: Democratic - parliamentary.
Legislative branch: The Knesset is the parliament of the State of Israel. It is located in Jerusalem and has 120 members. The present Knesset is the 18th and was elected on 10th February 2009. The next Knesset will be elected on January 22nd, 2012.
Executive branch includes the government and government ministries.
The judiciary includes the system of courts: the Supreme Court, the District Courts, Magistrates Courts, Courts for Local Affairs, Religious Courts, Traffic Courts, Labour Courts, Juvenile Courts, etc.
President: The President is elected by the Knesset every seven years and his main duties are representational. The incumbent President, Mr. Shimon Peres, was sworn into office on 13th June 2007.
The Prime Minister: The incumbent Prime Minister, Mr. Binyamin Netanyahu, has been in office since 31st March 2009.
Local authorities: Municipalities, local councils and regional councils. These authorities have governmental and administrative powers in their areas of jurisdiction and are responsible for provision of services to their constituencies. All mayors are directly elected to serve a five year term.
Location: The State of Israel is located on the southwest tip of the Asian continent, on the eastern basin of the Mediterranean Sea. The State of Israel lies at a latitude between 29° and the 33° north of the Equator.

Area of the country: 22,072 sq. km. (as of - 1967 including East Jerusalem and as of 1982 -including the Golan Heights).
Land area: 21,643 sq. km.
Area of lakes: 429 km. (Sea of Galilee - 164 sq. km., the Dead Sea - 265 sq. km.)
Land border: Total length of border: 857 km.
Coastline: Length of Mediterranean Sea Coast 194 km. Length of Red Sea Coast about 12 km.
Population: At the end of August 2012, the population of Israel numbered 7.928 million inhabitants. The population of Israel comprises the following groups:
Jews and Others 79.8%
Of which:
Jews 94.6%
Non-Arab Christians 0.5%
Not classified by religion 4.9%
Arabs 20.2%
Of which:
Muslims 83.4%
Arab-Christians 8.3%
Druze 8.2%

Largest Cities (end of 2008)

		Population
1	**Jerusalem**	763,600
2	**Tel Aviv-Yafo**	392,500
3	**Haifa**	264,800
4	**Rishon LeZiyyon**	226,100
5	**Ashdod**	209,200
6	**Petah Tiqwa**	193,900
7	**Be'er Sheva**	187,200
8	**Netanya**	179,000
9	**Holon**	170,600
10	**Bene Beraq**	153,300
11	**Ramat Gan**	134,300
12	**Bat Yam**	128,900
13	**Ashqelon**	110,400
14	**Rehovot**	108,300

India in brief

Location: The Indian peninsula is separated from mainland Asia by the Himalayas. The Bay of Bengal in the east, the Arabian Sea in the west, and the Indian Ocean to the south surround the Country.
Area: 3.3 Million sq km
Population: 1.2 billion (approx.)
Geographic Coordinates: Lying entirely in the Northern Hemisphere, the mainland extends between latitudes 8°4′ and 37°6′ north, longitudes 68°7′ and 97°25′ east.
Capital: New Delhi
Border Countries: Afghanistan and Pakistan to the northwest; China, Bhutan and Nepal to the north; Myanmar to the east; and Bangladesh to the east of West Bengal. Sri Lanka is separated from India by a narrow channel of sea, formed by Palk Strait and the Gulf of Mannar.
Coastline: 7,516.6 km encompassing the mainland, Lakshadweep Islands, and the Andaman & Nicobar Islands.
Climate: The climate of India can broadly be classified as a tropical monsoon one. But, despite much of the northern part of India lying beyond the tropical zone, the entire country has a tropical climate marked by relatively high temperatures and dry winters. There are four seasons - winter (December-February), (ii) summer (March-June), (iii) south-west monsoon season (June-September), and (iv) post-monsoon season (October-November)
Natural Resources: Coal, iron ore, manganese ore, mica, bauxite, petroleum, titanium ore, chromite, natural gas, magnesite, limestone, dolomite, barytes, kaolin, gypsum, apatite, phosphorite, steatite, fluorite, etc.
Key Economic Indicators:

- Economic growth is supported by market reforms, substantial inflows of FDI, rising foreign exchange reserves, IT and real estate boom, and a flourishing capital market.
- With the largest number of listed companies - 10,000 across 23 stock exchanges, India has the third largest investor base in the world.
- India has a large domestic consumer market – 1.2 billion population including 300 million classified as middle class (earning US$ 2000- US$ 22,000 a year). In fact, according to a study by the Mckinsey Global Institute (MGI), India's consumer market will be the world's 5th largest in the world by 2025.

In addition, India is among the world's youngest nations with a median age of 25 years. Its working age population is estimated to rise to 70% of the total demographic by 2030 - the largest in the world. India will see 70 million new entrants to its workforce over the next five years.
India-Israel Trade: Major exports from India to Israel include precious stones and metals, chemical products, textile and textile articles, plants and vegetable products, mineral products, rubber and plastic products, base metals and machinery. Major exports from Israel to India include precious stones and metals, chemical and mineral products, base metals, machinery, and transport equipment.

While the traditional business thrust in diamonds, agriculture, chemicals, information & communication technology and pharmaceuticals remains strong, there is a growing interest from Israeli companies in clean energy, water technologies, biotech, nanotech, homeland security, real estate, infrastructure and financial services.
Type of Government: Sovereign Socialist Democratic Republic with a Parliamentary system of Government.
Administrative Divisions: 29 States and 6 Union Territories.
Constitution: The Constitution of India came into force on 26th January 1950.

The World Economy, India and Israel

The Indian economy is one of the fastest growing in the world, with a rapidly expanding consumer class. Israel's technological strengths could be exploited to the benefit of both countries by complementing India's competitive advantage in production and marketing capacities

Global growth essentially stalled in the second quarter of 2012, and looks hardly better at the start of the second half of the year. The US economy, which seemed reassuringly robust in the beginning of 2012, has slowed. Euro zone leaders continue to search for a solution to the region's debt crisis, which is now in its third year. Nevertheless, the region is moving into deeper recession, and sustainable solutions to the debt crisis remain elusive. The euro zone will be in recession for most of 2012.

As a result, the global economy is expected to grow by just 2.1% at market exchange rates in 2012 (down from 2.6% in 2011). At purchasing power parity (PPP) exchange rates, which give more weight to emerging markets, growth will slip to 3.2% (from 3.7% last year). only a modest improvement is expected in 2013: the US economy will do well to grow by around 2% (about the same as this year) and China, now in a new phase of its development in which consumption will make a larger contribution to the economy, will grow by around 8.5%, compared with the double-digit rates of growth achieved in the recent past. Only the euro zone will improve much in 2013, albeit from contraction to fractional growth. Only in 2014 will global growth return to 4%—a moderate rate.

Inflation remains uncomfortably high in India. Reduced external demand, mounting debt and policy mistakes slowed Indian GDP growth forecast to 6.6% in 2012.

The Israeli economy has been growing by an average of 3.6% per annum over the last 4 years (2008-2011). It is largely influenced by world economic trends and particularly in Israel's main export markets - the US and the EU. As a result of the global downturn, Israel's GDP is estimated to grow only by 2.2% in 2012 and 3.3% in 2013.

The importance of the Services Sector in India and Israel:

Export of services is one of the fastest growing sectors in the world, especially in India. The share of services in India's GDP at factor cost (at current prices) increased from 33.5 per cent in 1950-51 to 55.1 per cent in 2010-11 and to 56.3 per cent in 2011-12.

With high growth in the services sector, India has outlined a clear strategy for this sector, and is ranked 2nd in commercial service exports according to the WTO data in 2010. Its share of global commercial service exports rose to 4.9%, after totaling 3.1% in 2005, while merchandise exports amounted to 1.4% only. Israel was ranked 14th in commercial service exports in 2010 and its share of global commercial services was 0.8% per cent, which is twice that of Israel's share in global goods exports.

Israel, like India, has realized the enormous potential in the services sector its services trade grew by 8.5% in 2011. 59% of Israel's service exports are concentrated in the areas of software and R&D.

Israeli computer-related services and software exports totaled $ 10 billion 2011, an 19% increase compared to the same period in 2010. In 2011 computer-related services and software exports amounted to $6.8 billion, representing a 28% growth rate. Israel's R&D exports totaled $3.4 billion in 2011, an increase of 3% compared to 2010.

Israel High Tech Industry

During the last decade, the high- tech industry in Israel has been the engine of it's economy. High technology industries have played a prominent role in the Israeli economy, particularly during the last decade. While, only 15 years ago, most of the country's technology was concentrated in military/security related industries, today Israeli companies are significantly established in high tech industries worldwide and Israel is ranked no.1 in the number of Nasdaq- listed high tech companies outside of the USA, and availability of venture capital per capita.

In spite of the global economic crisis, high tech export to-

The economies of Israel and India are compatible in many aspects

taled $21.5 billion in 2011 - accounting for 47% of total manufacturing exports. This represents a increase of 7% compared to the same period in 2010.

Cooperation between Indian and Israeli industry

Israel's technological strengths could be exploited to the benefit of both countries by complementing India's competitive advantage in production and marketing capacities.

The economies of Israel and India are compatible in many aspects. An international comparison index of the World Economic Forum - the global competitiveness index - ranks Israel 1st in quality of scientific research institution and 6th in capacity of innovation. India is also known for the latter, while its strengths are concentrated in the size of its domestic market and its higher education and training systems; India is ranked 21nd in availability of scientists and engineers, 27th in venture capital availability ,30th in quality of management schools. Therefore there is wide scope for cooperation in R&D, JV and other business cooperation.

Since the establishment of diplomatic relations between India and Israel in 1992, bilateral trade and economic relations have progressed rapidly. From a base of US$ 200 million in 1992 (comprising primarily of diamonds), merchandise trade has diversified and had increased sharply reaching US$ 5,192 million in 2011 (an increase of 10% compared to 2011, US$ 4,736 million).

In 2011, India stood at the eighth place in terms of Israel's trade partner countries and the third largest trade partner in Asia after China and Hong Kong (trade data includes diamonds) and remained a 'focus' country of the Israeli Government for increased trade effort. In 2010, India was ranked 5th largest export destination of Israel (including diamonds) and 7th when excluding diamonds. In addition, India was ranked 11th largest import source of Israel including diamonds, and 16th largest import source excluding diamonds. While India's exports to Israel in areas other than diamonds have increased over the years, Diamonds still constituted around 50% of the bilateral trade in the year 2011.

