



**India's Growing
Defense Budget**

INTERVIEW

Dr. Kook Jin Moon
Chairman
Tongil Foundation, Korea



**The Rise of
Kim Jong-un in
North Korea**



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Growing India-Korea Ties

Interview with Ambassador Vishnu Prakash

**India as an Asia-Pacific
power is bound to
increase its ties with
the region**

Vishnu Prakash
*Ambassador of India to
the Republic of Korea*



**India Poised to Redraw
Healthcare Service Sector**

Xi Jinping's American Debut

**Growth and Importance of the
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Mr & Mrs Vishnu Prakash at a welcome reception hosted in his honor at Lotte Hotel on February 13th, 2012. Also seen are Dr. Lakhvinder Singh, President of Indo-Korean Business and Policy Forum and his colleagues from the Forum who performed during the event.

Growing India-Korea Ties

India is an Asia-Pacific Power and is Bound to Increase its Engagement with the Region in the Near Future

BY MATTHEW WEIGAND

The Asia-Pacific Business and Technology Report was able to meet with Vishnu Prakash, the new Ambassador of India to South Korea, in his residence in Seoul earlier this month. Mr. Prakash is a senior diplomat who was formerly the Official Spokesperson in the Ministry of External Affairs, New Delhi, for three and a half years before coming to this post. It is not his first time in Korea either. He last visited Seoul as part of Prime Minister Dr. Manmohan Singh's delegation in November 2010 to attend the G20 summit. As the spokesperson he always travelled with the Prime Minister of India during the latter's visits abroad. Mr. Prakash is uniquely suited for his current position, having served in Shanghai, Tokyo and Vladivostok, besides impressive stints in Moscow, New York, Islamabad and Cairo. He has decided to strongly focus on deepening bilateral economic and commercial ties which have been booming ever since the India-Korea Comprehensive Economic Partnership Agreement (CEPA) came into force on January 1st, 2010.

Vishnu Prakash

Ambassador of India to the Republic of Korea

In a wide ranging interview with Asia-Pacific Business and Technology Report Managing Editor Dr. Lakhvinder Singh, he discussed his plans to further strengthen India-Korea ties and deepen India's engagement with East Asia.

Welcome to Korea. Is this your first time in Korea? What is your first impression of Korea and the Korean people?

I had been in Korea earlier, for the G20 summit with the prime minister. On assignment, this is my first time. I have some knowledge of the region though, having served in Japan, China, and Vladivostok.

I came with eyes wide open, in the sense that before coming here I was the official spokesperson of my foreign office for 3.5 years. And I have literally seen the relationship getting transformed from close quarters. I had some sense of what this position entailed, how the relationship is, what to expect. But I must say that what I have found here has gone beyond my expectations, in the sense of the clearly discernible warmth for India in Korea. My first impressions have been very positive.

There must be a lot of events that you have been invited to already. Any highlights?

I hit the ground running in the sense that in the last five weeks we've had a number of interesting engagements and a number of Indian cultural events. We organized a photographic exhibition, along with the Korea Foundation, on the travels in 1920s-30s of Nobel laureate Rabindranath Tagore, to southeast and east Asia. In 1929 he penned a poem on Korea called 'Lamp of the East', prophesying a great future for the nation. Korean people have great affection for Tagore. We also brought one of our renowned classical dancers, Ms Kavita Dwivedi, to perform Odissi, as part of the festival of India that has been going on for ten months. She performed in Seoul and Busan. We also had a Republic Day celebration on the 26th of January. I have met lots of people already from different walks of life, including presidents of newspapers and universities, heads of the commerce chambers, and political and business leaders. It has been a satisfying first month for me.

What do you think of India and Korea's changing roles in the Asian region and their interplay?

We see India as a Pacific power. We have been pursuing a Look East policy since 1992, to engage ASEAN and the East Asian nations. We are very happy with the response and the results. One, we already have an annual Indian ASEAN summit. We now have an India-ASEAN FTA in goods. Our relations with China, Japan, and South Korea are evolving very well. With respect to South Korea, I think the last few years have seen a transformation in relations. We are now strategic partners. We already have a CEPA and our relations in practically all spheres including culture, education, security, de-

fense, and business are growing. I would like to particularly underscore a growing strategic convergence in interests and outlook between India and Korea. There are today no major issues which divide us. Besides, we also are two vibrant democracies. There are a number of factors which are bringing us closer. First and foremost we are both rapidly growing economies. India is seen as a huge a major market with a middle class of 300 million people and a 2 trillion dollar economy by the end of 2012. There are a variety of factors which are injecting momentum into this bilateral relationship.

India set up diplomatic relations in 1962 with North Korea. But recently in the last 3 years this relationship has also been picking up very fast. Direct and indirect trade between the two countries is estimated to have already reached \$US 1 billion. India decided to give North Korea almost 1 million dollars of food aid, and the Indian administration has been giving North Korea a lot of other attention. In the free world, India may now be the only country that has a good relationship with both North Korea and South Korea. As a government representative, do you think this is a part of India's policy to play a more constructive role in peace-building in the Korean peninsula, or is it a normal routine functioning relationship that we should not read too much into?

We have, as you have already noted, a long relationship with both Koreas. In North Korea, our embassy has been functioning for a long time. In the last few years at the request of North Korea and within our capabilities, we from time to time have provided food assistance. Last year also we did so at the request of the World Food Program. As for trade, it is a question of demand and supply. The government doesn't have much of a role and these are purely commercial matters.

Today North Korea faces plenty of international sanctions and some countries have refused to give food as aid. But North Korea is surviving because of support from China. India's petroleum industry is said to be the second largest supplier of petroleum products to North Korea. Even though you've already said these things are purely commercial and the government isn't interfering, to what extent does this free hand given to Indian companies to deal with North Korea indicate change of Indian policy towards North Korea and the Korean peninsula?

India is a responsible member of the international community of nations. We always adhere to international conventions



Mr. Vishnu Prakash, new Ambassador of India to Seoul.

COVER STORY

that we are party to and UN decisions. So in regard to any determination made by the UN, we have always adhered to it in letter and spirit. India has always played a responsible and constructive role in international affairs. That being said, there is no governmental interference when it comes to business. We are a market economy. International trade is mostly conducted by the private sector. And they go by commercial considerations.

So, having a good relationship with North and South Korea, do you think India has a role to play in peace building and conflict resolution on the Korean peninsula? In the Korean War, India could foresee the importance of this region, and contributed immensely during the war and after the war in bringing peace to the peninsula. The founders of the Indian republic could also see the importance of this region. We lost this momentum during Cold War years. But now once again we have a good reputation in both countries. Do you think the time has come for India to return to its traditional role as a peacemaker?

It is very important to understand India's outlook. We are not a country which is in

the business of imposing its political system or way of life or philosophy - political, economic, or social - on any country. Secondly, if we have played a role anywhere outside our borders, that is only at the invitation of the country or countries concerned. Let me give an example: Afghanistan in 2001 sought India's assistance in economic development and we have already become the sixth largest provider in the world of economic assistance to Afghanistan, of over \$US 2 billion, and this is despite the fact that we are ourselves a developing country. Three, as far as the Korean peninsula is concerned, we have made it very clear that we would like to see a peaceful settlement of the Korean issue. We have always been a very powerful voice for peace and dialogue. We maintain that there is no dispute in the world that cannot be settled through peaceful negotiations. We do as we say. In our own neighborhood we have been a victim of terrorism emanating from Pakistan. Even then we have always been the initiator of dialogue with Pakistan because we believe that dialogue is the best way forward.

China is an important player on the global stage. How does India view China's changing role in the Korean peninsula and in East Asia in general?

China is a very important player in Asia and beyond. China is our northern neighbor. We have a 4,000km border with them. We have been engaging China actively. We seek a cordial and cooperative relationship,

and our respective nations have concluded a strategic partnership. China is now our largest trading partner in goods. What role China plays in other regions and other countries is not for me to comment on, except to say we would all like to see the peaceful rise of China, as has often been averred by Chinese leaders.

What are the major areas of engagement of India with Northeast Asia?

We believe that we are an Asia-Pacific power. We have enjoyed a civilized relationship with East Asia and the Indochina region, including with Vietnam, Indonesia, Cambodia, Laos, and Thailand. Let me talk of Buddhism for a moment, which from India has travelled far and wide over 2,000 years, to southeast and northeast Asia. And whether you talk of China, Mongolia, Korea, or Japan, India has had historical linkages with them. In the recent period our relationship has evolved. We have economic, commercial, cultural, defense, security, people-to-people relationships with practically all North and East Asian regions which are growing rapidly.

Recently there has been a lot of talk about an Asian economic community. Your prime minister has been talking about this issue every now and then. How does India look at Asian economic integration?

The Prime Minister is a renowned econ-

When it comes to Asia, I think the 21st century is the Asian century. In the next 10 to 15 years India, China, Korea, Vietnam, and Japan are going to play an even bigger role. It would not be incorrect to say that the center of economic gravity is gradually shifting towards Asia.



India's Look East Policy has Korea Seriously Looking Back

It is rare thing to see – two countries growing to complement each other so completely that it seems as if the whole situation was engineered from behind the scenes. On the one hand you have South Korea, which is a high-end shipbuilding, construction, and electronics exporter. And on the other hand, you have India, which is a rapidly-growing economy across a few thousand miles of sea with a 350 million-strong middle class who have a long list of high-end electronics they want to buy and new housing they want to see built.

