



# THE FIFTH INDIA ISRAEL FORUM

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## Executive Summary

The India Israel Forum has played a catalytic role in deepening the bilateral trade and investment ties. Over the last five years, the Forum through its meetings has set the tone for several new partnerships between Indian and Israeli government agencies, corporates and academia. In furthering the cooperation endeavour, delegates at the 5th India Israel Forum Meeting, held in New Delhi on October 31 and November 1, 2012, said the Forum should now enhance its focus and identify a greater number of workable bilateral projects that can serve as success stories. The Forum also discussed the recommendations put forth by the Domain Working Groups formed to identify bilateral business opportunities and cooperation endeavours in the areas of water, healthcare and energy.

The opportunity for greater bilateral cooperation stems from India's emergence as a key investment destination for global business. In recent years, a number of Israeli firms have also forayed into Indian markets, in sectors like infrastructure, water, energy, healthcare and the like. Some of these firms have viewed the Indian market as a compelling opportunity to commercialise their cutting-edge technologies and innovations. However, these are still early days and the true benefits of establishing an India presence will accrue only in the longer run. Some of the delegates therefore suggested that Israeli businesses entering India should look at a longer horizon (40-50 years) and seek to establish deep partnerships with Indian entities instead of merely selling technologies in this promising market.

The delegates asserted that the much anticipated Free Trade Agreement (FTA) between the two countries, once firmed up, will prove to be a game-changer leading to significantly expanded bilateral trade flows, broadening of the trade basket and greater bilateral business exchanges.

Five key areas stand out for bilateral engagements -- technology, homeland security, healthcare, agriculture and money. Some delegates pointed out that while people-to-people interaction is important, a sharper business focus would be beneficial to both sides. The Forum should therefore identify the major opportunities for bilateral cooperation in key areas and set the tone for Indian and Israeli businesses to establish long-term partnerships.

Historically, Indian business has focused attention on stepping up FDI inflows but now large Indian companies are making the moves to accelerate their own overseas investments, in promising markets like Israel. The delegates suggested that many of the major Indian companies would be well advised to invest in Israeli firms that develop cutting-edge

technologies. These firms could also look to invest in Israeli venture capital funds that manage a portfolio of technology companies. This will give Indian industry greater access to cutting-edge technologies and funds, and the Israeli firms will enjoy easier access to India's large markets.

Looking at the Indian markets, the real opportunity lies in developing goods and services that address those at the bottom of the pyramid. Indian government has directed sharp attention on making the growth process truly inclusive. This will lead to significant expansion of the rural markets. In step with this goal, the government is also promoting an Inclusive Innovation Fund that will bring together different stakeholders to develop innovative solutions targeted at the bottom of the pyramid. Israeli organisations could play an active part in building this eco-system.

Israel is already making a mark on India's agricultural landscape. It has set up 31 centres of excellence in nine Indian states which now serve as platforms for agriculture-related R&D. Healthcare is another area where Israeli expertise and technology is much needed in India. The delegates cited women's health -- especially related to the problem of anemia, clinical trials, cardiac diagnosis, medical IT, medical insurance, prevention of infant mortality and malnutrition, and treatment of diabetes as high potential areas for bilateral collaborations. For instance, hospital-to-hospital collaborations between India and Israel could help fast-track many of the clinical trials being done in Israel.

India has a huge skill shortage in the healthcare sector. To address this problem, CII has set up a healthcare sector skill council for capacity building. Israeli organisations could participate in this skill development initiative.

On the energy front, the delegates saw an opportunity to combine new Israeli energy technologies with new business models in India with the objective of providing last mile access to customers living at the very margin of existence in the country. For instance, Israeli expertise in setting up micro off-grid solar systems is highly relevant in rural India. Likewise, Israeli energy firms could also offer their technologies for setting up large thermal solar towers and systems in India.

The delegates proposed that 10-20 Israeli technology companies could get together with 10-20 implementers in India to work out the collaborative energy projects. Governments could step in to provide due financial support to such projects.

The experts pointed out that the Tel Aviv University's Energy Centre has developed various technologies that would be most appropriate for India. The centre has advanced capabilities in battery technologies and storage, including micro batteries that are highly relevant to the bio-medical industry. The centre is also developing plants that can grow in deserts and produce bio-mass.

In a bid to intensify the energy cooperation, the Forum's Working Group on Energy is forming a steering committee to fast-track engagements in 5 key areas: (i) smart grid (ii) decentralised power (iii) biomass (iv) distributed solar applications (v) large scale solar films.

Likewise, the Forum's sub-group on water is focused on three key areas: (i) waste water treatment technologies (ii) desalination technologies (iii) water supply distribution and the management of leakage, metering, etc.

The experts opined that as India's population grows and the general standard of living improves, the rate of water consumption will increase exponentially. As the quantity of water available will not increase at the same pace, the water management authorities will have to adopt new technologies to conserve water, as well as rationalise its use.

Metering of water usage will be one key step to stem the excess wastage of water that is seen in different parts of the country. Israeli has time-tested expertise in water management and technologies. There is therefore a strong case for encouraging Israeli water technology and management companies to foray into Indian markets and work with Indian public entities.

The upcoming water conferences in India and Tel Aviv can be opportune occasions for Israeli technology firms and leading Indian water utilities to work out joint projects and business engagements. However, the Israeli firms will need to deliver the technology solutions at Indian price points.

The experts suggested that water technology firms should identify industrial clusters in India where the water situation is acute. The Delhi-Mumbai Industrial Corridor (DMIC) and south-eastern parts of India are two regions that make a strong case for pilot projects as the groundwater situation in these areas is poor.

They also emphasised the need for academic exchanges in the area of hospital waste water treatment and industrial waste water treatment. It would be prudent to connect the water sub-group with the healthcare sub-group as waste water around hospitals contain highly toxic, mutagenic substances that need to be treated with great care to prevent water and food pollution.

The delegates urged both governments to jointly promote institutional match-making platforms for easier collaboration between Indian and Israeli industry and academia. They also advocated the setting up a campus of Tel Aviv University in India (in Delhi or Bangalore) for stronger academic collaboration between India and Israel. There was also a suggestion to set up a collaborative partnership between one of the six new All India Medical Schools and Tel Aviv University's Sackler School of Medicine, allowing Indian students access to medical research and vice versa.

The delegates expressed the need for creating a standard financial protocol for signing bilateral agreements linked with cross-border business. The two Embassies and CII could play a part in creating the protocol. Due efforts are needed to intensify the formal interactions between businesses on both sides through portals, interest groups, working groups, and VC dialogues. It was also felt that greater cooperation in the financial sector will give confidence to businesses to work together.

To ensure stronger follow-ups to the bilateral delegate visits and discussions, the Israeli delegation suggested the setting up an entrepreneur centre in India that will support businesses exploring Indian markets. This would be particularly useful to small and medium enterprises.



**DAY 1****Session with Mr Sam Pitroda, Adviser to the Prime Minister of India on Public Information Infrastructure and Innovations**

Session Chairs: Mr Tarun Das, Founding Trustee, Aspen Institute India and Former Chief Mentor, CII  
Mr David Kolitz, Chairman & CEO, Elul Group

Guest Speaker: Mr Sam Pitroda, Adviser to Prime Minister of India on Public Information Infrastructure and Innovation

**Proceedings**

Mr Tarun Das said in his opening remarks that the Forum has played a key role in deepening the India-Israel bilateral ties – both business and friendship - and that every effort should be made to enhance the relevancy of the Forum meetings. He said that Mr Stanley Bergman and Mr Aharon Fogel must be saluted for their leadership, faith and commitment to the Forum. He added that the establishment of Domain Working Groups would further enhance the work done by this crucial Forum.