Telecom, software, biotechnology, genomics, nanotechnology, water technology, security systems and agro technology are areas where existing cooperation could be enhanced and new areas explored. Cooperation can take place in the Indian market as well as in third country markets.

Still, we have a long way to go to realize the full potential of bilateral trade. Israel has proposed a Free Trade Agreement (FTA) with India to boost these burgeoning economic and bilateral ties.

There is most certainly great potential for both countries. We are two modern, democratic, young societies; there is a strong Jewish community in India and a great platform for making opportunities a living reality. We look forward to a fruitful and exciting journey ahead.

This article is contributed by the Economic Department of the Israel Export & International Cooperation Institute



India-Israel Connect: 20 years... and going strong!

As the global marketplace becomes increasingly **knowledge-driven**, Israel's innovative spirit has been instrumental in creating some of the **world's most significant technological breakthroughs.**

Such creativity has made Israel a profitable destination for foreign investment, where industries from a variety of disciplines are successfully integrated to form pioneering synergies.

It is this **energetic, creative atmosphere that is attracting growing international attention**.

The world's leading multinational corporations have chosen to establish **Research & Development (R&D)** and production centers in Israel. At present, over **259 foreign commercial R&D centers** are helping industry leaders stay on the cutting edge. Companies like **GE** and **Intel** have been present and are steadily growing in Israel for decades, while others like **Google** have in recent years developed multiple active **centers of innovation**.

In what remains a hugely significant deal, **Warren Buffett's** investment company Berkshire Hathaway Inc, acquired 80% of Israel's Iscar Metalworking for $4 billion in 2006. Buffett has since called the acquisition of Iscar a "***dream deal***" that surpassed all his expectations.

The Indian Determination

Like Buffett, India's investors are becoming more aware of the innovative reputation of the "***start-up nation***" as more and more of **India's multinationals are choosing to partner with Israeli companies**.

2012 marks the 20th year of diplomatic relations between the two countries. Indo-Israel ties have evolved over the last two decades leading to strong cultural and economic associations between the two countries.

The Asian market is on an upward trajectory, and Israel is benefiting from this in multiple ways. In 1999, Israel exported 12% of its goods to Asia; by 2012 this number had jumped to 25%. Several key Indian companies have also made significant investments in Israel.

India's Jain Irrigation in 2007 bought 50% of Israel's NaanDan, completing the purchase in 2012. The incorporation of NaanDan into Jain has widened the scope of solutions and services provided by **NaanDanJain** worldwide. This gave a tremendous boost to the company's export capabilities and created various opportunities to penetrate new markets.

Also this year, India's **Sun Pharmaceutical Industries Ltd.** will reportedly merge Israel's Taro Pharmaceutical Industries Ltd. with Sun Pharmaceutical affiliates. Tata Consulting Services (TCS) has also opened an office in Israel and the State Bank of India is inaugurating a branch in Ramat Gan's diamond exchange.

Having made huge strides in recent years, India's multinational companies are currently looking to become more internationally competitive. Increasingly, they are looking to Israel to obtain the ***layers of innovation*** that will allow them to make the leap to market domination.

Echoing this thought, Mr. Subu Goparaju, Senior Vice President at Infosys Limited, India's multinational IT firm, said in June 2012: "***At Infosys, we are looking at leveraging the innovation ecosystem in Israel as part of evaluating early stage technologies that are relevant for clients to build tomorrow's enterprises.***"

The Attraction to Israel

A major point of attraction for multinationals from all countries is the Israeli government's policy aimed at **spurring growth in knowledge-based industries**. Israel runs a myriad of programs that cover every phase of the R&D value chain - from ideation, through incubation, and into competitive and long-term phases.

The government also plays an active role in encouraging what we call an **"ecosystem"** of support across industries. This network includes agencies like the Ministry of Indus-

try, Trade and Labor's Office of the Chief Scientist, a web of technology incubators for very-early-stage technologies, numerous bi-national R&D funds like BIRD-F, and an active and alert private venture capital system.

Equally important is the network of commercial attaches sent by the Ministry to important locations around the world, advancing Israel's interests in targeted world markets. Israel is set to increase its presence in India, adding another office to its two existing ones for a total of three in **New Delhi, Mumbai and Bangalore**.

Israel is also looking to partner with India for several **national infrastructure projects** ranging from new railways and roads to natural gas and other **sustainable energy solutions.**

At the center of Israel's ecosystem is "***Invest in Israel***". This is an Investment Promotion Center, which serves as a focal point for foreign-based companies and individuals interested in direct investment and joint venture opportunities in Israel. It is dedicated to helping investors locate the right projects and providing ongoing support.

Indo-Israeli Free Trade Agreement dialogue is currently underway to pave the way for doubling bi-lateral trade and leading to new frontiers of mutual success and profit.

As we look to the future - the time is right to explore business opportunities that will be beneficial to both India & Israel.

Doing Business With Each Other

Adv. Anat Bernstein-Reich

What Israeli and Indian businesspeople need to know about each other?

I have a suggestion for Israelis wanting to work in India, and conversely for Indians doing business in Israel, or with Israelis. The methodology is simple: as long as you are aware of the other side's flaws and upsides, there is a chance that business will happen. In this article I will list my tips for both business communities.

For Indian businesspeople

Indian businesspeople who visit Israel for the first time are sometimes a bit intimidated by the directness of Israeli businessmen. This may appear rude or impolite. But the fact is - Israelis are mostly very direct! Once you are aware of it, it is less intimidating. When you get used to it, it may be very pleasant to do business with people that let you know their stance very early in the discussion - no games, no subtext, they mean what they say, and if they don't want to do business with you, there will be no niceties, they will just tell you so.

Israelis will negotiate hard, but they will reach the final price very quickly. Sometimes they will tell you: "this is my last price". Believe them. They don't know that Indians like to negotiate, and since they like doing business more than negotiating, they will prefer this stage to be over as soon as possible. Israelis are also quick in decision-making because the hierarchy in the organization is flat.

Israelis may sometimes say "no", or "not possible". You need not be offended. They will not rush to say no. The Israeli business person will always try to find a way to make things happen. In India it is called 'jugaad'; in Israel we call it improvisation, and Israelis love doing that.

For Israeli businesspeople

Patience is the name of the game! Working in India is a marathon, and if you don't have the patience nor the budget or the proper running shoes, it is better you do business in other countries. At first, learn about the country. India is a federation and not a homogenous state. Don't do business in the first place you see and with the first person you meet. Among the billion people, you have many options. Do your homework. Build your business plan not on the assumption that you will sell one dollar or even one rupee to each Indian. This plan is doomed to fail.

When you negotiate with Indian businessmen, know where you want to head, but don't say it upfront. Indians love to negotiate. This is their way to know you better, evaluate your proposal, and get more people from the organization bought into this deal. If you will give your best price at the beginning, there is a chance that you may not have business.

I have found quite often that when the Israeli businessperson is anxious to travel back home, he gives up too much in the negotiation. Since negotiations are generally an ongoing process in India, be prepared. You cannot expect something to be concluded within a week. Use good marathon shoes! Enjoy!

Adv. Anat Bernstein Reich is the Vice President of Israel-Asia Chamber of Commerce, Managing Partner of A&G Partners Israel, and the President of the Israel-India Friendship Association

Israel's Tax System in a Nutshell

Harry Kirsh, Advocate | **Partner, Yigal Arnon & Co.**

Beyond Israel's attraction as a dynamic, technology-based economy which boasts a highly-educated and motivated workforce, Israel's tax system is also investor-friendly and well suited to encourage cross-border business initiatives.

In this brief article, we will touch on the main features of the Israeli tax system (as of April 2012), highlighting those which would be of importance to the Indian entrepreneur or investor.

Low Corporate Tax Rates

Israel's general corporate tax rate is 25%. The Investment Encouragement Law provides for reduced rates of company tax for businesses which engage in manufacturing activity- broadly defined so as to include for example software development ventures - and which meet certain export criteria. These "Preferred Enterprises" are currently entitled to pay 10% tax if located outside the center of the country, and 15% if located in the central region. Those rates will be further reduced to 6% and 12%, respectively, by 2015.

Research and Development Centers

Many multinational technology enterprises have established major R&D centers in Israel. The local R&D entity typically operates on a "cost plus" basis, with an operating margin of between 5% and 10% normally being acceptable. In many cases, an R&D center may also qualify as a "Preferred Enterprise" (see above) and pay significantly reduced rates of corporate tax. R&D services performed on a contract basis for foreign affiliates also usually qualify for "zero rating" Value Added Tax treatment. For companies performing R&D activities for their own account (not as contractors), investment in R&D may be deducted annually as a current expense for tax purposes (subject to certain conditions).

Profit Repatriation

The Israeli withholding tax on dividends distributed by an Israeli subsidiary company to an Indian parent company is limited to 10% under terms of the India-Israel double tax treaty. Moreover, the treaty contains a special provision which requires the Indian tax authorities to grant a tax credit of 15% on dividends received from an Israeli subsidiary, despite the fact that the Israeli withholding at source cannot exceed 10%. This benefit appears to be of particular interest in light of recent changes to the Indian tax system which limit the basic rate of Indian tax on an inbound dividend to 15%.

In this context it is important to note that Israeli tax law does not contain any restrictions on the amount of debt which may be used in the financing of the operations of a local company, in relation to the amount invested in shareholders' equity (i.e. there are no "thin capitalization" rules). This allows for leveraged investments and the repatriation of cash through the repayment of loan principal with no tax consequences.

Capital Gains Tax Exemption

Successful investments in Israel companies, especially in the high tech sector, are typically realized through "exit" transactions which involve the sale of shares in the local company (and in a minority of cases, the sale of the technology assets themselves). These exit transactions can give rise to significant capital gains. While the India-Israel tax treaty would allow Israel to tax gains derived by an Indian investor upon the sale of shares in an Israeli company, recent amendments to Israel's tax code provide a broad exemption to foreign investors on capital gains derived from the sale of Israeli companies (irrespective of the terms of the applicable tax treaty). The practical meaning of this is that in most cases, gains derived upon "exit" by foreign resident shareholders will be exempt. An additional exemption in the Israeli tax law exempts gains earned by non-residents from the sale of shares in publicly-listed Israeli companies, whether traded on the Tel Aviv Stock Exchange or abroad. There are also extensive provisions in the Israeli tax code allowing tax-deferred reorganizations, including mergers, share swaps, asset contributions and spin-offs.