India's Look East policy has led them to engage East Asia steadily for the past ten years, but now their extremely promising market dynamics are catching Korea's eye too.

Everyone knows that Korea's current lover is the United States. Sure, Korea and China are close, but the US saved Korea in their hour of need and then provided them a perfect market for their growth as a manufacturer and exporter. But all is not well in the house of America, which is experiencing a shrinking middle class, job market, economy, and just about everything else. Now is the perfect time for Korea to take some time off and re-think its priorities and relationships as it graduates from industrialization high school and moves on to globalization university. Now is the time for Korea to consider serious, long-term commitments closer to home and more culturally similar. India makes an extremely compelling case for Korea's next long-term economic relationship. India is ready and willing to pick up just as many goods and services as Korea is ready to put down, and the Comprehensive Economic Partnership Agreement between the two countries is only helping matters. Besides, the two are really more compatible than any other two countries may be. Where India has software manpower, Korea has hardware manpower. Where India has two oceans and an extensive need for more ships to sail them, Korea has shipyards. Where Korea has a rapidly-aging population, India is a young country, with 300 million children under the age of 15. That is the entire population of the United States that will be needing new cell phones, televisions, computers, and trendy fashions for at least the next 15 years. There is just no reason for either country to refuse the other.

And it is not just trendy consumer electronics that Korea can offer India either. India is also hungry for nuclear power and other, alternative sources of energy that they can use to provide more basic infrastructure throughout their sprawling nation. South Korean companies have spent a lot of time and effort to become experts in nuclear energy, and the Indian

government is taking full advantage of that.

Also, it makes sense from a defense perspective. India and South Korea are both democratic nations, interested in preserving the well-being and freedoms of their people. However, not all their neighbors have the same priorities. China in particular is offering additional tensions in the region with expansionist overtures towards all the resources they can find. While they do not show any signs of actual conquest, the Chinese government does aggressively pursue disputed oil-rich regions of the South China Sea. What the Chinese government thinks that it can or cannot do will depend on the attitudes and cooperative possibilities of its regional neighbors. Nobody except North Korea is interested in




Ambassador of India, Vishnu Prakash, with Mr Kim Sung-Hwan, RoK Minister of Foreign Affairs and Trade.

US, England, and a handful of other countries as native English speakers qualified to teach. India has a long history of education and English-language speaking, but qualified Indian English instructors are not yet welcomed in the South Korean bureaucratic system. This is something that India hopes will soon be addressed. Also, businessmen on both sides have been re-

India is ready and willing to pick up just as many goods and services as Korea is ready to put down, and the Comprehensive Economic Partnership Agreement between the two countries is only helping matters.

destabilizing the region, and the best way to preserve stability is for like-minded neighbors and trading partners to present a unified front in all international arenas. That is why South Korea and India are going to be working more closely on defense in the near future.

Now, granted, all is not perfect between the two countries. There are still some issues that need to be addressed. For instance, South Korea has a constant national push to learn English as a second language, and yet their governmental policies only recognize citizens of the

ported as complaining that the CEPA between the two countries favors the other side more in their respective business sectors, although the specific reports are sometimes contradictory and unsubstantiated. This may actually be a sign of a truly fair compromise, for as the saying goes, a compromise is a situation in which nobody is truly satisfied. But in the India-Korea relationship, it seems as though more stakeholders can be closer to satisfied than in many other similar agreements. The relationship is good for both countries, and it can only grow. 

omist. He walks tall on the international stage because of his stature as an economist and the father of India's economic reforms. As a statesman his wise counsel is valued at international forums such as the G20 process. When it comes to Asia, I think the 21st century is the Asian century. In the next 10 to 15 years India, China, Korea, Vietnam, and Japan are going to play an even bigger role. It would not be incorrect to say that the center of economic gravity is gradually shifting towards Asia. Our Prime Minister has been a foremost proponent of the Asian economic community which would enhance mutual economic convergence and synergies.

Given that sentiment, there are some practical problems. Asia as an economic unit is not the same. Different countries are at different stages of economic development. The EU is possible because most countries are at the same level. Some countries like Japan and Korea have developed but there are some practical problems. How can we solve these practical problems?

Nobody claims to be having a magic wand to create an Asian economic community tomorrow. There are enough historical examples of countries with different levels of economic development but with shared interests coming together. All 27 members of the EU are not at the same level of economic development. They are all democracies and have reached certain understandings, and that is the glue. Take the ASEAN region - they are at different levels of economic development. Singapore, say, which is a very developed country, and Laos, Cambodia, and Myanmar which are developing nations, are members of ASEAN. There are enough examples for this type of cooperation, so long as there is a political will. So long as countries appreciate there is an economic advantage, you gradually find ways to add synergies. What you require is far sight, political will, and a clear demonstration of economic advantages.

Recently India has become very active in East Asia. What is the future of the East Asia Summit as a whole?

I've already mentioned the historical role and the historical linkages between India and Southeast/East Asia. I've already mentioned that India is an Asia-Pacific power. It is very natural for India to be a member of the East Asia Summit. We have convergence of interests. Economic, commercial, security, energy. For example, sea lanes - are all important for our countries. We are all very interested in safe passage and free navigation in the sea lanes of communication. Many countries are victims of terrorism and it is very important for us to join hands and root out the menace. When you talk of the East Asia Summit, all the members have similar economic, cultural, and security in-

terests. I'm happy that the East Asia Summit is evolving as an important forum.

Now coming back to India-South Korea bilateral ties: what was your first feeling about the relationship when it was handed over to you and what were the important areas you decided you are going to focus on during your ambassadorship to take it further?

The first impressions have been very positive. I have become fully conscious of what the relationship entails and completely subscribe to the vision of our relationship. We are strategic partners, we have a similarity of outlook and approach on a host of international, regional, and other issues. That is an important aspect of the relationship. One of the pillars of the relationship is economic and commercial cooperation. In the last few years billions of dollars of investments have flown in both directions. Our trade in 2011 has exceeded 20 billion dol-

years during 2010 and 2011, trade increased 70 percent. Last year Mahindra and Mahindra invested around half a billion dollars in Ssangyong Motors. So you have investments flowing in and trade flowing in. During the last two years the CEPA model has been replicated by us with a number of countries in the region, including Japan and Malaysia, and we are now negotiating one with Indonesia. A joint committee at the level of trade ministers has been set up, to regularly review functioning of CEPA. The last meeting was held in January 2011. We have a trade deficit with Korea and have been in discussion with our Korean friends for better access for Indian IT companies, pharmaceuticals, agricultural products, etc.

There is a common perception among Indian businessmen that the CEPA has been more beneficial to Korean companies than Indian companies. They expected that Korea would open the service sector to Indian companies but it has not been true so far. What can be done so that India and Korea can narrow the current trade gap?

Korea is a technology powerhouse. We are importing manufactured goods like electronics, white goods, autos, components, and chemicals from Korea. Our strengths are in the services sector, such as biotechnology, IT and in the pharmaceutical sector. A majority of our exports to Korea are comprised of primary goods, though we export finished goods too. So we seek better market access in the services sector, for pharmaceuticals, and so on. I want to underscore here that these are discussions between friends. We both want to see the CEPA doing well.

How have Indian companies coming into Korea rated their initial experience?

What kind of problems have they been facing? What do they need to make things better?

Indian companies in Korea are quite happy. TATA Motors, which bought Daewoo trucks, is doing very well. The IT companies I have already mentioned. They are doing well. They are looking at playing a more active role. Ssangyong Motors is a new venture, and Mahindra and Mahindra are trying to nurse it back to health. But the experience of the Indian companies has been positive. What I would like to mention is that the Indian private sector has come of age. We find that outbound investment from India every year is almost equal to inbound investment. Indian companies are increasing their footprint abroad. For instance, Indian companies have invested \$US 26 billion in the US in the last 5 years.

So you're giving the impression that everything is OK as far as economic ties are concerned between the two countries. Do you see any problem areas?



Mr. Vishnu Prakash with President Hu of China.

lars for the first time. In 2014 we are confident of reaching the 30 billion dollar mark. We also have ongoing defense and security cooperation. We will have a defense wing of the embassy soon, later this year. Last year we set up a full-fledged Indian cultural center, recognizing great mutual interest in each other's cultural traditions. This year we are told Korea will set up a cultural center in Delhi. We are happy at the growing number of people-to-people contacts. Last year we issued close to 100,000 visas. We have been issuing 7 to 8 thousand every month. Half of the people from Korea who go to India are there for business, the other half for tourism. In short I am very happy at the speed and manner in which our relationship is growing.

Two years ago the Comprehensive Economic Partnership Agreement (CEPA) was signed between India and Korea. How do you think it has fared so far? What is your personal take?

I think the CEPA has been a resounding success. I can substantiate it. In just two



With Chairman of Korea Chamber of Commerce and Industry, Mr. Kyung-shik Sohn.

We have no major issues dividing us. There are normal commercial issues which are very normal and healthy between any two countries. And we are certainly keen to have a better access to the Korean market in some areas as are Korean companies in India. This is a normal thing between two trade partners. We are in discussion to make things better.