Reflecting on India's economic scenario, Mr Sam Pitroda observed that the country is poised for a new growth phase powered by its large youth population that adds up to more than 550 million. Adoption of appropriate technologies will provide the necessary growth impetus to the economy, he said, adding that India's growth model should be aligned with its own socio-economic realities and not necessarily akin to any Western growth model.

Speaking about India's telecom sector which has grabbed international headlines over the last two decades, Mr Pitroda mentioned that over 900 million people in the country are using mobile phones and that by March 2013 this number would have scaled the 1 billion mark. The greater challenge would be to leverage this widespread mobile connectivity for developmental initiatives.

Mr Pitroda pointed out that the Indian Government is intent on democratising people's access to information and communication technologies (ICT) but this would call for investments of up to \$20 billion over the next two years. The Government is developing two major network systems – (i) a knowledge network that connects universities, R&D labs and various institutes across the country (this network is partially operational); and (ii) a governance

network that will connect 250 local governments using the optical fibre infrastructure that calls for investments of up to \$7 billion.

The governance project, which will provide for 40 major applications including the Unique Identification Number (UID) project, is expected to be complete in 24 months. These projects are being developed keeping in view the education, healthcare and governance needs of the future. Mr Pitroda said that local communities will be chiefly instrumental in feeding information into the networks.

Speaking about the National Innovation Council, Mr Pitroda said that it comprises state innovation councils, sectoral innovation councils, industry innovation clusters and university innovation clusters. An Inclusive Innovation Fund will be established to build an ecosystem of enterprises, entrepreneurship, and venture capital that promotes the development of innovative solutions targeted at the bottom of the pyramid. The Inclusive Innovation Fund will be based on the premise that innovative enterprises can be profitable and scalable and can competitively engage people at the bottom of the economic pyramid.

Mr Pitroda opined that one of the biggest challenges facing the Indian Government is of creating 10-15 million new jobs every year. A robust Indian growth model powered by an innovation culture and global partnerships will help the Government in realising this goal.

#### Opening Session and Introduction of Delegates

Session Chairs: Mr Stanley Bergman, Chairman and CEO Henry Schien Inc  
Mr Jamshyd Godrej, Chairman & MD, Godrej & Boyce  
Manufacturing Co Ltd

Remarks: Mr Alon Ushpiz, Ambassador of Israel to India

#### Proceedings

Mr Stanley Bergman said in his opening remarks that Israel could provide the right technologies and innovations that can help India retrace its high growth path. This will also positively impact those at the bottom of the pyramid.

Mr Bergman said the Forum has helped deepen the India-Israel bilateral economic ties by creating new partnership opportunities for governments and businesses on both sides. Looking ahead, he said the challenge lies in identifying a greater number of workable bilateral projects.

Mr Alon Ushpiz said the recent bilateral ministerial visits have provided the necessary impetus for greater bilateral business engagements. Stating that innovations are central to the bilateral partnership, Mr Ushpiz said that defence and agriculture are two areas where the sharing of technologies and innovations could be stepped up. Israel has already set up 31 centres of excellence in nine states in India which will serve as platforms for agriculture-related R&D.

Mr Ushpiz said the much anticipated Free Trade Agreement (FTA) between the two countries, once firmed up, will lead to significantly expanded bilateral trade flows, broadening of the trade basket and greater business exchanges.

He added that renewable energy development and homeland security are two other key areas of bilateral cooperation.



*Amb Alon Ushpiz, Ambassador of Israel to India*



*Mr Chandrajit Banerjee, Director General, CII, Mr Stanley Bergman, Chairman and CEO, Henry Schien Inc and Mr Tarun Das, Founding Trustee, Aspen Institute India and Former Chief Mentor, CII*

### Session One: Global Economic Trends and Their Impact on India and Israel and Bilateral Ties

Session Chairs: Mr Salil Singhal, Chairman, PI Industries  
Mr Yair Seroussi, Chairman, Bank Hapoalim

Presenters: Mr Hugo Chaufan, Chairman of the Board, Arad Limited and Metzerplas  
Mr K R S Jamwal, Executive Director, TATA Industries Limited  
Mr Aharon Fogel, Chairman, Migdal Group  
Mr T N Ninan, Chairman & Chief Editor, Business Standard Limited

### Proceedings

Mr Yair Seroussi said in his opening remarks that in the emerging global economic environment, both India and Israel should aim to achieve growth without compromising on economic and political stability. Stating that the economic slowdown is fast spreading its tentacles, Mr Hugo Chaufan observed that even China is now seemingly tentative about its economic growth strategy.

Mr K R S Jamwal said that in contrast to the current global economic scenario, India is expected to grow steadily over the next 40-50 years, so businesses entering the region should look at a 50-year horizon. "Make this your second home," he said, addressing the Israeli delegates.

Referring to the different patterns of growth followed by major economies, he said that Japan and China tended to focus on investments and exports, whereas US and India were more focused on the consumption story. India could broaden its growth strategy by directing equal attention on consumption, investments and exports. In this context, he said that Israeli technologies delivered at Indian price points will prove to be a game changer for the country. At the same time, Indian and Israeli firms could enter into more JVs to jointly address new global markets.

In a similar vein, Mr Aharon Fogel said the current global economic crisis could be a major growth opportunity for both India and Israel. Europe's slowdown is a growth opportunity for Israeli and Indian firms to form JVs and explore the world markets, he said, adding that "Israel is lucky to be small at this stage". To leverage the growth opportunity he advocated the adoption of a growth-oriented policy that lays less emphasis on austerity measures.

Stating that monetary stability is of key significance to both countries, he said that India can afford to maintain a stronger currency. At the same time the Indian Government is well

advised to focus on long-term growth instead of heavily cutting down its budgetary spends. He urged the governments to provide the right policy support to businesses in order to leverage the emerging growth opportunities.

Mr T N Ninan said that India faces twin deficits – current account deficit of about 4% of GDP and a combined fiscal deficit (including central and state government deficits) of 8-9% of GDP. To manage the deficits, India will have to maintain at least 6% GDP growth. While consumer demand in India is robust, investment levels have declined. This is largely due to issues like roadblocks in land acquisition. Mr Ninan also expressed concern over the declining growth of the domestic capital goods sector.

Speaking about the bilateral economic ties, Mr Ninan said that once the FTA is signed, bilateral trade and investment flows will likely double. He pointed out that bilateral cooperation endeavours in the fields of agriculture, joint research, textiles and water have already yielded promising results. He added that it is not enough to focus on bilateral ties in defence and diamonds. Israeli companies could explore the opportunity of setting up their manufacturing base in India to address world markets.

Mr Ninan said that India's fiscal deficit rose during a period of rapid economic growth. However, the debt ratio has not come down due to political reasons. Speaking about the employment situation, he said that the Indian economy will need to grow at 8% to be able to create jobs for the 10 million that get added to the workforce every year.