Employee Stock Option Plans

Israel allows employee stock option gains to be taxed at a beneficial rate (25%) if the options are held in trust for a period of two years (subject to a number of conditions). Similar treatment is also available for a grant of shares.

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In sum , Israel offers an attractive tax regime for inbound investment and business activity which allows foreign enterprises to efficiently tap into Israel's outstanding human resources and know how.

Governmental Support for Industrial R&D Cooperation between India and Israel

Active support for collaborative R&D ventures between Indian and Israeli companies

The Office of the Chief Scientist (OCS) of the Ministry of Industry, Trade and Labor is responsible for implementing Israeli government policy regarding support and encouragement of industrial research and development. The role of the OCS is to assist in the development of new technologies in Israel, as a means of fostering the Israeli economy, encouraging technological entrepreneurship, leveraging Israel's science-based resources, supporting high added value R&D, enhancing the knowledge base of Israeli high-tech industries and promoting cooperation in R&D both nationally and internationally. The OCS offers a range of support programs, including bilateral and multilateral international R&D cooperation programs that are implemented by MATIMOP, the Israeli Industry Center for R&D.

MATIMOP, the executive agency of the Office of the Chief Scientist of the Ministry of Industry, Trade and Labor of Israel (OCS), is the official National Agency for international industrial R&D cooperation charged with promoting highly supportive policies to build Israel's industrial infrastructure, and nurturing industrial innovation and entrepreneurship. MATIMOP implements an increasing range of international programs on behalf of the OCS, both bilateral and multi-lateral. The Government of Israel has entered into 40 Bi-National Industrial R&D Collaboration Agreements all over the world and participates actively in 5 multi-lateral European programs. These agreements facilitate access to funding schemes, know-how and technologies, as well as open up new markets.

The India-Israel Initiative for Industrial Research and Development (i4RD) is a governmental bilateral framework providing active support for collaborative R&D ventures between Indian and Israeli companies. The bilateral framework is jointly implemented by MATIMOP, the Israeli Industry Center for R&D, on behalf of the Office of the Chief Scientist (OCS) of the Ministry of Industry, Trade and Labor, in Israel; and the Global Innovation and Technology Alliance (GITA), promoted jointly by the Technology Development Board of the Department of Science & Technology (DST), Government of India and the Confederation of Indian Industry (CII), in India. The i4RD program offers enormous opportunities for industrial R&D cooperation to Indian and Israeli companies. Applicants can get funding of up to 50% of R&D costs in the form of a soft loan for projects targeting the development of new, innovative and market-driven products, applications and services in all industry fields. In Israel, funding is provided by the Office of the Chief Scientist; In India, from GITA/DST. Through R&D alliances, Israeli companies not only benefit from the unique strengths and skills of their partner company in India, but can also make the most of market opportunities unique to country, which has shown unprecedented growth over the last decade.

At the level of the individual companies, the benefits derived from entering these programs and developing joint R&D projects are clear:

- Risk Sharing – high risks are mitigated by utilizing government grants and through scientific, technical and commercial synergies;
- Time to Market – collaborative R&D tends to shorten development cycles providing critical commercial advantages;
- Strategic Relationships/Partnerships – mutually beneficial strategic partnerships enhance opportunities for success in an increasingly competitive and integrated global market.

All programs share the common benefits for Israeli companies highlighted above, as well as offering international companies access to Israeli industry's unique capacity for innovation. The effort to expand the network of international industrial R&D collaboration with new countries, states, provinces and regions is ongoing.

According to Michel Hivert, Director General of MATIMOP, 2011 was "a very good year even though we are still under the shadow of the financial crises. The Chief Scientist's budget for international partnerships rose to about $100 million." Mr. Hivert adds that he believes that within two years, international cooperation activities will make up about one third of the annual budget of the OCS and be no less than NIS 500 million. "International strategic partnerships are critical to Israeli industry by opening the gateway to successful competition in the increasingly integrated global market for knowledge-intensive products."

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GLOBAL INNOVATION AND TECHNOLOGY ALLIANCE
PROMOTED BY DST AND CII

Department of Science and Technology
Government of India

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OCS-Office of the Chief Scientist
MINISTRY OF INDUSTRY, TRADE & LABOR

Defining India as a homogenous business territory - says who?

Niv Azrad

Two elderly men decided to spend a day at the zoo. It was the first time they had ever been to one. They wandered through the park and when they got to the giraffe's cage, they stood still and stared at this unique looking animal. After quite a long time, the two gentlemen turned to each other and say: "Nahhhh… there's no such 'animal'…"

The seventh largest country in the world in geographical terms, and second in population size, the Republic of India is a federation composed of 28 states and seven union territories with 18 languages and over a 100 dialects.

So much for Wikipedia, but in my view, the story I've opened with is an allegory. To understand India is to know that when it comes to defining India as a homogenous business territory - well, there is no such 'animal'…

As Israeli investors we don't view Europe as a single territory .So should we not grasp India as one country. When we prepare to enter the European market, we study and research the specific country we plan to approach – its culture, language, customs, regulation, taxation, legal environment etc., and this is the way one should plan and prepare when targeting any of the 28 states that form the Indian market. And this is only one of many aspects foreign investors need to cope with.

For example, an aspect worth recognizing is employee mobility among the Indian workforce. So knowing which territory is your target market and learning its local culture, is just the tip of the iceberg. India's fast developing cities attract investors from abroad and educated workforce from all over India; a diverse and colorful culture is conceived, reminiscent of an immigrant community in all its facets. A foreigner first arriving to India's thriving megalopolis will not easily tell the difference; after all the people who make up this colorful cultural mix are actually part of the same nation. Yet, they don't always share the same background, language, dress code, customs; it is colorful cultural mix per se. In a country where language changes every few hundred kilometers and food every 100 kilometers, there is a lot to fathom before you can do justice to the cultural marvel that India is.

To date, Several Israeli companies are operating successfully in the Indian market, yet it is still not a trivial matter to bring new Israeli investors into the Indian market. In the past, many potential investors didn't experience big successes in India, which is the reason why newcomers move with great caution.Yet, to reject India after one or two failures would be unfair.

Simply spoken, India is an economical locomotive that thinks differently than the routine western thinking and any attempt to define it will be perceived as patronizing…

As a foreign investor in India, today, more than ever, India's business potential is huge, but requires a different approach to business. The thoughts I have expressed here form the tip of the Iceberg – of a whole new adventure, still unexplored.

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The Desert Blooms: Israel's Agriculture-Technology Innovations

By Noam Aviv

Agricultural experimenting - borne from necessity - gave Israel an edge in agricultural technology and water management

Agricultural technology and water management has long been an area where Israel enjoys a relative advantage, and sometimes even an absolute one. This record is based on a rich past of scientific and agricultural experimenting which was borne from necessity.

Since its founding, the Middle Eastern country has been coping with water scarcity and has been made the subject a national priority. Traditionally, dry farming on a subsistence level was practiced in the Land of Israel for over 2000 years. When Zionism started attracting Jews to what was then called Palestine, before the establishment of the State of Israel, the pioneers of many of the early farming settlements cultivated many experimental plots. Arriving in the country with hardly any previous agricultural experience, they found agricultural experimentation vital for the development of such crops as grapes, citrus and almonds.

Through the years, agricultural research in Israel has been based on close co-operation between scientists, farmers and agri-tech industries. Israel's semi-arid to arid climate and its shortage of high quality water were major constraints facing Israeli agriculture. "Making the desert bloom" was the time's slogan and reality was not far from it. Extensive greenhouses production and know-how help the country export vegetables, fruits and flowers to the European markets during the winter off-season. And as more and more countries around the world begin to confront the real issues of global warming and water scarcity, many are turning to Israel, which has developed novel solutions in the field.

Examples to Israel's relative advantage in agriculture technology are practically endless. To name but a few:

- Israeli agriculturalists have developed revolutionary drip irrigation systems which allow for massive savings in water consumption; Israeli-invented drip irrigation helped achieve 70%-80% of water efficiency in agriculture, the highest rate in the world.
- Israel developed some advanced water management and treatment practices, thanks to which 44 percent of the water used for agriculture in the country come from recycled and low quality water with a 80% water recycling rate, Israel is the world's leading country in water recycling (for the sake of comparison, the second largest water recycler is Spain, with a rate of 18%).
- Israel has developed automated milking and dairy herd management systems and egg-collecting equipment, computerized feeding systems for cattle and production-recording computers which helped reach record yield in terms of milking.
- Computerized fertigation (a process that automatically injects fertilizer through irrigation systems) was developed in Israel and exported abroad. Israel is home to the world's largest seawater reverse osmosis (SWRO) desalination plants, annually producing 140-150 million m3 at the low cost of approximately $0.52 per m3 of water, the most cost-efficient of its kind in the world. The country now desalinates 50% of its municipal consumed water, and its irrigation solutions yield the highest ratio of crop per water unit. To this day, Israeli desalination is the most economical in the world.
- Gravity-based drip systems for developing countries, plus advanced temperature and humidity control methods, help create healthy environments for poultry, flowers and out-of-season vegetables. Also, Israel has achieved the highest ratio in the world of crop yield per water unit.

Those achievements and others are well-rooted in Israel's agri-tech culture, and since the 1950s, Israel has sought to share its expertise in the field with the developing world. But globalization makes the good news available worldwide.

Some current successful Israeli named in the Sector include Netafim, which developed drip irrigation and is today the leading irrigation technology worldwide; Emefcy, an efficient wastewater treatment innovator; EZPACK, who created a unique way to transfer clean, drinkable water to disaster areas; TaKaDu, who provides a Software-as-a-Service solution for monitoring water distribution networks; and Polysack Plastic Industries, which developed, manufactured and marketed an extensive range of state-of-the-art UV resistant nets for a wide range of agricultural applications such as plant protection and shade and light-spectrum management.

All of these companies are involved in agricultural projects around the world helping to bring about major ecological and agro-technical challenges.

But Israel's advantage thrives on public funding as well. Perhaps the most important institute in the field is Volcani Institute -The Agricultural Experiment Station established in 1921 that was later on developed into the Agricultural Research Organization (ARO).