Korean companies are hiring a lot of Indian labor in IT and other things. But they do not provide the same benefits that they could otherwise get in the EU and other developed countries. So many Indian laborers have been complaining. I would like to draw your attention to the fact that there are some issues, especially between...

Is it India-specific? Since it is not a dispute between Korea and India, we cannot take it as an issue between two countries. This is about Korean law and is applicable to workers from all countries in Korea. As the Ambassador of India I would certainly like to see the Indian personnel and community to be comfortable, and we will do what we can.

Recently Korea has been emerging as a power house in Green Technology and sustainable development. What are the potential areas of cooperation in green energy and nuclear energy between the two countries?

We are a developing country. While we will be a two trillion dollar economy this year, for us a healthy sustainable economic growth is of paramount importance, which is the main focus of India's domestic and foreign policy. Having said that, it is also very important to grow responsibly and to

Nobody claims to be having a magic wand to create an Asian economic community tomorrow... So long as countries appreciate there is an economic advantage, you gradually find ways to add synergies.

try to enhance energy efficiency, to reduce carbon emissions. We have already undertaken voluntarily to enhance India's energy efficiency by 20 percent by 2020. We are doing good work in renewable energy, wind, solar, biofuel, etc. One of the reasons for our quest for nuclear energy is precisely that nuclear energy is a clean energy. And we would like to enhance nuclear energy component in the mix of our energy basket. Today just 2 percent of our energy comes from nuclear power. We want to enhance that to 10 percent by 2035. So, we have plans to add about 60,000 megawatts of nuclear power generation capacity in the next 20 years. As you know we have already concluded a nuclear cooperation agreement with Korea, and we think they can play a positive role. We are also happy to collaborate with Korea in green technology and other areas.

Education is very important. Both from a short-term perspective and long-term perspective. The number of Korean students studying in the US is declining. China has been a great beneficiary of this shift. Is there any strategy in place to get some

of this emerging student shift to India? How can education sector cooperation with Korea can be improved?

Sixty years ago, Prime Minister Nehru went about building 'new temples' in independent India in a series of Indian institutes of Technology, Management and Science. We have done quite well in the education sector. I'm happy that more and more Korean students are going to India to study English, IT, management, and Indian students are coming here to study sciences, do PhDs, Masters, and to study Korean. This trend has to be strengthened. We intend to be more active, in having cooperative arrangements between Korean and Indian Universities. I've just returned from Busan where I had excellent meetings with the Presidents of Pusan National University, Shilla University, and the Busan University of Foreign Studies. I will be doing the same thing here in Seoul in the next few weeks. We will be focusing very strongly in this sector.

Once again thanks for talking to us.

Thanks. It is a pleasure and I look forward to more such chats.

Business



Opening Ceremony, Korea Electronic Show 2011

Growth and Importance of the MICE Industry

BY SHAMILA JANAKIRAMAN

The need of the hour for any company, whether it is in the IT, FMCG, leather or textile industries, is the expansion of customer base and retention of the present market.

Among other ways, this can be achieved by participating in huge congregations, seminars, exhibitions and other marketing events.

Besides bringing industry counterparts together, these events help in synergizing ideas and bringing in additional clients, increased sales and revenues. They also serve as a cost effective means of advertising. A specialized industry has mushroomed to cater to this unique need of companies and is known as the MICE Industry, where MICE stand for Meetings, Incentives, Conventions and Exhibitions.

The MICE industry is essentially a service industry that also encompasses trade, transportation, finance, and travel. The MICE industry is characterized by three highs - high growth potential, high added values, and highly beneficial innovations. It offers three larges - large output, large opportunities for employment and large industry associations. The industry also ensures three advantages - the efficient utilization of human resources, technological know-how, and assets.

Countries are vying with each other to promote themselves as a hot MICE destination in order to garner a major piece of this new industry pie. Singapore and Hong Kong are top MICE destinations in Asia already. With fast economic growth witnessed in Asia there has also been a remarkable growth in the outbound MICE industry.

Travel companies have also started spe-

cializing in delivering MICE services and activities. The outbound MICE industry tries to maximize revenues from the corporate MICE traveler as it forms an integral part of the leisure travel sector. Travel companies have core competencies in the foreign exchange, travel insurance, visa and passport service verticals, as well as in other travel related services, which gives them an edge in serving the MICE industry.

Social Media also plays an important part in promoting MICE business as it increases awareness, improves and maintains a high level of customer service, while communicating directly with target audiences.

India has developed a reputation as a unique conference destination, with its historical, cultural, architectural, wildlife, culinary, spiritual and therapeutic attractions. Better infrastructure, new airports, hotel MICE facilities, improved air, road and rail transport now make India an excellent conference destination.

Many Indian state governments are keen on establishing convention centers near large metro cities. The MICE promotional and marketing efforts in India include one-to-one meetings, focused events, direct mail communications and offline and online campaigns with customers. MICE exhibitions also give greater brand visibility along with the opening up of networking opportunities to interact with potential customers.

Thailand has been forging ahead as a fa-

vorite tourist spot for some time now. The Thai government is also proactively trying to leverage its huge capacity by allocating \$US 6.5 million to develop specialized venues and implement other facilities to conduct international events for marketing products and organizing corporate seminars.

The Bangkok Metropolitan Administration and the Thailand Convention and Exhibition Bureau (TCEB) entered into a MoU to give greater impetus to the industry few years back. Thailand is trying to become ASEAN's international MICE destination. Plans are afoot to make Bangkok a green city in the meantime.

The strategies launched by the joint endeavor involve introducing Sentimental Marketing and Experiential Marketing campaigns to promote Thailand as a favorable venue in which to organize trade shows and road shows. The inbound market is also strengthened through special campaigns and promotional packages for event participants. The communication strategy leverages the media exclusively, besides including communications of referrals and testimonials via the Internet.

The cities in Thailand picked for developing the MICE market are Bangkok, Pattaya, Phuket, and Chiang Mai, all favorite tourist destinations. Crisis management strategies to further optimize the MICE destination has led to the setting up of TCEB call center and contact centers. Steps have been implemented to enhance safety and security standards in the MICE industry as specified by the Industrial Standard 22300 - MICE Security Management System.

Malaysia

The Convention and Exhibition Bureau, or MyCEB, is instrumental in powering the nation's MICE industry. Malaysia has built various convention facilities like the Borneo Convention Centre Kuching (Sarawak), the Putrajaya International Convention Centre, Kuala Lumpur Convention Centre, the MA-TRADE Exhibition and Convention Centre in Kuala Lumpur, and the Johor Bahru Iskandar region.

MICE organizers are being encouraged by the announcement of financial incentives to make Malaysia an attractive business tourism destination. Zulkefli Hj Sharif, Head of MyCEB, said that the scheme is valued at over US\$16.5 million for 2011-2012. Planners in the field of health and medical care, science and technology, halal food, education, oil and gas will also get incentives as these sectors are directly or indirectly responsible for developing Malaysia into a MICE hotspot.

In November 2011 a branding campaign was organized by MyCEB, at Kuala Lumpur Central Market, showcasing Malaysia as Asia's Business Events Hub. The event portrayed Malaysia as a gateway to conduct business events, as it is strategically located on trade routes between India and China and other locations in Asia and Europe.

The event was leveraged to the maxim

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Can India Become the Largest Auto maker in the World?

BY MEENAKSHI SHANKAR

The global auto industry is setting the stage for rapid growth over the next decade ruled by automakers and suppliers from six major markets – China, India, Japan, Korea, Western Europe and the U.S.

India is expected to grow into one of the auto industry's superpowers during the next decade, according to a new report. The automotive industry in India is one of the largest in the world and one of the fastest growing globally. The majority of India's car manufacturing industry is based around three clusters in the south, west and north and categorized into passenger cars, two-wheelers, commercial vehicles and three-wheelers, with two-wheelers dominating the market.

India has already generated a name for itself in this industry catering to the changing needs of the Indian consumer and through various innovations. It reportedly stands as the second largest manufacturer of motorcycles in the world. In terms of passenger car and commercial vehicle manufacturing, India has taken its place as the seventh largest overall. There is a consistent growth of between 25 and 30 percent annually. Even India's automobile exports are currently climbing to such high levels.

A few of the top players in the Indian automobile industry include Maruti Suzuki, Tata Motors, Mahindra and Mahindra, Hyundai Motors, Hero Honda and Hindustan Motors in addition to a number of new entrants.

Reportedly, India's strong engineering base and expertise in the manufacturing of low-cost, fuel-efficient cars has resulted in the expansion of manufacturing facilities of several automobile companies like Hyundai Motors, Nissan, Toyota, Volkswagen and Suzuki. According to a recent report by Rothschild, the investment bank, India is set to become the third largest automotive maker in the world by 2015. Ernst & Young also has reported that overseas investment in India rose for the first time in three years in 2011.

The Tata Motors Group, India's largest automobile company, with consolidated revenues of \$US27 billion in 2010-11, reported its global wholesales, including Jaguar Land Rover, at 119,799 units in January of 2012, higher by 21 percent over January 2011. Cumulative sales for the fiscal were 985,260, higher by 13 percent compared to the corresponding period in 2010-11.