Commenting on India's macro-economic environment, Mr Jamwal said as India has a large young population with strong buying capacity, inflationary trends will continue. The challenge lies in ensuring that the GDP growth consistently stays ahead of the consolidated fiscal deficit to GDP ratio.

Mr Chaufan said while the Indian Government is likely to increase taxes to reduce demand and thereby curb inflation, the right approach would be to strengthen the supply side using new technologies.

On a positive note, Ms Vishakha Mulye, Managing Director & CEO, ICICI Venture Funds Management Co Ltd, said that most business sectors in India have been opened up for equity participation. ECB has also been liberalised. All these trends bode well for greater India-Israel business engagements.

### Session with Dr Montek Singh Ahluwalia, Deputy Chairman, Planning Commission

Session Chairs:	Mr Uday Kotak, Executive Vice Chairman & Managing Director, Kotak Mahindra Bank Limited Mr Aaron Mankovski, Managing Partner, Pitango Venture Capital
Guest Speaker:	Dr Montek Singh Ahluwalia, Deputy Chairman, Planning Commission

### Proceedings

Dr Montek Singh Ahluwalia said India is increasingly focusing on inclusive growth which is multidimensional. It is not just about reducing the poverty level but also about creating a fair distributional outcome. India is a highly fragmented society with caste divisions and regional problems, so growth can be assessed only on the basis of GDP growth.

Dr Ahluwalia said the 12th Plan document has incorporated 25 monitorable economic indicators to adjudge growth. They include the health indicators, education indicators, environment indicators, poverty related indicators, agriculture related indicators, etc. If all indicators achieve their assigned targets, only then the growth can be seen as 'inclusive'.

Dr Ahluwalia said in India agriculture sector is an area of concern as it contributes 16-17% to the GDP. And it faces huge water-related problems. India and Israel can collaborate on these fronts.

He said the world is going through a tough period. "No economic guru is predicting an economic recovery in EU and no pundit is saying that the EU will collapse". In these market



*Mr Tarun Das, Founding Trustee, Aspen Institute India and Former Chief Mentor, CII, Mr Uday Kotak, Executive Vice Chairman & Managing Director, Kotak Mahindra Bank Limited, Dr Montek Singh Ahluwalia, Deputy Chairman, Planning Commission and Mr Aharon Fogel, Chairman, Migdal Group*



conditions, an industrial economy can hardly depend on exports. The growth should be based on infrastructure development which, however, will widen the current account deficit. So, FDI and FIIs should finance the bulk of infrastructure development in India to keep the current account deficit under control.

Dr Ahluwalia said the key question is, can India attract huge investments. The message that goes out to the international community is that foreign investment is absolutely necessary and welcome in India. If the government can manage the domestic issues that are standing as stumbling blocks “then the job is done”.

Talking about SME sector, he said India has not done enough justice to the sector at a policy level. India can learn a lot from Israel. It is necessary to create an ecosystem where the modern small sector can grow and expand. It is the poor infrastructure that is hindering the growth of the SME sector and also stopping many to take the entrepreneurial route. The Planning Commission is looking at various models of credit system to encourage small sector financing, he said.

Elaborating on infrastructure, he said the focus should be on water, energy and transportation. 67% of energy comes from coal and the country has huge problems in accessing that.

Scarcity of water is more alarming than the energy scarcity, he said adding that the government has already realised this. “We are trying to measure groundwater availability through satellite technology. Planning Commission is working on National Water Policy to tackle many of the water related issues including pricing of water,” he said.

#### **Session with Mr Uday Kotak, Executive Vice Chairman & Managing Director, Kotak Mahindra Bank Limited**

Session Chairs:	Ms Vishaka Mulye, Managing Director & CEO, ICICI Venture Funds Management Co Ltd
Guest Speaker:	Mr Uday Kotak, Executive Vice Chairman & Managing Director, Kotak Mahindra Bank Limited

#### **Proceedings**

Mr Uday Kotak shared his company's growth experience in the banking, financial and insurance sectors. He said that by 2005 India had assumed an important position on the global economic landscape.

While overseas entities are likely to face some challenges in doing business in India, Mr Kotak said the real opportunity lies in a “bottom-up” approach. When India is viewed top down, there are numerous challenges. “The beauty of the India opportunity is in a bottom up approach. The opportunities can be anything from early stage to late stage,” he said.

Referring to the domestic capital markets, he said the infrastructure sector is down 80% compared with the benchmark index that is down 15% since January 2008. So there is seemingly great value in investing in the infrastructure sector.

Mr Kotak also said that even as the capital markets have shrunk in recent months, certain companies command high valuation, mainly because they are addressing highly promising markets like the rural segment.

Mr Kotak reckoned that these trends will serve as guiding lights for Israeli investments and joint ventures in India.





**DAY 2****Session Two: Collaboration in Cross Border Investments and Financial Interactions**

**Session Chairs:** Mr Uday Kotak, Executive Vice Chairman & Managing Director, Kotak Mahindra Bank Limited  
Mr Aharon Fogel, Chairman, Migdal Group

**Presenters:** Mr Yair Seroussi, Chairman, Bank Hapoalim  
Ms Vishakha Mulye, Managing Director & CEO, ICICI Venture Funds Management Co Ltd  
Mr Rami Goren, Chairman & Managing Director, GI3 Holdings  
Mr Sandeep Singhal, Managing Director, Nexus India Capital Advisors  
Mr Amir Aviv, President & CEO, Poalim Capital Markets

**Proceedings**

Making his introductory remarks, Mr Aharon Fogel suggested that both countries should create a financial protocol for entering into bilateral agreements linked with cross-border business. The two embassies and CII could play a part in creating the protocol, he said.

Mr Fogel asserted that businesses on both sides should leverage every occasion, be it an exhibition or delegate visit, to develop bilateral partnerships. Face-to-face interaction is the biggest opportunity of all and cannot be replaced by other forms of interaction like online communication, he opined.



*Mr Yair Seroussi, Chairman, Bank Hapoalim, Ms Vishakha Mulye, Managing Director & CEO, ICICI Venture Funds Management Co Ltd and Mr Avshalom Felber, CEO, IDE Technologies*



*Mr Noam Ben-Ozer, Founder & Managing Director, Focal Energy, Mr K Ashok Natarajan, CEO, Tatva Global Water Technologies (P) Ltd and Mr Rami Goren, Chairman & Managing Director, GI3 Holdings*

Reflecting on the Israeli growth experience over the last 2-3 decades, Mr Yair Seroussi said with the opening of the Israeli economy in the late 1980s most Israeli firms sought to launch their IPOs in the US and get listed on US stock exchanges like Nasdaq which had become the primary exchange for many Israeli technology companies. This was accompanied by a wave of acquisitions of Israeli technology companies. By the turn of the Millennium, Israeli companies started to acquire firms worldwide.

Initially, in Israel it were the banks that managed the assets of companies. But other financial institutions entered the fray in the wake of economic liberalisation. Today, 45% of financing of corporates in Israel is done by non-banking financial institutions.

Israeli financial markets are open both ways. While the bulk of Israeli financial interactions are with the US and Europe the country is strengthening financial ties with emerging economies, he said.

Mr Uday Kotak noted five key areas that exemplify Israel: technology, security, healthcare, agriculture and money. While people-to-people interaction is important, time is ripe for money-to-money talk, he said.