Through the years, agricultural research in Israel has been based on close co-operation between scientists, farmers and agri-tech industries. Israel's semi-arid to arid climate and its shortage of high quality water were major constraints facing Israeli agriculture. "Making the desert bloom" was the time's slogan and reality was not far from it

In 1972, another important player was merged from existing governmental bodies: The Agricultural Research Organization (ARO) was established, incorporating all agricultural research within the Ministry of Agriculture. The ARO and its forerunner have helped to turn Israel's "mixed farming" system into a highly industrialized enterprise focused on export to Europe. Serious water shortages in the country have led to the use of low quality and recycled water. Some 44% of the water used in Israel for agriculture comes from recycled water without lowering quality of the produce.

CINADCO (The Center for International Agricultural Development Cooperation within the Israeli Ministry of Agriculture and Rural Development) is another important player in the field. CINADCO has trained farmers all over the world in various methods of cultivation, irrigation and fertigation technologies and crop diversification in vegetables, flowers and orchard crops.

Apart from those, academy plays an important role: The Faculty of Agriculture of the Hebrew University of Jerusalem, Tel Aviv University, Bar Ilan University, Ben Gurion University of the Negev and the Weizmann Institute of Science - all of those engage intensively in agricultural research.

Public funding for agricultural technology research and initiatives is well focused and up-to-date – which bears fruit in the numbers of new companies that are built in Israel and reach the global market. For example, Israel NewTech is a national program aimed at promoting Israel's water and sustainable energy sectors. This pioneering national program is led by the Ministry of Industry, Trade and Labor, and is supported by a number of additional government agencies. Israel NewTech helps to advance the water and sustainable energy sectors by supporting academia and research, encouraging implementation in the local market, and by helping Israeli companies succeed in the international arena.

The present main objectives of the Israeli public funded agri-tech research include supply of fresh food products all the year around at reasonable prices; increasing exports of agricultural products; strengthening the farming community at the periphery of the country; increasing production and income of farmers; efficient use of the limited water resources and precision agriculture.

Israel also leads several international standard committees (ISO) in the areas of crisis management and water utility, support systems in water utility and bio early warning systems.

In light of the recent surge in global food prices in the last decade, technological advances in those fields, which have major applications in increasing crop yields, are more important than ever, and Israel has the lion's share in the world wide agricultural technology business.

Agriculture & water – Overcoming the obstacles in India

While agriculture's share in India's economy has progressively declined to less than 15% due to the high growth rates of the industrial and services sectors, the sector's importance in India's economic and social fabric goes well beyond this indicator. First, nearly three-quarters of India's families depend on rural incomes. Second, the majority of India's poor (some 770 million people or about 70 percent) are found in rural areas. And third, India's food security depends on producing cereal crops, as well as increasing its production of fruits, vegetables and milk to meet the demands of a growing population with rising incomes. To do so, a productive, competitive, diversified and sustainable agricultural sector will need to emerge at an accelerated pace.

India is a global agricultural powerhouse. It is the world's largest producer of milk, pulses, and spices, and has the world's largest cattle herd (buffaloes), as well as the largest area under wheat, rice and cotton. It is the second largest producer of rice, wheat, cotton, sugarcane, farmed fish, sheep & goat meat, fruit, vegetables and tea. The country has some 195 m ha under cultivation of which some 63 percent are rainfed (roughly 125m ha) while 37 percent are irrigated (70m ha). In addition, forests cover some 65m ha of India's land.

Challenges

Three agriculture sector challenges will be important to India's overall development and the improved welfare of its rural poor:

1. Raising agricultural productivity per unit of land: Raising productivity per unit of land will need to be the main engine of agricultural growth as virtually all cultivable land is farmed. Water resources are also limited and water for irrigation must contend with increasing industrial and urban needs. All measures to increase productivity will need exploiting, amongst them: increasing yields, diversification to higher value crops, and developing value chains to reduce marketing costs.

2. Reducing rural poverty through a socially inclusive strategy that comprises both agriculture as well as non-farm employment: Rural development must also benefit the poor, landless, women, scheduled castes and tribes. Moreover, there are strong regional disparities: the majority of India's poor are in rain-fed areas or in the Eastern Indo-Gangetic plains. Reaching such groups has not been easy. While progress has been made - the rural population classified as poor fell from nearly 40% in the early 1990s to below 30% by the mid-2000s (about a 1% fall per year) – there is a clear need for a faster reduction.

3. Ensuring that agricultural growth responds to food security needs: The sharp rise in food-grain production during India's Green Revolution of the 1970s enabled the country to achieve self-sufficiency in food-grains and stave off the threat of famine. Agricultural intensification in the 1970s to 1980s saw an increased demand for rural labor that raised rural wages and, together with declining food prices, reduced rural poverty. However agricultural growth in the 1990s and 2000s slowed down, averaging about 3.5% per annum, and cereal yields have increased by only 1.4% per annum in the 2000s. The slow-down in agricultural growth has become a major cause for concern. India's rice yields are one-third of China's and about half of those in Vietnam and Indonesia. The same is true for most other agricultural commodities.

Priority Areas for Support

Enhancing agricultural productivity, competitiveness, and rural growth

Promoting new technologies and reforming agricultural research and extension: Major reform and strengthening of India's agricultural research and extension systems is one of the most important needs for agricultural growth. These services have declined over time due to chronic underfunding of infrastructure and operations, no replacement of aging researchers or broad access to state-of-the-art technologies. Research now has little to provide beyond the time-worn packages of the past. Public extension services are struggling and offer little new knowledge to farmers. There is too little connection between research and extension, or between these services and the private sector.

Improving Water Resources and Irrigation/Drainage Management: Agriculture is India's largest user of water. However, increasing competition for water between industry, domestic use and agriculture has highlighted the need to plan and manage water on a river basin and multi-sectoral basis. As urban and other demands multiply, less water is likely to be available for irrigation. Ways to radically enhance the productivity of irrigation ("more crop per drop") need to be found. Piped conveyance, better on-farm management of water, and use of more efficient delivery mechanisms such as drip irrigation are among the actions that could be taken. There is also a need to manage as opposed to exploit the use of groundwater. Incentives to pump less water such as levying electricity charges or community monitoring of use have not yet succeeded beyond sporadic initiatives. Other key priorities include: (i) modernizing Irrigation and Drain-

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India & Israel

Our friendship has generated great accomplishments in the past 20 years. We aim to achieve many more

History

TAHAL began operations in India soon after establishment of diplomatic relations between India and Israel in 1992. Since that time, TAHAL has carried out projects in many states of the country. Notable among these are the preparation of Master Plans for Water Resource Development in Haryana, Gujarat, Rajasthan and Tamil Nadu; irrigation & drainage projects in Uttar Pradesh; and water supply and wastewater treatment projects in Assam. Improving access to safe water for India's growing population is of critical importance. To meet this challenge, India has been investing in development of water resources and agriculture, fields in which TAHAL's unique capabilities provide a significant edge over other firms.

Local Presence

- In addition to a main office in New Delhi, TAHAL has maintained various project offices in Hyderabad, Guwahati, Jaipur and other locations.
- Over the years, TAHAL has made a strong local impact by cultivating strategic alliances with local consulting firms to facilitate contract award and successful project execution.
- TAHAL is building strategic partnerships with local developers to carry out BOT/turnkey projects.

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Some agricultural sub-sectors have particularly high potential for expansion, notably dairy. The livestock sector, primarily due to dairy, contributes over a quarter of agricultural GDP and is a source of income for 70% of India's rural families. Growth in milk production, at about 4% per annum, has been brisk, but future domestic demand is expected to grow by at least 5% per annum

age Departments to integrate the participation of farmers and other agencies in managing irrigation water; (ii) improving cost recovery; (iii) rationalizing public expenditures, with priority to completing schemes with the highest returns; and (iv) allocating sufficient resources for operations and maintenance for the sustainability of investments.

Facilitating agricultural diversification to higher-value commodities: Encouraging farmers to diversify to higher value commodities will be a significant factor for higher agricultural growth, particularly in rain-fed areas where poverty is high. Moreover, considerable potential exists for expanding agro-processing and building competitive value chains from producers to urban centers and export markets.

Promoting high growth commodities: Some agricultural sub-sectors have particularly high potential for expansion, notably dairy. The livestock sector, primarily due to dairy, contributes over a quarter of agricultural GDP and is a source of income for 70% of India's rural families, mostly those who are poor and headed by women. Growth in milk production, at about 4% per annum, has been brisk, but future domestic demand is expected to grow by at least 5% per annum. Milk production is constrained, however, by the poor genetic quality of cows, inadequate nutrients, inaccessible veterinary care, and other factors. A targeted program to tackle these constraints could boost production and have good impact on poverty.

Developing markets, agricultural credit and public expenditures: India's legacy of extensive government involvement in agricultural marketing has created restrictions in internal and external trade, resulting in cumbersome and high-cost marketing and transport options for agricultural commodities. Even so, private sector investment in marketing, value chains and agro-processing is growing, but much slower than potential. While some restrictions are being lifted, considerably more needs to be done to enable diversification and minimize consumer prices. Improving access to rural finance for farmers is another need as it remains difficult for farmers to get credit. Moreover, subsidies on power, fertilizers and irrigation have progressively come to dominate Government expenditures on the sector, and are now four times larger than investment expenditures, crowding out top priorities such as agricultural research and extension.

Sustaining the environment and future agricultural productivity

In parts of India, the over-pumping of water for agricultural use is leading to falling groundwater levels. Conversely, water-logging is leading to the build-up of salts in the soils of some irrigated areas. In rain-fed areas on the other hand, where the majority of the rural population live, agricultural practices need adapting to reduce soil erosion and increase the absorption of rainfall. Overexploited and degrading forest lands need mitigation measures. There are proven solutions to nearly all of these problems. The most comprehensive is through watershed management programs, where communities engage in land planning and adopt agricultural practices that protect soils, increase water absorption and raise productivity through higher yields and crop diversification. At issue, however, is how to scale up such initiatives to cover larger areas of the country. Climate change must also be considered. More extreme events – droughts, floods, erratic rains – are expected and would have greatest impact in rain-fed areas. The watershed program, allied with initiatives from agricultural research and extension, may be the most suited agricultural program for promoting new varieties of crops and improved farm practices. But other thrusts, such as the livelihoods program and development of off-farm employment may also be key.

Source: World Bank

Role of Venture Capital in Cleantech solutions

space allows for a country-wide incubator of ideas. Another factor that encourages entrepreneurs - Israelis' compulsory military service, with its early exposure to high-pressure environments, also develops team work and leadership skills plus ability for technology-oriented innovation.