Automakers around the world are gradually shifting their production facilities from high-cost regions such as North America and the European Union to lower-cost regions such as China, India and South America. This is also coupled with the shift in



Auto Expo 2010, Delhi, India

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auto market consumer preferences towards hi-tech, fuel-efficient, environment-friendly vehicles, such as small cars. India is currently meeting up to the demand of being a cost-friendly and demand-driven market which is encouraging automakers to shift their locations there.

The Asian countries, especially China and India, are expected to account for 40 percent of growth in the auto industry over the next five to seven years. Global Insight, a U.S. based provider of economic and financial information reported in its study that India can bring about 14.7 percent of growth by 2013.

Mercedes Benz said in a recent release that it is planning on investing \$US71 million at its plant in Pune, India and will also be launching 5 new compact premium cars in the country within the next two years. Mercedes Benz has already invested \$US130 million in India and this additional \$US70 million, will take the total investment to \$US200 million. Deiter Zetsche, Chairman, Management Board, Daimler AG, said, "India is an important growth market for us. We see high demand for our A and B Class segments in India. We plan to enlarge our dealer network and ramp up production capacities."

Matthias Luhrs, Chairman at Mercedes Benz India, was quoted as saying, "It is important to start local production for A and B Class. We hope to double our volumes with these models."

On the other hand, BMW has gained hugely, as far as sales are concerned, by launching its X1 compact SUV. Small cars are catching on in the Indian auto industry, and by launching more small cars in India, Mercedes Benz believes that it can double its sales there by 2020.

Small cars make up 70 percent of the domestic market, and although Tata and Mahindra provide strong local competition,



Tata Nano EV Concept

© Walter Cattaneo | Dreamstime.com

foreigners are dominant. According to Ernst & Young, foreign direct investment (FDI) into the Indian automotive industry has increased by 48 percent to \$US7.4 billion in 2011 and Suzuki alone has a 45 percent share.

Even the Swedish car manufacturer Volvo looks at India as a long term strategic market and plans to introduce more vehicles in the luxury car segment in order to get a grip of a bigger share in this market. Volvo plans to gain a 15 percent share in this segment by selling over 20,000 units per year by the end of the decade. The car maker also has plans to launch a new model in India during the first quarter of next year, as it aims to become one of the top three players in India.

With no caps on FDI, new entrants are spurring competition. And in contrast to recent policies on retail, state governments have been welcoming. Automobile manufacturing clusters are being created in the south and west of India, where states such as Tamil Nadu and Gujarat offer cheap land to attract investment.

But it's not just the domestic market that is fuelling growth. Exports already make up 15 percent of output, and many firms have

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Indian Shipping Industry – Riding the Economic Wave

BY SHAMILA JANAKIRAMAN

The shipping industry is global in scale and it reflects the economic health of nations and the world as a whole. Commercial shipping started with the Phoenician merchants who carried goods across the Mediterranean. The Venetians and Dutch were prominent original players in this burgeoning industry.

The opening of the Suez Canal in 1869 came as a boon to shipping, as it enabled faster trade between Europe and Asia. The container shipping sector grew exponentially from the 1970s to the 1980s. In Asia the industry saw significant growth, with Hong Kong opening its large container port to the world in 1989.

It can be said that 90 percent of the world trade is transported by the international shipping industry. The huge volumes of goods to be exported and imported would be impossible without it. Trade across the oceans benefits customers across the globe, owing to the competitive freight rates offered and the high efficiencies exhibited. Further, economic liberalization bodes well for the industry as a whole.

The shipping industry serves as a catalyst for economic development and offers a cheaper mode of transportation to access larger markets. Cargo changes hands via 50,000 merchant ships criss-crossing on international waters. The world fleet is registered in 150 countries and the industry employs a huge manpower of a million people serving in various capacities.

It can be said that shipping is eco-friendly as it is the least dangerous means of transport compared to land-based transport and industries, as the marine pollution caused by shipping is the least impacting on the environment. Statistics reveal that there has actually been a significant reduction in marine pollution over the past 15 years due to fewer oil spills, while the increase in seaborne world trade has been phenomenal.

Based on the total material riding on the high seas, the global shipping industry is classified into wet bulk (goods like crude and petroleum products), dry bulk (like iron ore and coal) and liners or containers.

The Shipping Industry in India

Shipping encompasses ship repair, ship building, offshore engineering, yacht manufacture, and river and coastal shipping.

The Indian shipping industry is massive considering its fleet of more than 615 ships with a total capacity of 6.65 million tons Gross Registered Tonnage, or GRT. Nearly 260 ships take care of overseas trade while others take care of domestic needs. A remarkable growth in the numbers of tugs, survey vessels, towing vessels and pilot vessels belonging to ports and maritime boards in the recent past shows that the industry is fast developing.

Among the dominant shipping companies, SCI and Great Eastern Shipping operate mixed fleets, while Essar Shipping deals

with energy trade and operates tankers. Another significant contributor in India is Varun Shipping, which operates wet, dry bulk, gas and chemical goods transport vessels.

The Shipping Corporation of India (SCI) recently celebrated its Golden Jubilee. SCI started as a marginal liner shipping company with only 19 vessels in 1961 but is now the largest Indian shipping Company. Its fleet is comprised of bulk carriers, crude oil tankers, product tankers, container vessels, passenger-cum-cargo vessels, phosphoric acid/chemical carriers, LPG/ammonia carriers and offshore supply vessels.

SCI owns and operates around one third of the Indian tonnage servicing both national and international trades. It operates break-bulk services, international container services, liquid/dry bulk services, offshore services and passenger services. SCI ensures uninterrupted supply of crude oil to the country. It also specializes in transportation of LNG, or Liquid Nitrogen Gas, which is an all important fuel required by power plants and chemical/petrochemical industries.

The chief factors which keep shipping companies like SCI on the growth path in India are the Indian government's liberalization and globalization policies, along with the availability of a modern and new technically advanced fleet of vessels and well-qualified personnel to man the ships.

The shipping market is cyclical in nature and freight rates are volatile. The earnings and freight rates depend on the demand and supply scenarios existing at that time in the world markets. Increase in demand is a function of trade growth and the geographical balance of trade. Increase in supply is a function of new ship building orders and scraping of existing tonnage.

The shipping industry will witness a boom when there is an addition of shipping capacity and an increase in world trade. But the capital-intensive industry requires huge cash flows for funding operations and procurement. Also imperative is the investment in human resources, as there is a critical need for expertise and technical knowledge in handling all matters at sea.

Indian Shipping Industry – Challenges and Opportunities

The shipping sector in India shapes India's economy to a large extent. The Indian shipping sector is growing in leaps and bounds and metamorphosing from a traditional way of business to attract lucrative business opportunities.

Almost 90 percent of the country's trade by volume takes place by sea in India, which



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owns the largest merchant shipping fleet among developing nations. The Indian shipping industry carries national and international cargoes, besides being involved in ship building, ship repairing, offering light-house facilities, freight forwarding, and so on.

Modernization of the shipping industry was a first step taken to deal with fast globalization and liberalization. Infrastructural development is trying to beat competition from foreign companies. Crude petroleum products are carried on the high seas in huge volumes by Indian ships, and deregulation in the oil sector has helped crude oil carriers to operate with fixed freight rates irrespective of the market condition.

However, there are remaining opportunities galore as liquefied natural gas (LNG) has to be imported to feed power and fertilizer projects in India. This business opportunity, valued at several billion dollars, has to be garnered by Indian shipping companies by collaborating with foreign companies as it is too expensive for them to handle it alone. The cost of shipping LNG is US\$200mn for just one ship.

The state-owned Shipping Corporation of India (SCI) has joined hands with Mitsui Osaka Shosen Kaisha (OSK), a consortium in Japan, to build LNG vessels for India.

Impediments to fast growth and loss of high value business in the Indian shipping sector are port congestion and lack of depth in channels (as was seen at Kolkata Port Trust's Haldia dock).

As Indian refineries have stepped up production, petroleum imports have reduced, in turn reducing transportation. Also the laying of pipeline networks on land across borders is expected to affect crude oil transport by ship adversely.

Shipping Management

With the growing complexity of supply chains which span the globe, it is imperative for companies to keep in step with changing business environments with increased flexible distribution operations, tighter inventory control and faster, more efficient processing. This needs an effective process execution system. Software companies like INTTRA offer tools that help plan, process and manage shipments for ensur-

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Thailand and China Agree on a US\$70.6m Tablet Deal

BY PRIYANKA SHARMA

The Pheu Thai party of Thailand announced a “one student, one tablet” campaign policy during the country’s general elections last July.

Now after winning the election, it is all set to fulfill its promise made during the election campaign, which will lead Thailand’s educational system into the next generation of education. This will be accomplished by boosting educational strategies “based on e-learning and the distribution of electronic books through the internet for the students of various grades.”

The Thai government is all set to mark a memorandum worth 2.2 billion baht (US\$70.6 million) towards a deal with its Chinese counterparts in February of this year, said the Bangkok Post, to procure 900,000 tablet devices. High quality and functional tablets will be imported to Thailand to be used by school children to bolster their learning process.

According to sources in the Thailand government, the Foreign Affairs Ministry had put forward a proposition to the Chinese

government “to select one supplier of the Tablet device with requirements such as a seven inch screen with Wi-Fi enabled and storage capacity of 8–16 gigabytes. In choosing a tablet producer, the main yardstick under consideration was the capacity to produce a quality tablet from an internationally reputed brand with after-sale quality service for two years.”