Commenting on the scope of India-Israel bilateral investment ties, Mr Kotak said that Indian businesses tend to focus excessively on attracting overseas investments into the country. But what is needed today is two-way investment flows. The Forum should look to catalyse money-to-money talks between Indian and Israeli businesses leading to cooperation endeavours in technology, security, healthcare, and agriculture, he said.

Ms Vishakha Mulye suggested that Israeli firms should make the effort to identify investment opportunities in India at a granular level, and assess the potential for private sector participation in those areas including foreign investments.



*Mr Uday Kotak, Executive Vice Chairman & Managing Director, Kotak Mahindra Bank Limited and Mr Chandrajit Banerjee, Director General, CII*



*Mr Aaron Mankovski, Managing Partner, Pitango Venture Capital, Mr Nikhil Sawhney, Managing Director, Triveni Turbine Ltd & Director, Triveni Engineering and Industries Limited and Dr Giora Yaron, Chairman of Board Itamar Medical, Ramot and Executive Council of TAU*



Ms Mulye pointed out that India's GDP growth over the last decade and more has been powered by both consumption growth and increasing investment inflows. While investments have slowed down in recent years, consumption growth is largely uninterrupted, fuelled by a large young population with ample buying power. As the per capita rises in India, a slew of investment opportunities will emerge, she said, adding that the country's inclusive growth strategy will also create new business opportunities, especially in rural India.

Ms Mulye said that sectors like logistics and infrastructure will open up for huge investments. With rising income levels the consumption basket in both urban and rural areas will change, resulting in demand for new goods in areas like agriculture, technology and healthcare. These are high potential areas for Israeli investments, she said.

While the consumption story will continue, India is also primed to receive huge volumes of foreign investments in the infrastructure sector. Over the last 5-6 years, \$400 billion has flowed into this sector, of which around \$100 billion has come from the private sector. The expectation is that private sector participation will reach the 50% level in the coming years. Ms Mulye suggested that investments can be made in both equity and debt. Debt may in the form of ECB and FII, whereas equity can be FII, FDI or through the fund route (PE, VC, etc.).

On a different tack, Mr Rami Goren observed that the complex business environment in India poses several challenges to institutional investors. For instance, the recent Land Acquisition Act could prove to be a dampener for investments in India's infrastructure sector.

Mr Sandeep Singhal said there are clearly identifiable Israeli products and technologies that have high relevancy in the Indian markets. He added that Indian industry is cognizant of the fact that several Israeli companies have built-up global scale and successfully attracted global investments in them. These experiences are of great relevance to Indian industry.



*Mr Yair Seroussi, Chairman, Bank Hapoalim and Ms Vishakha Mulye, Managing Director & CEO, ICICI Venture Funds Management Co Ltd*

He noted that the US continues to be the largest market for Israeli technologies but emerging economies like India are also attractive destinations now.

Citing certain fundamental differences in the approach to business, Mr Singhal said while Israeli firms tend to look at a product architecture as a whole, Indian firms take a problem solving approach. Indian firms have a strong understanding of problems, algorithms, etc., but they demonstrate a rather limited understanding of product architecture.

Speaking about the business enabling factors, Mr Singhal said there is significant amount of early stage capital available in India now. As of the current year, some \$1 billion has been raised as early stage capital. Besides, India has a large talent pool not just in the software area but also in engineering – with significant capabilities to re-engineer and re-design products at reasonable costs.

He added that entrepreneurs in India have been highly focused on price performance. The market expects to access world class products at a third of the price points prevailing in overseas markets. Yet there is a lot of money to be made, he reckoned, referring to the successes attained by telecom major Bharti Airtel.

Speaking about some of the challenges, Mr Singhal said that both India and Israel tend to view the US as the principal destination for cross-border business. Moreover, Israel is not focused on 'bottom of the pyramid' solutions that are in great demand in India. Indian industry on its part has also revealed a rather limited understanding of global customer needs, he opined. He added that Indian business has the notion that Israeli business is very 'transaction-oriented' and does not take the 'partnering' approach.

To deepen the cross-border connects, Mr Singhal advocated promotion of formal interactions between businesses on both sides on an ongoing basis through portals, interest groups



*Mr Sandeep Singhal, Managing Director, Nexus India Capital Advisors, Mr Rajan Navani, Managing Director, Jetline Group of Companies and Dr Hadar Ron, Managing Partner, Israel Health Care Ventures*



*Mr Amir Aviv, President & CEO, Poalim Capital Markets and Dr Naushad Forbes, Director, Forbes Marshall Pvt Ltd.*

and working groups, and increase the frequency of India-Israel VC dialogues. He also said that Indian strategists will greatly benefit by investing in Israel funds.

Mr Amir Aviv said that Israeli investors should target those market spots in India where technology is in high demand. He added that Government risk participation is key to Israeli investments picking up in India's key sectors. This would be necessary till such time as private sector participation builds up. He suggested that Government, corporates and funds could come together to create a vehicle that facilitates seamless investments.

In the interactive session, Mr Mankovski said there is less prudence in asking Indian industry to reinvent the wheel. At the same time, getting Israeli technology companies to invest in JVs in India will not deliver the goods. Indian companies should invest in Israeli funds that invest in a portfolio of Israeli companies which can target the Indian markets. As most Israeli firms are not willing to spend enough time in India, a partner in India will be of key essence, on the same lines as Israeli investments work in the US, he said. The challenge lies in getting Indian companies to invest in Israeli technology firms and how those firms can sell in India and also promote R&D activities in the country.

Mr Rajan Navani, Managing Director, Jetline Group of Companies, underlined the need to help Israeli investors overcome the roadblocks that they are likely to face in India. If the young entrepreneurs can get to see the end goal, the bilateral financial interactions will grow further, he said.

Prof Gadi Ariav, Tel Aviv University Business School said that due efforts to build relationship assets will augment the bilateral interactions and transactions. By 2020 India and China together will be a \$10 trillion market for luxury items made for a secondary wave of consumption. The relational assets will help Israeli firms tap this high potential segment, he said.

Dr Giora Yaron said that Tel Aviv University is raising a \$10 million fund for innovative science with commercialisation as the end objective. Indian companies are invited to invest in the fund and thereby gain visibility of the innovations in Israel and get the opportunity to interface with top VCs who are part of the committee, he said.

Stating that business cultural differences between the two countries are there, Ms Orna Sagiv, Consul General Consulate General of Israel, Mumbai said the Israeli embassy could be integrally involved in building up more interactions between businesses from both sides. She suggested stronger follow-ups to the bilateral delegate visits and discussions. This can be achieved by setting up an entrepreneur centre that supports small and medium enterprises in this endeavour. The Israeli government is already extending significant support to companies wanting to establish their presence in India.

Dr Naushad Forbes, Director, Forbes Marshall Pvt Ltd, said that in a diverse country like India the cultural differences can't be wished away; a patient approach will pay the

dividends. Money-to-money discussions will trump all other differences, he said. Similarly, Mr Chaufan said it is prudent to invest in relationships that provide a sound foundation for doing business together.

Mr Jamwal said that India and Israel are at two different levels of technology maturity. India signed the IPR in 2005 but till date no Indian business has primarily built itself up on the basis of technology. However, this will change as more companies move into the technology space. Once the technology focus increases, the cultural differences will cease to matter, he said

Mr Kotak said in his concluding remarks that direct business relations without having to go through third countries will bring in greater results. Both sides need to identify some of the bilateral successes as symbols of communication. Warbur Pincus made 15-20x money by investing in Bharti at a time when Indian telecom sector was hardly developed, he said. He advocated a network model for companies from both sides to deepen their partnerships.