Historically speaking, the foundation of Israel's cleantech industry was laid with the beginning of the Kibbutz (collective communities) movement at the beginning of the twentieth century. Back then, the land was mostly semi-arid, with a scarcity of water, and pockmarked by mosquito infested swamps - thus principles of sustainability and self-sufficiency were adopted from the outset so as to "make the desert bloom". Those same principals help now new tech garage innovations to rapidly find their way to a working product. And it seems that Israeli entrepreneurs have made a good use of high-tech expertise in leveraging them to Cleantech.

All these above factors find an echo in vast financing: At least 40 venture funds, many of them American, manage today more than $10 billion in Israel, with an increasing share of their allocations devoted to cleantech companies. This includes almost every major VC firm in Silicon Valley (Battery Ventures, Greylock Partners, USVP, Sequoia Capital and many others) – all of them are active in Israeli cleantech investments.

Home grown Israeli VC community adds to the financial thrill: Israel's vibrant local VC community includes Israel Cleantech Ventures, AquaAgro and Terra Ventures. These three firms are dedicated to investing in Israel's cleantech sector.

To sum thing up, Glen Schwaber, Partner at Israel Cleantech Ventures, once wrote: "Israel's tech sector has flourished through the creation of core technology competencies that are world leading. These include, but are not limited to digital printing, semiconductors, power electronics, optics and software. Over the last two decades, multiple billions of VC dollars have poured into Israeli companies in these sectors, market leaders have emerged, and many of the world's largest multinationals have bought companies and set up shop in Israel as a result. Israel's ability to compete globally in cleantech markets will depend largely on our success in leveraging all this know-how … Israeli excellence in advanced optics and systems has spawned a number of very interesting utility scale solar companies."

Clean Technology - Current Status and Opportunities in India

Sateesh Kulkarni

India's clean technology investments, has reached $10.2 billion in 2011, some 52 percent higher than the $6.8bn invested in 2010. This was the highest growth figure of any significant economy in the world. There is plenty of room for further expansion in 2012-2013, India accounted for 4 percent of global investment in clean energy. India ranks sixth among the world's 20 leading economies in attracting funds to build clean energy infrastructure. The Jawaharlal Nehru National Solar Mission has encouraged investments close to $ 4.2 billion in converting sunlight to electricity almost two-fifths of the $10.2 billion the country invested in renewable energy in 2011. India's clean energy sector half of which consists of the wind energy grew the second fastest in the past year.

Policies

From a policy standpoint, there is a genuine push towards clean energy, across wind, solar, hydro and bio. Grid-connected renewable capacity in India stood at 22 gigawatts (GW), comprising 11% of total power generation in the country, with 2.8 GW of wind capacity added in 2011 alone. Solar capacity is on the rise due to both the Nehru Solar Mission as well as several state-level initiatives. The 12th Five-Year Plan aims to install 18.5GW of renewable energy.

There is opportunity across the entire supply chain, not just on the generation front. The immediate prospect is in addressing the challenge in the transmission and distribution losses, estimated to be close to 30% due to sub-standard grid infrastructure and pilferage. Energy efficiency is another sector that holds tremendous potential. Also, the fact that all large consulting firms have set up sustainable building or infrastructure business units indicates that they see cleantech as an engine of growth.

The grant-in-aid scheme on development and Promotion of Clean Technology was initiated in 1994 with the following objectives:

1. Development & Promotion of Cleaner Technologies.
2. Development of tools and techniques for pollution prevention.
3. Formulation of Sustainable Development Strategies

Since the inception of the scheme in 1994, important activities undertaken so far include

- Carrying Capacity Studies in various parts of the country namely Greater Kochi Region, Doon Valley, Damodar River Basin, Tapi Estuary and National Capital Region (NCR) by National Environmental Engineering Research Institute (NEERI) Nagpur
- Natural Resource Accounting Studies for Yamuna Sub-Basin by National Environmental Engineering Research Institute (NEERI)
- Life Cycle Assessment (LCA) Studies in Thermal Power Plants by Indian Institute of Environment Management, Navi Mumbai
- Live Cycle Assessment for Steel Sector by National Metrological Laboratory, (NML) Jamshedpur
- Pulp and Paper Study by Indian Agro and Recycled Paper Mills Association (IARPMA), Delhi
- Life Cycle Assessment for Cement Sector by National Council for Cement and Building Materials Ballabgarh; and Other pollution prevention and waste utilization and management studies.

Demand and Prospects

India, one of the world's fastest growing economies, presents lucrative opportunities for companies that offer products and services in the clean technologies industries. India is seeking to diversify and grow its energy sources and reduce carbon emissions in the context of sustained economic expansion. With the rapid growth of the Indian economy, the demand for clean technologies in the country is rising exponentially, and the development of renewable energy resources and deployment of environment technologies that reduce greenhouse gas emissions is a high priority for the Government of India.

India generated a record of 2.827 GW in wind power, making it third (behind China and the US) for new installations globally in 2011. Grid-connected solar power climbed from just 18 MW in 2010 to 2.777 GW in 2011. Energy Finance estimates that 2,500MW to 3,200MW of wind capacity could be added in 2012.

Renewable Energy: The Indian renewable energy market is estimated to be worth over $17 billion and is growing at an annual rate of 15%. Wind, hydro, solar, biomass, and

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The growth rate in biotech, energy, environment and transport sectors is much higher than India's GDP growth rate. This offers huge opportunities that can be utilized

waste-to-energy all have huge potential. Only 19,973 MW of total renewable energy potential estimated at 200,000 MW has been tapped in India thus far leaving a huge opportunity for potential future market growth.

To keep its economic growth at its current pace, India needs to add 150 GW of power capacity at an investment of $200 billion over the next five years. The Government of India (GOI) wants to tackle the existing shortfall in the energy supply increasingly through the generation of renewable energies. India today stands among the top four countries in the world in terms of renewable energy capacity and it offers some attractive incentives in this area.

Wind: Companies can take advantage of India's wind energy market, which is one of the world's largest as India imports wind turbines, windmill blades, wind battery chargers, wind energy converters etc.

Hydro: The hydropower generation potential for India is 300,000 MW out of which only 145,000 MW can be exploited due to limited resources and difficult geographical terrain. The GOI has firmed up an investment of $20 billion for the development of hydro projects by 2020.

Biomass: The GOI announced a target of creating 10,000 MW of biomass power generation by 2020 and will shortly release a biomass power policy to chart out a roadmap for supporting biomass generated power.

Waste to Energy: The GOI has developed a National Master Plan for Development of Waste to Energy in India. The GOI estimates that the potential to generate power from municipal solid waste will more than double by 2020, while the potential from industrial waste is likely to increase by more than 50%. In a country with high population density and limited landfill capacity, waste to energy power generation is a major priority.

Solar: India has embarked upon a $19 billion plan to produce 20GW of solar power by 2022.

Energy Efficiency: The market potential for industrial energy efficiency products and services is projected to be approximately $27 billion in 2018; the potential for green buildings was estimated to be over $3 billion in 2011.

Smart Grids: At present the smart grid market in India is at a nascent stage but is projected to grow rapidly with plans to install several million smart meters in the next few years.

Green Buildings: India has emerged as one of the world's top destinations for green buildings and has implemented a number of home-rating schemes and building codes, which open up a wide range of opportunities for companies in the energy efficiency sector.

The concept of green building development in the country has witnessed a sustained momentum despite the overall weakening macroeconomic environment, witnessed in 2009. The supply of green space has been contributed by various industrial segments but IT/ITeS sector contributed the maximum at 58 per cent of the total supply in the country.

Environmental Technologies: The environmental technologies market in India is estimated at approximately $9 billion per year with an annual growth rate of 15%. Growing environmental consciousness, increasing compliance and enforcement of environmental legislation, the availability of finance and rising domestic demand due to the rapid growth in urban population has led to the deployment of clean technologies in the country. The Indian Government has initiated many new projects for improving environmental conditions and reducing pollution ($12.4 billion is reserved for improvement of waste management, development of urban areas, water and sanitation, etc., in 63 cities nationwide.) The booming Indian economy, rapid industrialization, and urbanization have all contributed to severe environmental damage which creates opportunities for firms that can offer technology solutions to these challenges.

Water and Waste Water Management: The Indian Water Resources Ministry plans to invest $50 billion in the water sector over the next 5 years.

- The $1.2 billion Indian water and waste water treatment

market is expected to grow at a rate of over 10% in the next few years.
- The U.S. accounts for over 40% of the total Indian imports into this sector.
- The current market for industrial and waste water treatment is estimated at $640 million and drinking water purification at $425 million. Both sectors are expected to witness tremendous growth in the near and medium-term.
- The $280 million bottled water market is expected to reach $600 million by 2012.
- The $40 million market for packaged waste water treatment plants is expected to reach $60 million by 2013.

Clean Coal Technologies: India is making significant effort in adopting international technology and adding new clean coal infrastructure in the three categories of coal beneficiation, coal combustion and coal conversion. Indian coal is predominantly low grade and high in ash contents. India is targeting a coal beneficiation capacity of 810 million tons by 2025, an eight-fold increase from the current installed capacity. Improved coal combustion technology upgrade efforts include supercritical boiler technology and Integrated Gas Combined Cycle (IGCC) using synthesis gas for thermal power plants. Coal conversion technologies being targeted are underground coal gasification and coal to liquid projects. Additional focus areas are capturing methane from coal bed/coal mine/ventilation air for commercial exploitation. The GOI is collaborating with several international agencies and countries to explore the best available technology options in each of the areas.

Recent Initiatives

The European Business and Technology Centre (EBTC), an agency co-funded by the European Union (EU) for promoting clean technologies in India, will facilitate establishing 30 projects in the country in the near future. The EBTC has around 25 to 30 projects in the pipeline which will come up in the near future. The Indo-European projects will be in biotechnology, energy, environment and transport sectors. The EBTC assists the business, science and research communities in Europe and India to work together towards generating new business opportunities in clean technology transfer.

The growth rate in biotech, energy, environment and transport sectors is much higher than India's GDP (gross domestic product) growth rate. The growth is much higher in pockets. This offers huge opportunities that can be utilized. Also, India is among very few economies which have been able to register a sustained growth.

With Government policies and incentives in place for renewable energy, the number of private equity investments in the clean technologies sector is increasing. There were five deals in the clean technologies space in January-March 2011 quarter; ten in the April-June 2011 quarter and 14 deals in the July-September 2011 quarter. The amount invested in the July-September quarter was $359 million compared with $176 million in the immediate previous quarter.