The Bangkok post further reported news from the Office of the Basic Education Commission, in that three Chinese manufacturing companies – ZTE, Huawei and Lenovo – have been short-listed from an initial 17 applicants. At the time of distribution to students, after concessions, the cost of “each tablet will be 2,340 baht (US\$75) which is lower than the original target price of 3,400 baht (US\$109),” the report said.



A total of 900,000 tablet devices for the forthcoming academic year are to be purchased by the Thai government, of which 800,000 are to be allocated to primary school students, with the remaining 100,000 to be distributed to higher grade students (Prathom 4). Apart from issuing the device, the government is taking all necessary measures to make this system a significant achievement.

The Basic Education Commission (OBEC) has designed the software for interactive teaching, with the e-content using animations for describing the content of the five

subjects such as maths, science, Thai, English and social studies to be installed in each tablet.

According to officials, the Thailand government, on signing the memo of the deal with the Chinese government, will receive at least 1000 prototype Tablet devices for testing purposes, prior to the supply of the whole quantity. The additional budget as required for buying the tablets would be reimbursed from the government’s fiscal budget apart from the approved amount of US\$62 million. All the maintenance and service costs will be borne by the government.

As Wi-Fi facilities are obligatory for tablets to run on, the Education Ministry, following discussions with the Ministry of Information and Communication Technology, will install Wi-Fi for 34,000 schools. The issuing of tablet devices to the school children is an enriching platform, which upgrades the current education system, and thus children will be able to grasp concepts better through audio visual effects with easy access to more detailed contents. To ensure safe and secure use of the tablets, the government plans to restrict tablet use only to schools and will not allow students to bring them home.

The Thai government’s pro-educational initiative will lay the foundation to further advanced education systems in the country’s future.  

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to attract as many as 100,000 delegates to future international conventions by 2015, which will be a huge increase compared to 59,000 in 2009. The conducting of international business events is expected to impact the economic gain tremendously, according to MyCEB sources.

Taiwan

A new comer as a MICE destination, Taiwan making its presence felt just now when the market is really heating up in the Asia-Pacific region. The Taipei World Trade Center Nangang International Exhibition Hall (TWTC Nangang), opened in 2008, is a step taken in the right direction.

The strategic location of Taiwan as a hub in the East Asian and Pacific regions, with its easy airline accessibility to major cities in the Asia-Pacific region, makes it an excellent MICE destination. The launch of the Taiwan High Speed Rail in 2007 has made inter-city travel between the northern capital of Taipei and the southern city of Kaohsiung more comfortable.

The MICE scene in Taiwan has been put on the fast track by TAITRA, TEMA, Chan Chao Exhibition Hall, and New Era International Inc., which specialize in organizing professional international exhibitions. ACE Forum, Wes Expo Co., and Kaigo are active international exhibition agents there. The United Daily News and Trans Electric Co. take care of domestic-sales exhibitions. Chan Chao also conducts digital exhibitions via the Internet. TAITRA is equipped to hold

20-plus international exhibitions annually.

To develop the industry further, TAITRA collaborated with KINTEX, an exhibition center and a joint public and private venture in Korea, a few years ago. KINTEX increased its exhibition space in Seoul and internationalized the Korean MICE industry.

MICE is based on a service model which also helps develop other associated industries. Apart from the development of exhibition and conference venues, peripheral industries also gain, such as public relations consulting companies, translation firms, decoration, utilities, transportation, travel agency industries, and the hospitality sector. Local employment opportunities are on the increase owing to this sunshine industry.

Taiwan’s location, the availability of high-grade human resources, its well developed information and communications industries and electronic component production, semiconductor, conventional machinery, textile industries and local tourism resources serve as favorable conditions for foreign investment to enhance the international MICE industry in Taiwan.

Middle East

The MICE industry has been growing in leaps and bounds and has not been affected by recent political disturbances in this area of the world. This fact was highlighted by the delegates who participated in the Gulf Incentive, Business Travel and Meetings Exhibition (GIBTM) held at the Abu Dhabi National Exhibition Centre in March 2011.

Political stability and increased aware-

ness were counted as reasons behind the region’s success as a MICE destination. GIBTM serves as a platform to network, exchange ideas and share knowledge. The organization strives to enhance the MICE industry further here.

In the Middle East, global business tourism is a major industry. The Abu Dhabi Tourism Authority, or ADTA, strives to bring new MICE business to Abu Dhabi to follow the government’s 2030 economic vision. ADTA has chalked a 10-year plan to put Abu Dhabi among the world’s top 50 MICE destinations.

The other countries in the Middle East region are not to be left behind. In spite of the unrest in Egypt, the Egypt Tourism Authority has implemented ways to improve tourism in the country. To make up for the losses that the country witnessed during recent years, the government has invested about US\$5mn dollars to spruce up advertising, as well as offering incentives for charter flights from any destination to Sharm el Sheikh, Hurghada and Luxor.

Familiarization trips and awareness programs are also being organized for the media to boost Egypt’s positive image as a suitable tourist and MICE venue. Although the MICE industry is still in the infant stage here, more training and education initiatives have been launched to leverage this sector.

One of the smaller countries in this region, Bahrain is also making strides head on into this industry’s future by investing

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Andy Lopata

Author & Strategist in Business Networking

By Victor Fic

Andy Lopata, a London native, was educated at The University of Birmingham. The Financial Times calls this London-based author (www.lopatata.co.uk) one of Europe's leading business networking strategists. The co-author of two books on networking, Andy's third title is, *Recommended: How to Sell Through Networking and Referrals*. He is a Fellow of the Professional Speaking Association of the UK and a blogger for The Huffington Post (www.huffingtonpost.co.uk/andy-lopatata). Andy gives this exclusive interview about the under-used tactic of referrals to drum up business to Victor Fic, our special correspondent for economics and politics.

Andy, explain why you believe that businesspeople have an ineffective approach to referrals and how this committed you to encouraging them.

For eight years, I was managing director of a national business network in the UK. Its members, predominantly small businesses, primarily aimed to generate referrals for each other. Yet day after day, I witnessed companies failing to think about why they existed or ask for referrals in a way that would actually generate them. In various talks that I gave, I asked business owners what their most effective source of new business was. Time and again, they answered referrals, recommendations and "word of mouth." But when I asked what they did to generate such activity, I saw blank looks. Recommendation and referral are vital for business growth, yet we put more time, money and effort into other routes to market, such as cold calling, PR and advertising. I felt that it was time for a change. We need to build teams of "cham-

pions," meaning people who will seek out opportunities to refer us.

Cite examples of how referrals can work.

Following eight years running the national referrals-focused business network, and developing all of the training for our members, I spent much of the last four years working with a range of businesses, of all sizes, to develop their own referrals strategy. I worked with a team of wealth managers from a global investment bank who exceeded their annual target by 50 percent after implementing my ideas. Also, I saw partners at a law firm pick up the conversation with former 'champions,' meaning people who had previously referred them but then drifted away.

Are referrals, leads and recommendations similar?

The key difference is that someone to whom you are referred recognizes that he may need your help and he is expecting your call. A lead is a name and number of

Many businesses automatically assume that you should pay people to refer you, but in my experience financial reward does not motivate most people. People will refer you because they trust and like you...

someone who may be a prospective client, but he knows nothing about you. A recommendation means someone knows about you and how you might help him, but you either don't know that he is interested or you don't have permission to contact him. The best type of business introduction is someone who is expecting your call and interested in doing business.

Why can they help a business?

People are far more comfortable buying products or services after a trusted contact recommends them. Having a strategy to encourage people to make such recommendations or referrals is vital for any business. It is so important to be proactive when looking to generate new customers and you want the best possible new leads – and that means referrals. Referrals are easier to convert into business than any other source of new lead. Customers coming through referral are more likely to be loyal when the opportunity comes to buy again and they, in turn, are more likely to refer others in the future.

What mistakes do businesses make when implementing a referrals strategy?

Most businesses don't have a strategy at all, and where they do recognize the importance of referrals, you will find very little in the way of strategic thinking. Many businesses will simply wait for customers to recommend them, yet we know that more people are willing to spread bad news than good. So that can backfire. Oth-



Andy Lopata with Nobel Peace Prize winner and former President of South Africa, FW de Klerk, before they both spoke at the Academy for Chief Executives Conference near London in May 2009.

er businesses may ask prospects for some names of “other people who may be interested” but this is a poorly-timed and lazy approach that, at best, leads to low quality leads. Neither approach is effective.

How do you inspire people to refer you?

Many businesses automatically assume that you should pay people to refer you, but in my experience financial reward does not motivate most people. People will refer you because they trust and like you, because they are easily able to recognize who you help and when they need your product or service and when they are having the right conversations with the right people. So you need to look at how to develop that trust and understanding, and make it easy for people by asking for the referrals they have the opportunity to make. Look at every potential champion individually and ask yourself what will inspire him. Tailor your approach to his personality, background and your relationship with him. Financial incentives may play a part, but don't make them your first port of call.

Tell us about using LinkedIn as a key part of that strategy.

LinkedIn is a tremendous tool to help ask for referrals, but many people miss this. LinkedIn is based on the theory of “six degrees of separation,” meaning the idea that we are connected to everyone in the world by no more than five steps. In the case of LinkedIn, it tracks three degrees of connection from you. So if I searched for you, it might tell me that I know someone who knows somebody who knows you. You can identify people you'd like to meet, search for them on the site and then find out through it to whom you are connected. If you have the right relationships with your mutual connections, you can then ask to be introduced. You can either use the site for research and then ask for the introduction separately, or ask through the site.