India's price point versus cost of Israeli technology needs to be worked upon, he added. Protection of patent rights as Israeli technology moves into Indian hands also needs due attention.

Mr Fogel said that greater cooperation in the financial sector will give confidence to businesses to work together. He suggested that Indians and Israelis can invest in a fund in another country and that fund can give the strategy for bilateral investments. Governments too can play role in this.



*Ms Orna Sagiv, Consul General Consulate General of Israel, Mumbai,  
Mr Gourisankar Ghosh, Former Chair, UNWATER and Executive Director Water Sanitation WHO,  
Geneva and Prof Gadi Ariav, Tel Aviv University Business School*



### Session Three: Indian-Israeli Collaboration in Affordable Healthcare

Session Chairs:	Mr Stanley Bergman, Chairman and CEO Henry Schien Inc. Mr Shivinder Mohan Singh, Executive Vice Chairman Fortis Healthcare Limited
Presenters on task force recommendations:	Dr Hadar Ron, Managing Partner, Israel Health Care Ventures Dr Ranjit Roy Choudhary, Chairman, Taskforce for Research Apollo Hospitals Education and Research Foundation
Respondents:	Mr Gavriel Meron, President and CEO, novoGI INC Dr Giora Yaron, Chairman of Board Itamar Medical, Ramot and Executive Council of TAU Prof. Anupam Sibal, Group Medical Director, Apollo Hospitals Group

### Proceedings

Presenting the task force recommendations, Dr Hadar Ron said the group focused upon the practical side of collaborations in the area of healthcare. Women's healthcare, specifically related to the problem of anemia, was cited as an area for project-level collaboration. She said that women's health, especially in India's rural areas, is a matter of concern. Joint ventures for developing products and services that help augment women's healthcare can get the support of both governments.



*Dr Hadar Ron, Managing Partner, Israel Health Care Ventures, Mr Shivinder Mohan Singh, Executive Vice Chairman Fortis Healthcare Limited and Mr Stanley Bergman, Chairman and CEO, Henry Schien Inc.*



Dr Ron also pointed to clinical trials as another key area of collaboration. She said that in Israel the processes for clinical trials are cumbersome, time-consuming and expensive. Hospital-to-hospital collaborations between India and Israel can help fast-track the clinical trials.

Dr Ron added that cardiac diagnosis and medical IT are also areas where the bilateral collaborations can pay rich dividends. In the area of medical IT, specific applications are needed in India. As regards, the scope of collaboration in medical insurance, she said the focus should be both on primary insurance and high-end insurance products, catering to specific requirements.

Dr Ranjith Roy Choudhary said the task force was of the view that a large number of out-of-the-box ideas are required for enhancing people's access to quality healthcare. However, India should not merely borrow the ideas from outside and implement it here, he said.

Dr Choudhary said in the field of woman and child healthcare, anemia and nutrition are two major areas of concern. Today, there are many non-invasive technologies that can be used to address the problem of anemia in women. Israeli expertise in this area can be leveraged by Indian organisations.

Dr Choudhary said that for the treatment of diabetics, India needs low-cost non-invasive technologies. India has a huge pre-diabetic and diabetic population that can validate the use of low-cost technology. India has a national fund and clinical acumen in this area, he said, adding that the only requirement is right technology.



*Prof Gadi Ariav, Tel Aviv University Business School, Dr Ranjit Roy Choudhary, Chairman, Taskforce for Research Apollo Hospitals Education and Research Foundation and Mr Lior D Maayan, CEO, OrSense*

Dr Choudhary said the pace of clinical trials is going down in the country, with only a 2.2% global share of trials. China conducts 9% of global clinical trials. India is unable to attain its true potential in this area. Dr Choudhary said that quality devices for clinical trials are required and institute-to-institute collaboration is possible in this area.

He said it is important to go beyond telemedicine. And, the focus should be on providing healthcare service through mobile telephony. He also stressed upon the need for greater scientific and clinical faculty exchange programmes between the two countries.

Prof Anupam Sibal said though India has made enormous progress in the field of healthcare, there is a shortage of doctors and hospital beds in the country. He said there is huge infrastructure deficit with 40% of hospital beds being in 20 major cities where only 10% of the country's population lives. He said the challenge is to provide healthcare services to large sections of society with limited human resources. This can be achieved using mobile technology.

Mr Stanley M Bergman said, Indian and Israeli Diaspora can contribute to the healthcare sector collaboration. "I would like to see the participation of Diaspora in the Forum," he emphasised.

Mr Gavriel Meron said, it is necessary to develop a healthcare system that can be accessed by the poor. Products and services have to be developed according to the Indian market. Israel should be involved in the process of developing cheaper products, and they should be part of clinical studies conducted in India.



*Mr Anjan Das, Executive Director, CII, Mr Gavriel Meron, President and CEO, novoGI INC and Mr K R S Jamwal, Executive Director, TATA Industries Limited*

Dr Giora Yaron said a 'prevention model' is the way to go as medical products and procedures are expensive for most people in India. India and Israel should need to collaborate on this front.

Mr Lior D Maayan, CEO, OrSense, said, with better low-cost technology it is possible to penetrate deeper into Indian markets. Besides, the application of best engineering techniques can guarantee 100% success in the healthcare sector. With innovative methods it is possible to cater to the needs of the bottom of the pyramid.

Mr Chandrajit Banerjee, Director General, CII, said there is a huge skill shortage in the healthcare sector. CII has already started a healthcare sector skill council for building capacity in this area. Various others initiatives are underway to improve the standard of healthcare sector by understanding global practices. Israel can contribute to this skill development initiative, he said.

Mr Shivinder Mohan Singh said public health and hygiene is a huge issue in India. Other areas where India and Israel can collaborate are prevention of infant mortality and malnutrition.

He said most of the developing countries do not focus on preventive care. It is a big challenge in India. However, preventive care offers huge potential in terms of business opportunity. Collaboration is also possible in primary care, secondary care and tertiary care.

Mr Singh was of the view that reliability, accessibility and affordability are the key factors that can help achieve social and business objectives in the healthcare sector. Israel can provide the technology that will help India create a reliable, accessible and affordable healthcare ecosystem.

#### Session Four: Indian-Israeli Collaboration in Energy

Session Chairs: Dr Arunabha Ghosh, CEO, Council on Energy, Environment & Water

Presenters  
on task force  
recommendations: Mr Amit Segev, Deputy CEO, Shikun & Binui

Respondents: Dr Yuval Ebenstein, Department of Chemistry, Tel Aviv University  
Mr James Abraham, Managing Director, SunBorne Energy  
Mr Noam Ben-Ozer, Founder & Managing Director, Focal Energy  
Mr Pramod Singh, GM, Distributed Decentralized Group (DDG),  
The TATA Power Company Limited

#### Proceedings

India's per capita energy consumption is half of Brazil's, a third of China's and half of Americas. India's per capita electricity consumption is less than 1/20th of America's. Currently, there are five pressure points impacting India's energy sector: (i) India is going to be the fastest growing energy market; (ii) this demand will result in competition within and across sectors; (iii) rapid development of states like Bihar will create new demand for energy (this has not been adequately factored in the nation's energy demand estimates) (iv) coal production and logistics mandate focused attention; (v) greater focus on infrastructure that supports energy sector, such as grids, ports, etc.