The investment deal follows a series of investments into the clean technologies space. Goldman Sachs invested $204 million in start-up renewable energy firm, ReNew Wind Power in September 2011, This was one of the biggest private equity deals in the clean technologies space in India. Prior to this, FE Clean Energy invested $40 million in NSL Renewable Power in July 2011. IDFC Project Equity invested $112 million in Caparo Energy India in June 2011. Baring India invested $90 million in Cethar Vessels in December 2010.

Investing in the clean technologies space requires a great degree of specialization. These investments have a long gestation period and a different returns profile.

Sateesh Kulkarni is Director, Corporate Catalyst India and heads the Market Intelligence Division. Corporate Catalyst (India) Pvt, Ltd. is a consulting firm well positioned to develop, implement and monitor India business strategies, having 9 offices across India.

Why to Invest in Israel?

The R&D programs, the collaboration between Industry & Academia, the innovation and proven records - make Israel the best place to invest

Constantly Innovating

- Israel has the world's highest rate of research and development investment as a percentage of GDP and is among the world's leaders in numbers of patents issued.
- The country's twenty-four high-tech incubators are deeply committed to nurturing entrepreneurship and innovation and support about 180 projects in various stages of R&D at any given time. Since the inception of the incubator program in 1991 and to the end of 2008, over 1,150 projects have graduated from the program. By the end of 2008, the total cumulative private investment in graduate incubator companies surpassed $2.5 billion.

Top Academic Education

Israel enjoys the highest percentage in the world of engineers in the workforce and the highest ratios of university degrees and academic publications per capita.

Collaboration between Industry & Academia

Israel's Weizmann Institute of Science's commercial arm "Yeda" and Hebrew University's technology transfer arm "Yissum" are among the highest earning university technology transfer companies in the world. Yeda is the third most lucrative in the world in creating revenue from technology transfer.

Multi-lingual Workforce

With a highly export-oriented economy, Israelis feel very comfortable speaking English. The annual influx of tens of thousands of well-educated people from all over the world has contributed to easy communication in a variety of languages.

Proven Record

- Israel has a long track record of market-creating, profit-driving innovations. Israeli companies that have become well-known around the world include CheckPoint, Teva Pharmaceuticals, Comverse, ECI Telecom, Keter Plastic, Iscar, Netafim, Amdocs, Orbotech and many others.
- Israel's performance has captured the attention of the global investment community. Foreign Direct Investment has grown from $600 million in 1993 to $10.5 billion in 2008. International rating agencies have consistently sustained Israel's credit rating and reaffirmed their confidence in Israel's economy.

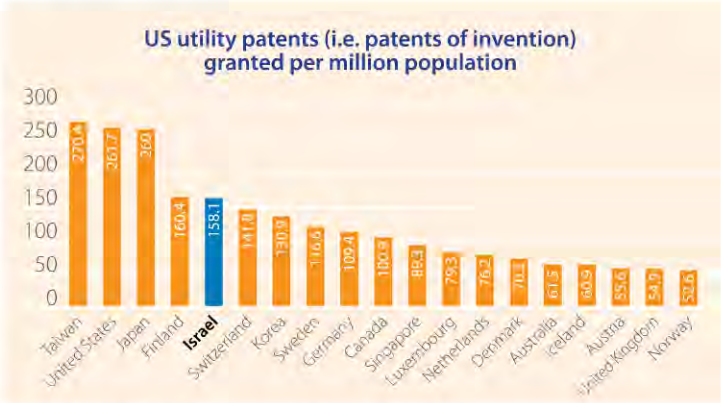
Leader in Profit-Driving Innovation

- Israel's M-Systems was the first to offer Disk-on-Key and Disk-on-Chip flash memory products, and changed the way people store and handle information.
- GE Healthcare in Israel was responsible for bringing to market the world's first miniaturized, portable cardiac ultrasound system.
- The Philips Brilliance CT Scanner, developed in Israel, takes a comprehensive picture of a patient in seconds instead of minutes and in the emergency room where every second counts.
- IP Telephony was invented by the two Israelis who founded VocalTec.
- ZIP compression technology was developed by two professors at the Technion, Israel's Institute of Technology.
- Israel's Given Imaging developed the first ingestible video camera to view the small intestine from the inside, and help doctors diagnose cancer and digestive disorders.
- The technology for the AOL Instant Messenger ICQ was developed in 1996 by four young Israelis.
- Israel's Comverse invented voice-mail.
- The Centrino and Pentium-4 Dotan microprocessors were developed at Intel Israel.
- Israel's InSightec Image Guided Treatment developed a non-invasive way to destroy tumors by focusing ultrasound waves on the target.
- Professors Aaron Ciechanover and Avram Hershko of the Technion in Haifa won the 2004 Nobel Prize in Chemistry. Their work toward identifying the Ubiquitin system is a breakthrough for research in cancer, degenerative brain diseases and many other diseases.
- Prof. Robert Aumann of the Hebrew University of Jerusalem won the 2005 Nobel Prize in Economics. Aumann is an internationally known researcher in the field of game theory.
- Israel's M-Systems was the first to offer Disk-on-Key and Disk-on-Chip flash memory products, and changed the way people store and handle information.
- GE Healthcare in Israel was responsible for bringing to market the world's first miniaturized, portable cardiac ultrasound system.
- The Philips Brilliance CT Scanner, developed in Israel, takes a comprehensive picture of a patient in seconds

At 4.7% of GDP, Israel has the highest rate of R&D investment in the world. Source: OECD and Israel Central Bureau of Statistics (2009)

Source: NASDAQ (2009)

Source: IVC Online, 2009



Source: WEF Global Competitiveness Report 2008-2009

instead of minutes and in the emergency room where every second counts.

International Trade and Economic Cooperation

- Israel has an extensive network of agreements with countries throughout America, Europe and Asia including:
- Free Trade Agreements that cover close to 80% of Israel's foreign trade.
- Joint R&D programs to promote industrial cooperation that provide up to 50% of costs for projects.
- Treaties for the avoidance of double taxation.

Modern Infrastructure

Israel offers the modern infrastructure and services required to conduct business efficiently and effectively, including:

- Efficient, sophisticated communications system.
- Reliable energy infrastructure.
- Well-developed transportation system with modern, international gateways.
- Protection of trademarks, patents and other intellectual property.
- Highly developed and transparent financial system and a legal system based on common and corporate law.
- Active and sophisticated capital markets: companies can dual-list on the Tel Aviv Stock Exchange and foreign exchanges.
- Israel has had full member status in the Investment Committee and Working Party of the OECD since 2002 and is a signatory to the OECD Declaration on International Investment and Multinational Enterprises.

Government Support

- Committed to encouraging the success of foreign direct investment, Israel has liberalized its economy through a series of regulatory changes:
- Implemented liberal foreign currency regulations that eased the raising of capital both in Israel and abroad.
- Reduced both tariff and non-tariff barriers.
- Reformed tax laws to reduce labor tax, capital income tax and global taxation; and created incentives for investments in the high-tech sector.
- Privatized state-owned companies to promote the growth of the private sector and to enhance competitiveness.
- Israel offers substantial investment grants, tax benefits and exemptions for foreign investors through the Law for the Encouragement of Capital Investments.

Special incentives for new R&D centers in Israel's North and South

The R&D centers grant program offers special incentives to foreign companies that establish R&D centers in the Negev and Galilee. This unique project, which was launched in 2009, aims to boost the creation of new high-tech clusters and is the first to allow direct grants to foreign companies which establish an R&D center in Israel. The program is structured to apply to both small R&D centers with a minimum of at least 15 employees, as well as large enterprises numbering above 100 employees.

Source: Investments Promotion Center, Ministry of Industry, Trade & Labor, State of Israel

A Simplified Guide to doing business in India

Satish Kanodia

The Republic of India is a vast country which has existed in one form or another for many millennia. Bound by cultural commonalities, independent India is the second largest country in the world - home to about a sixth of the human population - and the seventh largest country by sheer land mass.

Following the liberalization of India's economy in 1991, India experienced unprecedented growth and has become an integral part of the global economy. India is now the **world's fourth largest economy** and has been growing at an astounding annual rate of 7.8% since 2002.

This paper attempts to introduce the ***basic legal regime*** governing the conduct of business in India and answer **questions and issues** commonly raised by foreign investors Though liable to change, we believe this paper will provide clarity regarding trade & commerce procedures in India. ***However, it should not be used as a legal opinion on any specific matter.***

Please feel free to contact us in the event that you would like to invest in India or expand your operations into India. We would be happy to be of assistance.

Entering India

Investors seeking to set up operations or make investments in India need to appraise and structure their activities on **three pillars:**

- **Strategy**
  Observing the economic and political environment in India from the perspective of the investment
- **Law**
  Exchange Control Laws: Primarily the Foreign Exchange Management Act, 1999 ("FEMA") circulars, notifications and press notes issued under the same
- **Tax**
  Domestic Taxation Laws: The Income Tax Act, 1961; indirect tax laws including laws relating to value added tax, service tax, customs, excise; International Tax Treaties: Treaties with favorable jurisdictions such as Mauritius, Cyprus, Singapore and the Netherlands

Foreign direct investment

Setting up India operations or investing in India requires conformity with India's foreign exchange regulations, specifically, the regulations governing foreign direct investment ("FDI"). Most aspects of currency transactions with India, including investments, are governed by FEMA and the delegated legislation there under. FDI, up to 100%, is permitted in most sectors in India under the 'automatic route' - no prior permission is required from RBI or the Central Government.

Incorporation

The entities that foreign companies may set up in India may either be **unincorporated** or **incorporated**.

The options for **Unincorporated Entities** are:

- **Liaison Office:** Setting up a liaison office requires the prior consent of the RBI. It acts as a representative of the parent foreign company in India, cannot undertake any commercial activities and must maintain itself from the remittances received from its parent foreign company. It is an option usually preferred by foreign companies that wish to explore business opportunities in India.
- **Branch Office:** The branch office of a foreign company in India must be set up with the prior consent of the RBI. It can represent the foreign parent company in India, act as its buying or selling agent in India, and is permitted to remit surplus revenues to its foreign parent company subject to the taxes applicable. It is, however, limited to taking up specified activities. The tax on branch offices is 40 per cent plus applicable surcharges and the education cess.
- **Project Office:** A foreign company may set up a project office in India under the automatic route subject to certain conditions being fulfilled. The acti vities of a project office must be related to or incidental to the execution of the relevant project. A project office is permitted to operate a bank account in India and may remit surplus revenue from the project to the foreign parent company. However, the tax on project offices is 40 per cent plus

India experienced unprecedented growth and has become an integral part of the global economy

applicable surcharges and the education cess. Project offices are generally preferred by companies engaged in one-time turnkey or installation projects.