What are the current industry or social trends that relate to referrals?

In today's economic climate, when many companies are carefully examining their marketing spending, more recognize that networking is the most effective and least expensive way of generating new business. People are flattered to be recommended and this is even more true when they are examining every cost. The surge in online social networking has transformed the business scene and emphasized the importance of good networking. LinkedIn in particular has enjoyed substantial growth in membership, but most of its members don't understand how to use it effectively.

Can you offer hard stats that show that referrals work?

In July 2009, a Nielsen Global Online Consumer Survey on what influences people's buying decisions showed how trust in friends' recommendations outweighed any other influencing factor by three to one. The survey found that “peer recommendation” is trusted “completely” or “somewhat” by 9 out of every 10 people



Business networking strategist and author, Andy Lopata.

worldwide. For more information, see <http://blog.nielsen.com/nielsenwire/wp-content/uploads/2009/07/trustinadvertising09.pdf>

Will cold calls and direct marketing disappear?

People are less responsive than ever to cold calls and direct marketing. Targeted ads on social networks, particularly Facebook, have changed our relationship with the people who sell and market to us and, more than ever, we expect sales messages to be directly relevant to us. Referrals from the people who know us best and recognize our needs at that time are the most targeted sales message possible.

Is Facebook a more powerful tool than LinkedIn?

LinkedIn is a more powerful tool for people seeking direct referrals to specified individuals or positions within companies. For that reason, it works best for companies selling business to business, or seeking key joint venture partners or intermediaries. Facebook is probably the stronger network for people targeting consumers at the moment, effectively tapping into the power of word of mouth and recommendation rather than referral.

Why do you suggest that traditional marketing books ignore referrals?

It's not so much that they ignore referrals, but that referral generation is rarely treated with the same import as other routes to market.

The networking advice currently available predominantly focuses on how to build your network, meaning how to work a room for example, rather than leveraging that network and understanding the return on investment from that activity. My book, *Recommended*, takes that understanding of networking's role and converts it into a practical, measurable return.

How is your book specifically better?

It takes the reader on a practical journey through the stages of referrals genera-

tion, leaving them with a process they can implement in their business with ease. It focuses on looking at the sources of your referrals as individuals rather than taking a mass approach, and targeting specific referrals through those people. As a result, the quality of referrals and the value they bring to the business can be higher.


So what are your key tips for any business seeking to implement a referrals strategy?

First, be clear about which referrals you want and the quality of the introduction you seek. Many of the people I talk to cannot tell me who their ideal referral would be. If they don't know, how can their network possibly guess? So get that right first. Then look to your network and understand who can refer you. Not just the obvious people, such as clients and intermediaries, but examine your wider network. Be sure to consider your suppliers, former colleagues, family and friends as possible sources of referrals. Even your competitors, in many industries, may be happy to refer you in the right circumstances. You need to challenge your existing beliefs. Then understand what their inspiration will be to do so and get your message right so that you can make it as easy as possible for them to refer you. Finally, put a strategy into place that allows you to track your activity and, most importantly, the results of your actions. Above all, it's a question of attitude. Be prepared to help and refer others in your network rather than simply expecting them to refer you.

Who is your primary audience?

Referrals are vital for any business where new business generation is important, and beyond. But I particularly focus on owner managed and start up businesses, professional services firms and sales teams focusing on business to business sales where the transaction value is high and each successful referral can really promote success. Start-ups need to grow through word of mouth predominantly as they often lack the finances needed to pursue effective marketing campaigns in other ways. Professional services firms traditionally don't like to advertise and thrive on referrals.

Your book 'And Death Came Third!' has such a strange title for business. What does it mean?

In 1984, a New York Times survey asked people what most frightened them. Death came third! The top two fears in the survey were walking into a room full of strangers and speaking in public. So, in the book, my co-author Peter Roper and I share tips and techniques to help people overcome these fears. In my section, on networking, I focused on how to “work the room” at a networking event from the preparation and strategy through approaching individuals and opening a conversation to following up and developing the relationship. 

India Poised to Redraw Healthcare Service Sector

BY ANURAG AGNIHOTRI

The Union health care minister Ghulam Nabi Azad has announced policy changes in the health care and medical institutions sector, indicating reforms are taking place from grass root levels to primary and urban healthcare systems.

Making the announcement at the Pravasi Bharatiya Divas, which is a government-sponsored annual event during which new government policies benefiting People of Indian Origin are launched, the Minister proposed that the government would soon approve policies that will allow PIOs with overseas medical qualifications to teach as well as to practice in India.

While the announcement was welcomed by Indians and doctors abroad, several media reports have also noted that Indian healthcare professionals are taken aback, given the current low-employment status of qualified doctors in the country. The opinions of such stressed qualified doctors are a sharp contrast, note media reports, to the Ministers view that there was a "lack of skilled manpower in the Indian healthcare system." According to the Minister, the move to employ and deploy health care professionals with overseas-experience would be a strategic move to "encourage capacity building in medical institutions," as the country faced a crisis in quality medical teachers.

First Stage Would be Reforms in Medical Institutions

The government is proposing the new medical institution reforms as a much-needed infrastructural correction to the healthcare system that will encourage building better medical institutions, through Foreign Direct Investment (FDI) and increasing the student-tutor ratio from its present 1:2 to 1:1 for Post Graduate Medical Colleges.

In fact, the Minister quoted the current statistics of qualified and available healthcare professionals – which adds up to more than five hundred thousand qualified practitioners in Indian medicinal systems, while there is a dearth of nearly seven hundred thousand doctors in the allopathic treatment system.

However, medical students, especially post-graduate students, say that the present government policy that permits only three-fourth percentile of students appearing for pre-qualification exams for post graduate studies (that is to say, for every 7,500 students appearing for the premier medical entrance exam conducted by All India Institute of Medical Sciences, only 5,000 students are selected) is the bane of the entire low-sup-

ply of doctors to the Indian health care system. This results in several qualified doctors losing close to two years in preparation and qualifying for the exams and for the unsuccessful doctors repeating the whole process in the following years as well.

Status of Health Care Sector in India

The healthcare service sector in India is constantly under pressure as healthcare professionals there are constantly under public purview and are subject to several challenges both within and outside their profession and service. Several non-progressive policies have proved to be the biggest challenge for the healthcare sector in recent years. Official apathy, leadership bordering on brinkmanship and poor implementation of healthcare in primary and tertiary healthcare categories continue to be the bane of the society. While there are certain categories such as child and women healthcare that have kept pace with most of the proposed programs, there are several other categories, especially with relation to rural population, where health care has remained ineffective.

Despite the muddled scenario, the healthcare industry has been growing by over 12 percent per annum in the past four years. The healthcare system was confined largely to government hospitals until the 1980s, but analysts believe that with a turnaround over the last decade, the medical system of India has encouraged the growth of private and corporate health participation. Today, corporate hospitals, private nursing homes and clinics are the prime drivers in the Indian Medical system. Corporate and private sector hospital facilities with sophisticated and advanced technologies serve society better as there has been an increase in Indian health issues due to changes in lifestyles and environmental structures. A surge of private healthcare system, analysts report, is expected to touch billions of dollars in the years to come, as there is to be a major progression in the aspects of technology and service. In the year 2005, the healthcare industry had generated a revenue of nearly \$US30 billion, or, explicitly, 5 percent of the Gross Domestic Product.

FDI in Healthcare Institutions 2012

A Times of India news report notes that the Indian government, in order to aid the healthcare sector, has shaped the new medical institutions policy that ensures 100 percent automatic FDI clearance and provides infrastructure support to the setting-up of hospitals as well as low tariffs on medical equipment. The Union Minister for Health's announcement at the Pravasi Bharatiya Divas, which stated tax free holidays for hospitals in rural areas for five years, was well accepted, as it will bring about greater quality healthcare availability at the grass roots level as well as at competitive prices, the report noted.



Team of Surgeons in India © Mattmcinnis | Dreamstime.com



The Union Minister for Health & Family Welfare, Shri Ghulam Nabi Azad, addressing at the 16th Convocation of National Institute of Mental Health & Neuro Sciences, in Bangalore on January 20, 2012. © pib.gov.in



The Union Minister for Health & Family Welfare, Shri Ghulam Nabi Azad, addressing a Seminar in Pravasi Bharatiya Divas 2012, at Jaipur, in Rajasthan on January 07, 2012. © pib.gov.in

Growth of Medical Tourism

Discussion on various forums and across media-platforms shows a rather divided interest is at the root of the health care system. On the one hand, India's healthcare sector offers the most cost-effective surgical services in comparison to most global medical care systems. The quick and dedicated quality healthcare available in the country has led to a phenomenal development in medical tourism, as India is now renowned globally for its quality service at affordable prices and world class facilities.

On the other hand, there is a noticeable lack of medical professionals to impart advanced and quality service in the nation. Discussions across several media, involving medical students and qualified doctors who are presently unemployed, rue that the government is not addressing their cause and that it is keen on opening up the sector to FDI, while there is yet greater scope for resident and domestic doctors to fill up the requirement. However, the government proposes to call in foreign-qualified post-graduates to teach Indian medical students and to practice at healthcare centers in India, especially in the allopathic domain.