Highlighting these trends, Dr Arunabha Ghosh said there is an urgent need to combine new energy technologies with new business models so as to provide last mile access to customers living at the very margin of existence. The Working Group on Energy could focus upon this dimension, he reckoned.

Mr Amit Segev said that Israeli technology could be highly relevant to the effort to bridge India's energy gaps. Micro off-grid solar systems can be deployed in rural India. Israeli firms also have leading-edge technologies for setting up large thermal solar towers and systems.

Mr Segev said that Israeli firms are assiduously working to reduce the cost of solar power to grid parity. Rising demand for small and large solar systems in India makes a strong case for inducting Israeli solar technology.

He suggested that 10-20 Israeli technology companies could get together with 10-20 implementers from India to work out the collaborative arrangements. Governments could



step in with necessary financial support.

Commenting on the energy gap in India, Mr James Abraham said the country needs to add the equivalent of one Israel every 10 months. So the investment potential in the sector is very high. He noted that there are technologies in Israel that are far beyond the R&D stage which are ready for commercialisation. At the same time there are interesting innovation business models taking shape in India. Due efforts can be made to identify the new technologies and the business models and match them. In the process, proposals can be developed over the next one year for attracting funding.

The Working Group is forming a steering committee to fast-track business cooperation endeavours. The Group has identified five specific technologies to be focused upon: (i) smart grid (ii) decentralised power (iii) biomass (iv) distributed solar applications (v) large scale solar films.

Matching technologies with the business models requires innovations that make the price points work.

Dr Yuval Ebenstein said the Tel Aviv University's Energy Centre covers a wide array of energy-related technologies. It is the only energy centre in the world that combines management and law. The centre is highly focused on batteries and storage, including micro batteries that may be relevant to bio-medical industry. In bio-fuels, work is underway in algae bio-fuels. The centre is developing plants that can grow in deserts and produce bio-mass. These technologies will be of essence to India's energy sector. Moreover, Israel has also developed the technologies to produce wind energy in sub-optimal conditions.



*Ms Vishakha Mulye, Managing Director & CEO, ICICI Venture Funds Management Co Ltd, Mr Avshalom Felber, CEO, IDE Technologies and Dr Arunabha Ghosh, CEO, Council on Energy, Environment & Water*



*Mr James Abraham, Managing Director, SunBorne Energy and Mr Noam Ben-Ozer, Founder & Managing Director, Focal Energy*

In terms of smart grids, the whole interfacing will become crucial as more and more renewables come into play (AC to DC problems; synchronization problems; etc.). Dr Ebenstein said the Israeli energy centre also offers theoretical solutions like algorithms that support energy business.

Dr Ebenstein suggested that pilot projects have to be implemented in India which will give the promoters a clear sense of the local challenges. They have to be full-cycle projects. He added that governments should be involved in these efforts – Israeli innovations can be brought to India through bi-national efforts and the associated projects can leverage the Indian talent base.

Commenting on India's energy scenario, Mr Pramod Singh said the country faces a variety of challenges like peak load shortages, and there is renewed interest in accessing technology stacks globally that can help the Government address these issues.

India faces challenges on the access side too. 33% of the country's population has no access to energy. The moot point is, are there Israeli technologies that are scalable and affordable which can help India address the access challenges.

Mr Noam Ben-Ozer said that India needs to create a predictable business environment for technology and capital to follow. The Forum can support companies that are ready to do the pilots.

Responding to a query from Mr Aaron Mankovski on what are the limiting factors in India's energy sector, Mr Abraham explained that the Electricity Act, although it is forward-looking, has left the tariff in the hands of the regulator. Besides, there is the issue of free power. Financing of distribution companies is also an issue as several of these companies have gone bankrupt.



*Mr Pramod Singh, GM, Distributed Decentralized Group (DDG), The TATA Power Company Limited and Dr Yuval Ebenstein, Department of Chemistry, Tel Aviv University*

Mr Jamshyd Godrej said there is a huge business opportunity in developing off-grid power in India. CII is promoting the SPEED project which uses rural cellphone towers as anchor customers to provide renewable energy to rural India. The telephone towers provide uninterrupted telecom connectivity to the rural population and can also serve as a link for remote education and healthcare services. The towers are run on renewable energy which is clean and more cost-effective than diesel power (A unit of diesel power costs Rs 20-30 compared with Rs 10-15 per unit of solar power).

Mr Godrej said the project is exploring for investments in renewable energy projects in Bihar which generate power from rice husks. He added that these mini micro grids can function as smart grids that support a variety of activities.

Mr Ghosh said in his concluding remarks said that pairing of new technologies with new business models is the way forward in the energy sector. He said that VCs could work with research institutes in India to promote energy projects but Indian universities are not adequately geared for innovations that can be commercialised. This is partly because in India 80% of funding for research comes from the government. The regulatory eco-system has to change in India.

#### **Lunch Session Chairs: Vishakha Mulye and David Kolitz**

Session Chairs:	Ms Vishakha Mulye, Managing Director & CEO, ICICI Venture Funds Management Co Ltd Mr David Kolitz, Chairman & CEO, Elul Group
Guest Speaker:	Mr N K Singh, Member of Parliament (Rajya Shaba)

#### **Proceedings**

Mr N K Singh said the big challenge for the Indian economy is find the right intersection of sensible politics and sensible economics. The current level of economic growth is socially, economically and politically unacceptable.

Referring to a road map drawn by the Indian Finance Minister to cut the fiscal deficit, he said the minister has not mentioned the exact plan to achieve that in the near future. The biggest challenge is to put India back on a high growth trajectory.

Mr Singh said the next question is of managing and rationalising the subsidy. The challenge is to bring sensible politics and sensible economics together. It is also about finding the cost of short-term challenges and long-term benefits.



*Mr Yair Seroussi, Chairman, Bank Hapoalim, Mr N K Singh, Member of Parliament (Rajya Shaba) and Mr David Kolitz, Chairman & CEO, Elul Group*

He said the General elections will come in 18 months. It is important for the Indian government to see what it can do in this period. He was of the view that the central government should seek to build consensus among major political parties for passing the legislation on land reform, insurance reforms, pension reforms and banking sector reforms.

Mr Singh stressed that if these core issues are addressed now by the Central government before the General elections; the next government, whether it is the current coalition party or any other coalition party, will not have to start from the scratch. These fundamental issues, unless addressed, can stop the growth process.



### Session Five: Indian-Israeli Collaboration in Water

Session Chairs:	Mr Jamshyd Godrej, Chairman & MD, Godrej & Boyce Manufacturing Co Ltd Mr Hugo Chaufan, Chairman of the Board, Arad Limited and Metzerplas
Presenters on task force recommendations:	Mr Ori Yogev, Chairman, Whitewater Group Mr Nikhil Sawhney, Managing Director, Triveni Turbine Ltd & Director, Triveni Engineering and Industries Limited
Respondents:	Mr Shimon Ben-Hamo, CEO, Mekorot Dr Arunabha Ghosh, CEO, Council on Energy, Environment & Water Mr Avshalom Felber, CEO, IDE Technologies Mr Gourisankar Ghosh, Former Chair, UNWATER and Executive Director Water Sanitation WHO, Geneva Prof Dror Avisar, Department of Geography and Human Environment, Tel Aviv University Mr Ashok Natarajan, CEO, Tatva Global Water Technologies (P) Limited

### Proceedings

Water could become one of the most contentious policy issues in India in the coming times. There are issues linked with drinking water supply, general water for cities and municipalities, and use of water for agriculture and industrial activities. Both industry and agriculture in India enjoy access to free or heavily subsidised water. Mr Jamshyd Godrej said this has created huge imbalances in the distribution of this resource.