- **Limited Liability Partnership:** A Limited Liability Partnership ("LLP") is a form of business entity which permits individual partners to be shielded from the liabilities created by another partner's business decision or misconduct. In India, LLPs are governed by The Limited Liability Partnership Act, 2008.The LLP is a body corporate and exists as a legal person separate from its partners. FDI in LLPs will be allowed, through the Government approval route, only for LLPs operating in sectors/activities where 100% FDI is allowed, through the automatic route and there are no FDI-linked performance related conditions.
- **Partnership:** A partnership is a relationship created between persons who have agreed to share the profits of a business carried on by all of them, or any of them acting for all of them. A partnership is not a legal entity independent of its partners. The partners own the business assets together and are personally liable for business debts and taxes. In the absence of a partnership agreement, each partner has an equal right to participate in the management and control of the business and the profits/losses are shared equally amongst the partners. Any partner can bind the firm and the firm is liable for all the liabilities incurred by any partner on behalf of the firm. However foreign investment, with non repatriation benefits is permitted in Indian partnership firms with RBI approvals.

- **Trust:** A trust arises when one person (the "trustee") holds legal title to property but is under an equitable duty to deal with the property for the benefit of some other person or class of persons called beneficiaries. A foreign resident may only be the beneficiary of a trust and only after receiving the prior consent of the Foreign Investment Promotion Board ("FIPB").

Incorporated Entities:

Incorporated entities in India are governed by the provisions of the Companies Act, 1956. The authority that oversees companies and their compliances is the Registrar of Companies ("RoC"). Companies may either be 'private limited companies' or 'public limited companies':

- **Private Limited Company:** A private limited company must have a minimum paid-up share capital of INR 100,000 (approx. USD 1850). It carries out business in accordance with its memorandum and articles of association. A private limited company restricts the right to transfer shares; the number of members is limited to 50, it must prohibit any invitation to the public to subscribe to the securities of the company; and must also prohibit the invitation or acceptance of deposits from persons other than members. About 1-2 weeks are required to incorporate a private limited company.
- **Public Limited Company:** A public limited company must have a minimum paid-up share capital of INR 500,000 (approx. USD 9250). A public company can only commence business after being issued a 'Certificate of Commencement of Business' by the ROC, may have more than 50 shareholders and may invite deposits from the public and may also list its shares on a recognized stock exchange by way of initial public offering ("IPO").

Advantages and Disadvantages of a Private Company

- Not as stringently regulated as a public company
- More flexibility than public companies in conducting operations, including the management of the company, issuance of different types of securities and the payment of managerial remuneration
- Faster incorporation process
- Restrictions on invitation and acceptance of public deposits
- Limited exit options

Incorporation process

The important steps with an indicative time frame involved in the incorporation process are:

Setting up India operations or investing in India requires conformity with India's foreign exchange regulations, specifically, the regulations governing foreign direct investment (FDI)

1. ***Name Approval*** (2-4 days): The RoC must be provided with one preferred name and five alternate names which should not be similar to the names of any existing companies. A no-objection certificate must be obtained in the event that the word is not an 'invented word'.
2. ***Filing of Charter Documents*** (3-5 days): The Memorandum and Articles of the company will need to be prepared in accordance with the needs of the business and the same must be filed with the ROC, which will need to be provided with certain information, such as the proposed first directors of the company, and the proposed address of its registered office. The proposed directors of the company will have to obtain 'Director Identification Numbers' and in order to hasten the incorporation process, they should also obtain 'Digital Signature Certificates'. A private limited company must have at least 2 shareholders and 2 directors whereas a public limited company must have at least 7 shareholders and 3 directors.
3. ***Certificate of Incorporation***: The Certificate of Incorporation provided by the ROC at the end of the incorporation process acts as conclusive proof of the incorporation of the company. A private company can commence business immediately upon receiving its Certificate of Incorporation, whereas a Public company may only commence business once it has obtained a 'Certificate of Commencement of Business'.
4. ***Post Incorporation***: The company must hold its first board meeting, may appoint additional directors (if any).The company must apply for its 'Permanent Account Number' (PAN) and 'Tax Deduction Account Number' (TAN). The company must register itself with statutory authorities such as indirect tax authorities, must open a bank account and must put in place the contracts with suppliers and customers that are essential to running the business.

Types of securities

The primary types of securities used in foreign investments into India are:

- **Equity Shares -** Normal shares in the share capital of a company that typically come with voting rights and dividend rights. A private company may issue shares that have weighted voting rights or no voting rights at all.
- **Preference Shares** - Shares which carry a preferential right to receive dividends at a fixed rate as well as preferential rights during liquidation as compared to equity shares. Convertible preference shares are a popular investment option. Preference shares may be redeemable.
- **Debentures** - Debt securities issued by a company, and typically represent a loan taken by the issuer company with an agreed rate of interest. Debentures may either be secured or unsecured. Like preference shares, debentures may also be convertible

Extracting earnings out of India can be done in numerous ways. ***However it is essential to consider the tax and regulatory issues around each exit:***

Dividend

Companies in India, as in other jurisdictions, pay their shareholders dividends on their shares, usually a percentage of the nominal or face value of the share. For a foreign investor holding an equity interest, payment of dividend is as straight forward way of extracting earnings. However, the dividend distribution tax borne by the company distributing such dividend may not necessarily receive credit against any direct tax payable by the foreign investor who receives such dividend in its home jurisdiction.

Redemption

Preference shares and debentures can both be redeemed for cash. While redemption is perhaps the most convenient exit option for investors, optionally convertible securities, which are effectively redeemable, have been classified as 'external commercial borrowing' (ECB).

IPO

An IPO is the first offer for sale of the shares of a company to the public at large via listing the company's stock on a stock exchange.

Satish Kanodia is a professional providing wide range of services - set up for inbound and outbound services, direct and indirect tax, transfer pricing and all corporate services. He was the founder President of the Federation of Indo-Israel Chambers of Commerce.
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Getting Two Countries Achieve Together


Alfred Arambhan


Anat Bernstein-Reich

"What we have to offer, essentially, is our Network and the years of good will we have earned in our dealings in India," says Adv. Anat Bernstein-Reich. "Without a thorough understanding of cultural nuances, you can't effectively do business in India."

Ten years ago Israeli businesswoman, Adv. Anat Bernstein-Reich and Indian businessman, Mr. Alfred Michael Arambhan formed A&G Partners, a business catalyst and investment banking firm, focusing on Israeli-Indian business collaborations. A&G Partners stand for Acceleration and Growth and they see themselves as a gateway between Israel, India and South East Asia, providing their business partners synergy of global practices and local fundamentals, reinforced with a strong sense of culture and business ethos. "We have an extensive network with Indian leaders of industry, decision makers, groups and associations, which provides a springboard for businesses in various fields", says Arambhan.

Ms. Bernstein-Reich, a business development specialist for emerging markets has been involved with India for over sixteen years. Formerly a consultant to the World Bank, she co-founded a telecommunications company for emerging countries based in California, when she first became involved with the Indian telecom industry; she hasn't looked back since. It is no wonder that the Israeli business paper named her the **Queen of India**.

Mr. Arambhan, is a successful businessman in India and Southeast Asia, the founder and Group Head of Transnational Supply & Services (TSS) a group employing over 500 employees. Mr. Arambhan delivers lectures on Entrepreneurship and Leadership. One of his international projects won him recognition by the UN Global Compact Movement.

Both partners are active in the **public service**. Ms. Bernstein-Reich is the President of Israel-India Friendship Association and the Vice President of the Israel-Asia Chamber of Commerce. On the Indian side, Mr. Arambhan is the Charter President of the Kiwanis Club of Mumbai First.

In Israel, A&G is the gateway for The **Aditya Birla Group**, India's third largest conglomerate

A&G **Investment** banking arm provides both Israeli and Indian clients financial advisory, and Investment Banking services with clients such as ICICI Venture and Infinity Innovation Fund.

As a company that believes in **innovation**, A&G teamed with SIT- Systematic Inventive thinking, the world-renowned innovation consulting company, to form SIT-India, bringing the SIT international practices and adapting them to the Indian corporate world. www.sitsite.com

There is no business like show business. A&G is the executive producer for the Bharati Show - **Bollywood**-inspired Broadway-type stage show, an extravaganza of Indian music, song and dance, which brings the beauty, mystery and wonder of Indian culture to the world, and been viewed by over 1.5 million people across the world.

A&G is also involved in

- Real Estate development
- Project Management
- Technology Transfer
- IT & Telecom
- Security Consulting and HLS products
- Sourcing of goods and services from India

Together with the Israeli Ministry of Foreign Affairs, A&G is the proud local host of the Israel-India Technology Forum named "Gyan Milan". In the past 3 years, A&G hosted in Israel over 150 c-level executives from India that were introduced to the Israeli technology innovation.

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The emerging R&D Landscape in India

Indian economy has changed dramatically since the economic liberalization in 1991. Over the last two decades, a quiet revolution has been unfolding in India, growing slowly but steadily. Indian industry has been building up its technological capabilities. The growth in the Information Technology (IT) sector unleashed a huge momentum in human capital in India. The growing talent pool became a significant draw for an increasing number of R&D investments by major Multinational Companies (MNCs) like GE, Texas Instruments, Astra Zeneca, DuPont, Motorola, Intel, etc. In addition a large number of domestic player like the Tatas, Birlas, Biocon, Godrej, and others have redefined R&D with a unique focus on mass markets in major sectors including automobiles, biotechnology, pharmaceuticals, and telecommunications. Tata Nano, Tata Swatch and Godrej Chotucool are just some of the names that have served to strengthen the image of Indian R&D around the world.

Multinational Companies (MNCs) seriously began to explore India's potential as a research destination more than a decade ago. In the late 1980s and early 1990s some MNCs set up research labs in India. However, this early wave largely consisted of what is sometimes called "insourcing" – MNCs opened research labs to serve their own local manufacturing operations.