Media reports have stated that, "The government of India has approved generous amount of funds for the progress of the healthcare sector to enrich the medi-

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in meetings, incentives and an exhibition sector. In 2010 the MICE industry contributed US\$184mn to the economy with an expected increase to US\$223mn by 2012. As a major growth factor, the MICE industry is expected to further drive the country's GDP.


Hong Kong

Another contender in the MICE best destination game is using this industry to give a fillip to its tourism sector to garner huge revenues. In recent years a remarkable increase in visitor arrivals has been witnessed, according to the tourism board here. This is due in part to an increase in number of MICE events organized here, making Hong Kong a favorite destination along with Singapore.

This growth follows the trend in the rest of the Asian region where all nations are fast building specialized centers for such huge events. The numbers are phenomenal, as it is not a question of attracting individual travelers or families, but huge groups of people, which makes greater economic sense.

The reasons why some destinations are preferred over others are the presence of excellent business support infrastructure, good airports, perfect accommodation, and other entertainment and recreation options. Hong Kong's proximity to mainland China and the availability of all other features makes it one of the hotter destinations. The Hong Kong government has allotted \$US20mn to promote its MICE industry. Also the Hong Kong Convention and Exhibition Center launched a \$US180bn expansion project to expand the exhibition space in the country.

The MICE industry helps ancillary business sectors to grow and also contributes to Hong Kong's status as an international business and trading hub. The related hotels, event management companies, travel agencies and transportation companies see huge profits every year, which has in turn driven entrepreneurs and investors to set up further MICE-related business enterprises.

The Hong Kong Tourism Board expects more such events in the coming years. 

FACTOIDS:

- The MICE industry is essentially a service industry that also encompasses trade, transportation, finance, and travel.
- Hong Kong is a favorite MICE destination, along with Singapore.
- India has a reputation as a unique conference destination, as it has historical, cultural, architectural, wildlife, culinary, spiritual and therapeutic attractions.

FURTHER READING:

- **Taiwan MICE Industry**
http://investtaiwan.nat.gov.tw/doc/industry/13MICE_Industry_eng.pdf
- **Thailand MICE Industry**
<http://bic.thaiembassy.sg/node/158>

China's Cities See Explosive Growth as Villages Relax Hukou System

BY ANURAG SHUKLA

Agriculture has been the traditional occupation in rural China for centuries, but rapid economic growth in China has prompted millions of people to move from rural green areas to 'concrete jungles' – the cities where employment is more lucrative.


Although the Hukou system is in place, in which individuals are registered according to their birthplace and under residency permit to live there, it is believed to be less disturbed by officials as more cities are allowing farmers for both temporary and permanent work.

This major shift in the working population over the past three decades has led to explosive growth in the size of towns of China, be it Shanghai, Beijing or Guangzhou.

Migrating rural populations have always found employment in these economic dragons as urbanization and Westernization have led to non-traditional job creation in the infrastructure, housing and commercial building sectors, as well as menial household jobs in affluent urban homes.

According to a National Bureau of Statistics report, by the end of 2011, approximately 690 million new urban occupants had arrived, which translated to 51.27 percent of the country's 1.347 billion population, marking a raise of 21 million from the previous year. This has also led to drop in rural population by over 14 million to 656 million.

"This is one of history's most important population shifts," said Aprodicio Laquian, population expert and professor emeritus at the University of British Columbia in Vancouver. He also added that, "It resembles the 19th century Industrial Revolution in Europe, except that in China it's being compacted into only a few decades."

This is a great challenge for China to battle, as agriculture is a very important aspect of the economy and it has to be balanced with modernization and urbanization. 

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ambitions to develop their international angles further. Hyundai uses India as the global source point of all their small cars. Last year it exported 247,000 cars from India – almost double the 2007 figure. Ford is stepping up export of Indian cars to over 50 countries. And Toyota says it plans to export cars to South Africa in March 2012, the first time it will ship Indian-made cars overseas.

As the SUV market continues to expand, this could encourage more carmakers to move their production or assembly to India. Ford recently revealed its plan that it would spend \$US142 million on its plant in the southern Indian city of Chennai to begin manufacture of a new global SUV planned first for the domestic market, and subsequently to be built for export. Mahindra said its new Ssangyong SUVs launched in January 2012 would be assembled in India, avoiding high tariffs. Jaguar Land Rover, owned by Tata Motors, already assembles some of its luxury SUV models at its Indian plants. Carmakers also see SUV models improving customer perception of their entire vehicle range, and even complementing their small-car offerings in increasingly brand-conscious India.

"Entering into the SUV space increases brand image, it makes you a more respected and stronger player here in India," said H.W. Park, chief executive officer of Hyundai India, which recently launched a concept vehicle called the MPV.

In a new study, "India Automotive 2020: The Next Giant from Asia," it was noted that the vast sub-continental market had already

surpassed France, the United Kingdom and Italy to become the sixth-largest automotive market in the world in 2010. More than 2.7 million light vehicles were sold in India in 2010, up from just 700,000 a decade earlier.

The report also projected that India's automotive volume will grow to 11 million units by 2020, positioning the nation of 1.2 billion just behind China, which has projected annual sales of 35 million units in 2020, and the U.S., where light vehicles sales are projected to reach 17.4 million.

This whole momentum in the Indian auto market is believed to have been driven by a more open and market-driven economy, a powerful and less risk-averse work force, and then further added to with more consumer-driven culture and an craze towards small car production.

While India has certainly made significant progress in building its automotive industry, the country still faces various other challenges that could affect it from reaching its future potential. For example, for India to build vehicles of high quality and also quantity, in particular for export, it needs to focus more on improving its components industry as well.

With regard to the standing of the luxury car market, research indicates that it is expected to witness strong growth with a rising number of foreign players planning expansions in India. It is no doubt currently being identified as a big automobile trade mart. Recognizing this, Japanese, European, Korean, French, Italian and American automobile companies are all in the process of

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ASEAN GDP needs to Reflect Biodiversity Value (TEEB)

BY ANURADHA SHUKLA

The first Southeast Asia Regional Policy Dialogue on the Economics of Ecosystems and Biodiversity proved to be the right platform provided by the Asean Centre for Biodiversity (ACB) and the British Foreign and Commonwealth Office for the members of the Ecosystem Services Economics (ESE) to introduce to Asian Governments two key concepts that are critical to their economies when calculating their GDP.

The open-house between government representatives of Indonesia, Singapore, Brunei, Malaysia, the Philippines and ESE members was held in January 2012 at Makati, the Philippines. The dialogue was held to introduce to regional policy-makers the necessity for inclusive GDP (Gross Domestic Product) evaluation by including the ecosystem services, or ESS, since “only 7.3 percent” of the conventional GDP was added, while in reality it was 57 percent of “GDP of the poor.”

Chief of the ESE, Pushpam Kumar, and ACB Executive Director Rodrigo Fuentes, speaking at various points of the dialogue, emphasized that “TEEB [The Economics of Ecosystems and Biodiversity] and PES [Payments for Ecosystem Services]” are two high-impact tools which will give Asian economies the capability “to assess the economic impacts associated with losing natural capital.”

Elaborating further on the topic, Kumar said that, “The productive base of the economy continues to be eroded without

being reported and accounted. Indicators like GDP are distorted and do not reflect the changes in the level of welfare; growth accounting does not incorporate ESS, leading to erroneous sense of gain and/or losses; and, drivers like trade and investment impacting the ecosystems have far reaching impact for society.”

Giving a brief background on the necessity for these two assessment tools, Kumar said that nearly across the participating countries, nearly 540 million people were involved in farming, informal forestry, animal husbandry and fisheries; the growth in GDP impacts the ecosystem and there is degradation in the resources that are available for these traditional livelihoods.

Making an emphatic statement, Kumar said that, “The replacement of that ESS is beyond the capacity of the poor: they would need to spend twice their incomes.”

Taking the dialogue further, Fuentes added that, “We are also reviewing climate change and biodiversity action plans, and identifying approaches to integrate TEEB

The problem with present day GDP accounting fails to account for the loss of values of some aspects of the economy.

[The Economics of Ecosystems and Biodiversity] and PES [payments for ecosystem services] into such plans.”

Explaining the importance of TEEB further, Fuentes continued that, “The TEEB outlines the cost of policy inaction and finds that under a ‘business as usual’ scenario, an average year’s natural capital loss would lead to a loss of ecosystem services worth around US\$2 trillion to \$4.5 trillion over a 50-year period.”

The problem with present day GDP accounting fails to account for the loss of values of some aspects of the economy. Stressing the need for immediate informative decision-making as vital to governments to arrive at actual GDP in the face of ecosystem loss, Fuentes rued that it would lead to “wrong choices and decisions in addressing sustainable development challenges.” Repeatedly stressing the need to incorporate the ecosystem, Fuentes reiterated the need for participants to involve respective governments to adopt the TEEB and TEP.