*Dr Hugo Chaufan, Chairman of the Board, Arad Limited and Metzerplas, Mr Aharon Fogel, Chairman, Migdal Group and Mr Jamshyd Godrej, Chairman & MD, Godrej & Boyce Manufacturing Co Ltd*

In cities like Delhi and Mumbai a small part of the city population has access to a disproportionate share of the water supply whereas the urban poor have to pay large amounts for water because they are not part of the organised housing and water supply system.

While the issue of water loss and leakage is largely unaddressed, India still enjoys a relatively adequate availability of water per person comparable with many places around the globe. Issues that need urgent attention pertain to distribution, leakages, recycling and pricing. Key policy steps are needed to tackle these issues.

Mr Godrej said that if global leaders do not come together on issues related to climate change, the global issues related to water will become all more acute in different parts of the globe.

Mr Huo Chaufan said the sub-group has focused upon three key areas: (i) waste water treatment technologies (ii) desalination technologies (iii) water supply distribution and the management of leakage, metering, etc.

In India, as population grows and standard of living improves, water consumption will also increase at a rapid pace. However, water consumption is not metered at most places, whereas metering will not only rationalise the use of water but also make people aware of how much water they consume. The emerging water scenario in India will spawn a myriad business opportunities, he said.

Mr Nikhil Sawhney said there is urgent need to focus upon water treatment technologies including recycling of sewage for industrial use, desalination, etc. Israeli water technologies can be transferred to Indian organisations to be indigenised and delivered at Indian price points, he said.

Mr Sawhney said that a few pilot projects could be initiated in select states, keeping in view the local treatment and distribution challenges.



*Prof Dror Avisar, Department of Geography and Human Environment, Tel Aviv University, Prof Gadi Ariav, Tel Aviv University Business School and Dr Ranjit Roy Choudhary, Chairman, Taskforce for Research Apollo Hospitals Education and Research Foundation*



*Mr Noam Ben-Ozer, Founder & Managing Director, Focal Energy and Mr K Ashok Natarajan, CEO, Tatva Global Water Technologies (P) Ltd*

Mr Ori Yegev said that nearly all of Israel's drinking water needs are met through desalination. 70% of the recycled waste water in Israel is channeled for agriculture. In the case of India, he said that treated water can be channeled for industrial use.

Israel has made strident progress in water management, borne out of its endemic water scarcity. Today, the country can offer not only early stage technologies but also the expertise in water project implementation.

Plans are afoot to put together a \$20 million fund with government support which can be used to develop water technologies that are implementable in India. Mr Yegev said the water conferences in India and Tel Aviv can be opportune occasions for Israeli technology firms and leading Indian water utilities to work out joint projects and business engagements.

Mr Shimon Ben-Hamo said that Israeli companies would be well advised to offer total solutions to India. The objective should be to build and operate the projects, he said, adding, "We are planning to set up a 100% owned company in India."

Dr Arunabha Ghosh said that water technology firms should identify the industrial clusters in India where the water situation is acute. The Delhi-Mumbai Industrial Corridor (DMIC) and south-eastern parts of India are two regions that make a strong case for pilot projects as the groundwater situation in these areas is poor.

Mr Ghosh said that when it comes to municipal water, the biggest challenge is linked with the pricing of water. The other big challenge is the level of investments needed for purposes like metering, waste reduction and the like. Israeli firms have tended to focus on metering and waste reduction, whereas there is a need to focus on the long-term infrastructure as well, he said.

Companies should also look at states like Bihar that are stepping up agriculture growth. Demand for water in those regions will be very high, he said. Mr Avshalom Felber added



*Mr Gourisankar Ghosh, Former Chair, UNWATER and Executive Director Water Sanitation WHO, Geneva and Prof Dror Avisar, Department of Geography and Human Environment, Tel Aviv University*



*Dr Naushad Forbes, Director, Forbes Marshall Pvt Ltd and Shimon Ben-Hamo, CEO, Mekorot*

that the Indian government should take firm steps to reduce the wastage of water in the agriculture sector.

Commenting on the availability of water in India, Mr Gourisankar Ghosh said that in 1951 India had 5,800 cusecs per capita. Now it is 1,000. By 2050 India will need 15-20% more water to sustain its population. Most parts of India are in the high to medium risk zone in terms of water availability. Water management in the country is also mired in poor governance. Israeli firms need to be cognizant of these risk factors, he said, while adding that right pricing and reduction of wastage will greatly augment the water situation in the country.

Mr Gourisankar Ghosh said the government tends to look out for total solutions. This is where Israeli firms can move in. Firms that take a long term view of doing business in India should also focus on advocacy and capacity building at the local and national levels, he said.

Prof. Dror Avisar said there is need for greater academic exchanges in this field. In the area of hospital waste water treatment and industrial waste water treatment “we are looking for research institutes to cooperate with”.

Prof. Avisar said it would be prudent to connect the water sub-group with the healthcare sub-group as waste water around hospitals contain highly toxic, mutagenic substances that need to be treated with great care to prevent water and food pollution. The problem is that hospital waste water is not considered as industrial waste water and as a result they are released into the environment without much treatment. He suggested in situ water treatment at the hospitals.

Mr Ashok Natarajan said as per the LPC (litres per consumer daily) measure, Indian cities consume water more than Paris, London and other world metros. The problem is, there is high non-revenue water loss (70% in Delhi vs 3% in Israel). There is also lack of public awareness of the issue, he said.

Noting that 90% of business in India rests with the Government, Mr Natarajan said that Israeli firms will need to come up with a different strategy, and work with Indian partners and construct contracts that lead to a win-win situation.

It would be prudent to focus on 2 of the top 7 states that are business-friendly and roll out the pilot projects. Israeli firms should pursue technology partnerships instead of just supplying technologies, he said, adding that India will eventually become the biggest water market in the world.

In the interactive session, Mr Salil Singhal said that companies that are looking at water management projects must go into water harvesting as well. He suggested that India’s agriculture sector should step up the focus on drip and micro irrigation. Besides, transplanted rice should be replaced by direct seeded rice.

Mr Jamwal said that free or heavily subsidised water could be a key reason for wastage. He felt that farmers would be willing to pay for water if the situation demands.

Mr Anjan Das said the Supreme Court in a 2009 judgement had asked the Ministry of Science & Technology to come up with a solution for water. The ministry did a complete mapping of the country, and 61 locations at the district level were identified with 26 different types of water problems. They are ready to float global tenders for acquisition of technology solutions. Israeli water companies could use the available information while drawing up their strategies for the Indian markets.