Despite this strong accolade, there are serious issues that affect the R&D landscape in India. These threaten the long term growth prospect for the country and reach its full potential. Despite the growing talent pool, Indian R&D base remains globally non-competitive. India has an estimated full time equivalent R&D professional strength of 150 professions per million as compared to that of China (1,180 per million), Korea (2900 per million), USA (4300 per million), UK (2880 per million), and Finland (7300 per million). Indian research capacity is mostly skewed towards basic research and lacks in application oriented R&D. While we have several exemplars in highly innovative R&D, the vast majority of organizations would rather go for a quick acquisition of technology rather than invest in internal R&D. On the other hand, academic institutions and many of the public research centers focus on advancing the science, focusing on patenting and publishing, with very little systematic attention being spent in applied R&D.

Proposed course of action in the 12th Five Year Plan

The Government has emphasized the need for an increase in Science & Technology (S&T) activities in India. For this, the government has put forth certain steps that need to be accomplished in the next five years, through the 12th Five Year Plan.

1. Aligning S&T to Developmental Needs

In India, a wide range of sectors need break through innovations and significant S&T inputs. There is a substantial need for resources for creating a strong R&D system. The plan aims at increasing the R&D spend of 0.9% spend of GDP, of which 75% is public sector and 25% is private sector spend, to 2% of GDP which will consist of 50% each of public and private sector R&D spend. The plan also aims at proposing a shift in the R&D system in the country from basic research (input driven model) to applied research (output driven development strategy).

2. Interaction of Public S&T Institutions with Industry

The 12th Plan aims at bringing in changes in the way publicly owned S&T establishments communicate with the industry. Leveraging the government grants and other forms of financing to secure private financial flows is one of the actions the government intends to take. The government also aims at developing a workable protocol for facilitating interaction among these players. Large Indian companies may be encouraged to establish R&D centers like those of MNCs such as GE, Motorola, Texas Instruments etc.

3. Research in Strategic Sectors

The government aims at increasing R&D activity in the three main sectors namely Department of Atomic Energy, Department of Space, and Department of Defense Research and Development. Their research needs could trigger unique mechanisms for encouraging innovation and ensuring the right impact on social, industrial and strategic sectors in the 12th Plan.

In order to facilitate this, special directorates have been setup at the headquarters of the departments to serve as clearing house of the relevant information on technologies. Linkage with the industry associations is another dimension which would need additional thrust in the 12th Plan.

4. National Missions

National Missions stress on addressing national needs. National needs are mainly related to agricultural needs (soil management, water management, genetic erosion, etc.) and resource management (energy conservation, efficiency, renewable energy, etc.)

5. Dialogue with other countries

To establish constructive communications with other countries (both developed and developing), the government aims at creating a framework that would mediate between the countries and their organizations. This would take into account the realities of strategic national interest and diplomatic charter.

6. Expansion of Basic Science

The 12th Plan further aims at improving the basic science knowledge base in Indian institutions; mainly universities and IITs. Basic science teaching and basic science research is a prior condition for the expansion of the scope of S&T intervention in the development of the economy and society.

(Contributed by Federation of Indian Chambers of Commerce & Industry)

Imports Into India and Exports Out Of India

BASIC REQUIREMENTS AND PROCEDURES

Sateesh Kulkarni

Types of Import-Export Duty

Customs Duty is a type of indirect tax levied on goods imported into India as well as on goods exported from India.

The basic types of import duties are:

- Basic Duty-The customs levies an import duty on nearly any goods or products that come into the national borders. The rate of this duty can vary from the basic 5% to 45%.
- Additional Customs Duty- An additional customs duty is like the central excise duty that is levied on products that are manufactured in India. This additional customs duty is levied on the base value of the imported product which includes landing charges and other custom duties.
- True Countervailing Duty- The countervailing duties are imposed on products imported from outside India to make sure that the domestic products have a fair playing ground.
- Anti-Dumping Duty- Also known as the Safeguard Duty, the Anti-Dumping Duty is aimed toward protecting the domestic industry for import of specified goods with a view to protecting domestic industry from unfair injury. It would not apply to goods imported by a 100% EOU (Export Oriented Units) and units in FTZ (Free Trade Zones) and SEZ (Special Economic Zones).
- Education Cess- At the prescribed rate is levied as a percentage of aggregate duties of customs. If goods are fully exempted from duty or are chargeable to nil duty or are cleared without payment of duty under prescribed procedure such as clearance under bond, no Cess would be levied.

Registration of Importers-Exporter

For the purpose of import or export, the IEC Code is mandatory. This is a unique 10 digit number issued by DGFT - Director General of Foreign Trade, Ministry of Commerce, Govt of India.

Each Importer/Exporter shall be required to file importer/exporter profile once with the Regional Authority in Part 1 of 'Aayaat Niryaat Form - ANF2A'. Regional Authority shall enter the information furnished in Part 1 of 'Aayaat Niryaat Form ANF-2A' in their database so as to dispense with the need for asking the repetitive information.

Docume ntation:

Documents to be submitted by Importers –

Documents required by customs authorities are

- Invoice
- Packing List
- Bill of Lading / Delivery Order
- GATT declaration form duly filled in
- Importers / CHAs declaration duly signed
- Import License or attested photocopy when clearance is under license
- Letter of Credit / Bank Draft wherever necessary
- Insurance memo or insurance policy
- Industrial License if required
- Certificate of country of origin, if preferential rate is claimed.
- Technical literature.
- Test report in case of chemicals
- Advance License / DEPB in original, where applicable
- Split up of value of spares, components and machinery
- No commission declaration. – A declaration about correctness of information

Documents submitted by Exporters

The export documentation can be classified in the following two categories: (a) Commercial documents and (b) Regulatory documents.

- Commercial Invoice
- Packing List
- Certificate of Inspection
- Certificate of Insurance
- Bill of Lading/Airway bill/Combined Transport document
- Certificate of origin
- Bill of Exchange
- Shipment Advise
- Proforma Invoices
- Shipping Instruction
- Insurance order
- Mate's receipt
- Letter of Credit
- Freight Payment Certificate
- ARE1/ARE11 Form
- Shipping Bill/Bill of Export
- Vehicle Ticket

Procedures for Imports –

Bill of Entry

This is a vital document which every importer has to submit under section 46 Bills of Entry should be submitted in quadruplicate – original and duplicate for customs, triplicate for the importer and fourth copy is meant for bank for making remittances.

- Under EDI system, Bill of Entry is actually printed on computer in triplicate only after 'out of charge' order is given.

Duplicate copy is given to importer.

- Types of Bill of Entry - Bills of Entry should be of one of three types. Out of these, two types are for clearance from customs while third is for clearance from warehouse.

1. Bill Of Entry For Home Consumption - This form, called 'Bill of Entry for Home Consumption', is used when the imported goods are to be cleared on payment of full duty. Home consumption means use within India. It is white colored and hence often called 'white bill of entry'.
2. Bill Of Entry For Warehousing - If the imported goods are not required immediately, importer may like to store the goods in a warehouse without payment of duty under a bond and then clear from warehouse when required on payment of duty. This will enable him to defer payment of customs duty till goods are actually required by him. This Bill of Entry is printed on yellow paper and often called 'Yellow Bill of Entry'. It is also called 'Into Bond Bill of Entry' as bond is executed for transfer of goods in warehouse without payment of duty.
3. Bill Of Entry For Ex-Bond Clearance - The third type is for Ex-Bond clearance. This is used for clearance from the warehouse on payment of duty and is printed on green paper.

Export Procedures -

Registration

- The exporters have to obtain PAN based Business Identification Number (BIN) from the Directorate General of Foreign Trade prior to filing of shipping bill for clearance of export goods.
- The exporters are also required to register authorized foreign exchange dealer code (through which export proceeds are expected to be realized) and open a current account in the designated bank for credit of any drawback incentive.
- Whenever a new Airline, Shipping Line, Steamer Agent, port, or airport comes into operation, they are required to be registered into the Customs System.
- The exporters intending to export under the export promotion scheme need to get their licences/DEEC book etc, registered at the Customs Station.

Processing of Shipping Bill

In case of export by sea or air, the exporter must submit the 'Shipping Bill', and in case of export by road he must submit 'Bill of Export' in the prescribed form containing the prescribed details such as the name of the exporter, consignee, invoice number, details of packing, description of goods, quantity, FOB value, etc. Along with the Shipping Bill, other documents such as copy of packing list, invoices, export contract, letter of credit, etc. are also to be submitted.

There are 5 types of shipping bills:

- Shipping Bill for export of duty free goods. This shipping bill is white colored.
- Shipping bill for export of goods under claim for duty drawback. This shipping bill is green colored.
- Shipping bill for export of duty free goods ex-bond i.e. from bonded warehouse. This shipping bill is pink colored.
- Shipping Bill for export of dutiable goods. This shipping bill is yellow colored.
- Shipping bill for export under DEPB scheme. This shipping bill is blue in colour.

The Bills of Export are:

- Bill of export for goods under claim for duty drawback
- Bill of export for dutiable goods
- Bill of export for duty free goods
- Bill of export for duty free goods ex-bond
- Let Export Order

Arrival of Goods at Dock

After the receipt of the goods in the dock, the exporter may contact the Customs Officer designated for the purpose and present the checklist with the endorsement of Port Authority and other declarations along with all original documents. Customs Officer may verify the quantity of the goods actually received and thereafter mark the Electronic Shipping Bill and also hand over all original documents to the Dock Appraiser, who may assign a customs officer for the examination of the goods. If the Dock Appraiser is satisfied that the particulars entered in the system conform to the description given in the original documents, he may proceed to allow "let export" for the shipment.

System Appraisal of Shipping Bills

In most of the cases, a Shipping Bill is processed by the system on the basis of declarations made by the exporters without any human intervention. Sometimes the Shipping Bill is also processed on screen by the Customs

Customs Examination of Export Cargo

The Customs Officer may inspect/examine the shipment along with the Dock Appraiser. The Customs Office renters the examination report in the system & then marks the Electronic Bill along with all original documents and checklist to the Dock Appraiser. If the Dock Appraisers satisfied that the particulars entered in the system conform to the description given in the original documents and as seen in the physical examination, may proceed to allow "let export" for the shipment and in form the exporter or his agent.

Types of Imports and Exports

All imports now fall into one of the following four categories:

1. Freely importable items- Most capital goods fall into this category. Items in this category do not require import licenses and may be freely imported by any individual or entity.
2. Licensed imports-certain items can be imported only with licenses and only by actual users. The current "negative list"