#### **Session Six: Cooperation in Bi-national innovation and research – the role of the state and academia**

**Session Chairs:** Mr K R S Jamwal, Executive Director, TATA Industries Limited  
Dr Giora Yaron, Chairman of Board Itamar Medical, Ramot and Executive Council of Tel Aviv University

**Presentations** Mr James Abraham, Managing Director, SunBorne Energy  
Mr Yonni Regev, Deputy Director, Ministry of Finance, National Budget Department, Israel  
Dr Naushad Forbes, Director, Forbes Marshall Pvt Ltd  
Mr Aaron Mankovski, Managing Partner, Pitango Venture Capital  
Mr Varun Kapur, Vice President, Middle East & Africa, TATA Consultancy Services

#### **Proceedings**

Indian Government has taken a series of research initiatives in recent years, such as, the announcement of the Science and Engineering Review Board, establishment of National Innovation Foundation and Global Innovation & Technology Alliance (GITA), etc. Stating this, Mr K R S Jamwal said the challenge lies in deepening the collaborations between academia and industry to spur high-level innovations and research.

Dr Giora Yaron said that collaborations for innovation yield expected results if the focus is on addressing the grassroot issues. He urged both governments to share the financial risks pertaining to bi-national cooperation for innovation and research.

Mr Yonni Regev said that Israel and India are associated in various research initiatives including the exchange of faculty and doctoral scholars. Israeli government is providing financial support to companies that have launched their marketing initiatives in India. The financial support complements the innovation and research collaborations, he said.



Mr Regev said both governments should reduce the bureaucratic barriers for deeper collaboration in the field of research. It is also important that both governments should take steps for establishing institutional match-making platforms for easier collaboration of industries and academia. He suggested the creation of a short-term special purpose vehicle for providing initial financial support to these entities.

Dr Naushad Forbes reckoned that Stanford University is the best model for collaboration between academia and industry. However, he quoted Stanford University Prof. John Henske saying that making academia work for industry is like hurting the cat, and the only way to hurt the cat is by moving the food.

Dr Forbes said it is possible to get the right kind of research by providing the right kind of incentives to academia. He said in India 2/3rd of the research fund is provided by the Central government and major public research happens in autonomous R&D labs, and not in the higher education centres.

He noted that over the last 25 years there has been an 80% growth in master degree graduates while there has been only 20% growth in graduate students. In this skewed education system, by and large educational institutes, with certain exceptions, focus on teaching rather than research-oriented technical education. Collaborations between India and Israel can help India develop research-based technical institutes.

Talking about R&D in industry, he said in India 1/3rd of all R&D happens in industrial labs, which is much lower in terms of the global standard whereby 80% of R&D is done by industry. Average investment spend in R&D by Indian industry is only a half per cent of the total turnover, and it is 1% in the pharmaceutical industry. These are the few challenges that India faces today and these challenges should be seen as an opportunity for collaboration.

He said for industry-to-industry and academia-to-academia collaborations India and Israel can focus on three crucial areas -- energy, healthcare and water. He was of the view that there should be enough programmes where Indian industry can collaborate with Israel academia in R&D activities and product development.

Mr Aharon Fogel, Chairman, Migdal Group, said interdisciplinary research is pertinent. In R&D there should not be any government interference. In Israel 70% of industrial research is done by startup units. Participation of financial institutions is necessary in R&D, he said.

Making a comment on the Indian educational system, Mr K R S Jamwal said there are 45,000 graduate institutes in India that produce 45 million graduates every year. However, the actual requirement is 20 million people. And most of the graduates that come out of these institutes are not employable.

Referring to defence R&D and industry benefits, he said Israeli industry benefits from the defence R&D spend by the government. However, India industry does not get much benefit from defence R&D spend by the Indian government.

Mr Varun Kapur said it is important to reduce the cultural gap between India and Israel to promote long-term collaboration.

Mr Aaron Mankovski called for setting up a campus of Tel Aviv University in India (Delhi or Bangalore) for better academic collaboration between India and Israel. He also said there should be focused delegation visits and meetings where actual business is conducted.

Mr Mankovski said the majority of companies in Israel are startups, and for them India is not a priority market. For startups the US and Europe are the preferred destinations. However, matured and large Israel companies are coming to India. If Indian venture capitalists invest in startups in Israel it would be easier for them to gauge the Indian markets.

Mr James Abraham said the cost of R&D is very low in India. However, there is a shortage of experts and funds. "If we get the expertise with correct market understanding the solutions can be made in India at a very low cost," he said.

Mr Anjan Das, Executive Director, CII, said India has already allocated \$15 billion for R&D in the financial year 2012-13. And it will be increased to \$45-50 billion by the year 2016-17. So far no government funding is done for private R&D initiatives. However, by 2016-17 the government will spend \$10 billion for private R&D initiatives, if an equal contribution is provided by the private sector. Indian government is also considering the provision of grants to companies that acquire green manufacturing equipment.



*Dr Giora Yaron, Chairman of Board Itamar Medical, Ramot and Executive Council of Tel Aviv University, Mr K R S Jamwal, Executive Director, TATA Industries Limited and Mr Salil Singhal, Chairman, PI Industries*

Dr Hadar Ron, Managing Partner, Israel Health Care Venture, suggested setting up of an Indian Medical School in Tel Aviv University where the India students can have access to medical research. Clinical programmes can be done in India, she said.

Mr Salil Singhal, Chairman, PI Industries, said if cost is a factor in Israel for R&D then Indian industry can offer R&D facilities at cheaper rates.

Dr Arunabha Ghosh, CEO, Council on Energy, Environment & Water, said there is a complete disconnect between R&D labs and actual production houses in India. The only way forward is by looking things from the problem solving perspective.

Dr Ranjith Roy Choudhary, Apollo Hospitals Education and Research Foundation, said India needs technology from Israel and the focus should be on building institute-to-institute collaborations. India has enough funds for R&D and does not require money from Israel, he said.

Prof Gadi Ariav, Tel Aviv University Business School, said the collaboration should be more personalised not institutionalised.

### Concluding Session

Session Chairs: Mr Stanley Bergman, Chairman and CEO Henry Schien Inc,  
Mr Jamshyd Godrej, Chairman & MD, Godrej & Boyce  
Manufacturing Co Ltd

### Proceedings

Mr Jamshyd Godrej said the Forum is steadily developing into a business dialogue with both sides directing greater attention on the business side of discussions. He noted that deeper bilateral economic cooperation will help India gain better access to Israeli cutting-edge technologies. Indian defence forces have already benefited from the bilateral technology cooperation. In time, a greater section of Indian industry will also profit from the collaborative arrangements. He further underlined the immense potential in bilateral R&D initiatives.

Mr Godrej observed that the Forum is an extension of the strategic dialogue between US and India jointly organized by CII and the Aspen Strategy Group, US, and complements the strategic dialogue between India and Japan.

Referring to the pioneering work of the Domain Working Groups, he said they should look to meet more frequently and take the cooperation endeavours to the next level.

Mr Godrej cited education as an important area of collaboration between Indian and Israeli entities. Today, India is faced with huge challenges in education. No Indian institute figures in the top 100 education institutes in the world. Besides, Indians spend some \$30 billion annually to study overseas. There are several other issues that bedevil this sector. In this context, collaborative arrangements with Israeli universities and higher research bodies will greatly augment many of India's educational programmes, he said.

Mr Stanley Bergman underscored the need for business leaders from both sides to spend more time in each other's country and understand the opportunities for collaboration. It is not enough to bring western products to India. It is important to learn the business environment in India and adapt the products to meet local needs, he said in his concluding remarks.



*India – Israel Forum attendees*





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