Leaving the dialogue on a positive note, Fuentes said that local governments have to make the move towards this policy, “At the end of the day, it would have to be the governments who decide if they seriously want to pursue a brighter future for all Asians. For the Philippines, it’s high time, since we’ve been given several wake-up calls, the latest of which was the tragedy in Cagayan de Oro [and Iligan City].” [A-P](#)

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cal services for a better and healthy country. Healthcare is a critical sector as there are countless health concerns faced by the people around the country. A rapid growth of the health care industry has been observed in recent years and there is anticipation that the growth pace will increase by 15 percent per annum this year. The share of the health care sector of India in GDP is likely to surpass the current 1 percent to 2.5 percent.”

Experts and industry analysts point out that, “The centre is also making an allowance for Indian medical practitioners with specialization from the countries like the United States, Britain, Canada, Australia and New Zealand to practice in India.”

These five countries are favorite destinations for Indian origin students to pursue post-graduation degrees. In other words, the students of Indian origin practicing in other countries are to be invited by the Indian government to serve in the medical industry for teaching at the post-graduate students and also to carry out their professions in healthcare sector.

Why the Clarion Call to PIO Doctors?

In India, there are virtually five hundred

thousand qualified medical practitioners and a lack of nearly six hundred thousand doctors in the allopathic domain. The Union Minister, after distinguishing the five countries which are famed for post-graduation studies (see above), was also quoted as saying, “Let me assure you that we are prepared to go an extra mile to adequately liberalize policies and set up a single window within the ministry of health and family welfare to ease the process of your meaningful participation.”

Media reports also noted that, in the minister’s opinion, in consideration of the nearly three hundred thousand medical practitioners working out of the country (concentrated mainly in the United Kingdom health system alone, with around 40,000 individuals), “The Indian Medical professionals are an integral part of the healthcare delivery system the world over and have won laurels for their competence in various countries, including the United States, the UK, Canada, Australia and Gulf countries.”

Media reports on the follow-up seminar on the same topic noted the minister’s brief that mentioned the dearth of medical institutions in India in the private sector and that the government is considering establishing “new medical institutions while

meeting the land requirements with fine infrastructure facility and student professor ratio to be increased to 1:1 from the existing 1:2 in the post-graduate colleges and institutions, brought about by the increase in new medical colleges added to the medical system in the past two years.”

Entrepreneurial Opportunities will Restructure Indian Health Care System

According to news reports, the health minister has also added that, “Riding on the recent successes, India enters the 2012 year with a great hope. The 12th Five Year plan to be launched in 2012 brings health to the center stage and our commitment is to increase expenditure on healthcare to 2.5 percent of our Gross Domestic Product from the current level of 1 percent. We are moving towards universal healthcare for the nation and ensuring that no individual fails to secure adequate medical care because of inability to pay for it.”

Venturing into the healthcare sector in India today is certainly an opportunity for entrepreneurial healthcare professionals and educational institutions keen on making a qualitative difference in medical education in India. [A-P](#)

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ing optimum service, speed, reliability and security.

E-commerce tools help shipping companies in making schedules, booking, giving shipping instructions, making bills of lading, track and trace in-transit containers, and in drawing reports. Shipping management software most often features time saving tools. Electronic connections allow seamless shipment management and communication between shipping partners across the ocean container supply chain. Such software also provides control and visibility over the shipping company's document intensive processes, enabling the company to focus on core competencies more.

Present Scenario

The financial crisis which swept the world in 2009 and 2010 certainly affected the shipping industry, both in the dry bulk and the crude carrier segments. Freight rates declined with reduction in overall demands and even crude tanker rates fell by 15 percent with bulk freight rates dipping lower. However, the dry bulk segment recovered thanks to demand for stockpiling of dry bulk commodities, including food-grains and metals from China. In 2011 the shipping freight rates have shown some improvement but are still being affected by the European crisis.

In Asia the demand concerns are painting a dark picture with the cooling down of the Chinese economy. Combined with supply-side pressures, the industry is bound to suffer. But all is not lost - the increase in India's refining capacity and a boost in global oil exploration activity will be advantageous for offshore shipping lines as demand for their services will increase.

The commissioning of large domestic refining capacities in India and other countries will result in an increase in imports of crude, which will be beneficial to shipping majors. Increase in new ship building deliveries is also expected to give a much-wanted stimulus to the shipping rates. **(A-P)**

FURTHER READING:

- **Environmental Impact of Shipping Industry**
<http://www.marsec.org/shippingfacts/environmental/index.php?SID=49a71f357b2da5ee350638600259423>
- **Indian Shipping Industry**
<http://www.shipindia.com/>
- **Shipping Management**
<http://www.intra.com/solutions/business-need/shipping-management>

FACTOIDS:

- The Shipping Corporation of India (SCI) recently celebrated its Golden Jubilee. It started as a marginal liner shipping Company with only 19 vessels in 1961 but is now the largest Indian shipping company.
- The factors which keep shipping companies like SCI on the growth path in India are the Indian government's liberalization and globalization policies besides the availability of a modern and new technically advanced fleet of vessels and well qualified personnel to man the ships.

Macau Registers 42 Percent Rise in Gambling Revenue in 2011

BY CHERRY HU

Like Hong Kong, Macau, the Portuguese autonomous region of China, is one of the few parts of the Socialist Republic to enjoy comparatively liberal laws and lesser restrictions.

Its history as a gambling city-port persists to this day, as the city hosts some of the best casinos on this side of the globe. This has led to a steady stream of visiting tourists, both foreigners as well as people from mainland China.

Despite the government's increasing efforts to slow down the growth of the gambling industry, Macau's revenues from casinos continue to grow beyond expectations and even outstrip revenues earned at Las Vegas, America's exotic and exclusive gambling strips, by over five times.

Analyst such as Cameron McKnight, from Wells Fargo, predict that Macau's stature as the world's largest casino strip will continue into 2012 as well, and is likely to grow annually at a steady 11 percent. According to Macau's Gaming Inspection and Coordination Bureau, the gambling revenue for the year 2010 was \$US2.2 billion while that in December 2011 was \$US3 billion, indicating a clear rise by



25 percent. The overall gambling revenue for the year 2011 reached \$US34 billion in 2011, thereby indicating a yearly increase of 42 percent.

Although the Chinese government is pulling in the reins and local governing bodies are stricter with gambling laws, the unique blend of an exotic location combined with professional gambling industry continues to drive Macau's revenues. With an annual revenue increase predicted at 11 percent, the city-port will continue to be a very important destination for gambling fans and tourists looking for a unique oriental experience. **(A-P)**

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setting either their manufacturing base in India or have joined hands with Indian automotive firms to launch new products in the Indian market. Companies like Toyota, Renault, Nissan, Fiat, Kawasaki, Honda, and Cummins are examples of industry forces who have joined this list.

Concurrently, Indian companies are also trying to acquire foreign automobile companies to strengthen their presence in the global market. Recently there was the acquisition of Jaguar-Land Rover by Tata Motors and Mahindra & Mahindra's acquisition of three Italian companies - G R Grafica Ricerca, Metalcastello and Engines Engineering.

Currently, in India, the southern cluster near Chennai is reportedly the biggest manufacturing region with 35 percent of the revenue share. Chennai is often referred to as the "Detroit of India", as the operations of Ford, Hyundai, Renault and Nissan are headquartered in the city, and BMW has its assembly plant on the outskirts. Chennai accounts for 60 percent of the country's automotive exports. Haryana in North accounts for 32 percent, which includes Gurgaon and Manesar as the prime hub where the country's largest car

manufacturer, Maruti Suzuki, is based. The Chakan corridor near Pune, Maharashtra in the west takes represents 33 percent of the manufacturing market. Companies like General Motors, Volkswagen, Skoda, Mahindra and Mahindra, Tata Motors, Mercedes Benz, Land Rover, Fiat and Force Motors have their assembly plants in these areas.

Aurangabad is yet another area where companies like Audi, Skoda and Volkswagen have their Indian manufacturing base. In Gujarat, General Motors has its manufacturing facility in Halol and Tata Nano at Sanand. Ford, Maruti Suzuki and Peugeot-Citroen plants are also set to come up in Gujarat. Kolkatta is yet another noteworthy area in the eastern part with its Hindustan Motors. Honda has its unit in Noida, NCR of Delhi and Toyota has its automotive manufacturing unit in Bangalore.

Car lovers across the country are hoping to see increasingly better times in their near future. Many world-class car manufacturers are targeting India as the hottest destination. This has magnified a range of options for car loving people in India. India definitely has a good chance to excel and reach the top of this industry in the years to come. **(A-P)**

Diamonds – A Dazzling Profitable Industry

BY SHAMILA JANAKIRAMAN

Occurring naturally, diamonds have been sought after for their use in jewelry, in addition to their usefulness in industrial applications, owing to their molecular properties. The jewel in the crown, a girl's best friend, a diamond is always forever.

The diamond industry employs over ten million people across the globe, with a total production standing at more than \$US13bn worth of rough diamonds per year. They are in great demand as they are rare and beautiful. About 30 percent of all mined diamonds enter the jewelry market where they are cut and polished and set or embedded in jewelry of all fashions. The remaining 70 percent go for industrial applications which include cutting and drilling.

Diamonds started forming inside the earth several billion years ago due to extreme heat and pressure. This environment forces the carbon atoms making up diamonds to uniquely bond in pyramids, resulting in a strong solid structure which can serve industrial applications.

The diamond is the hardest naturally occurring material and it conducts heat effectively, which expands negligibly when subjected to high temperatures. It is resistant to most acids and alkalis.

The Diamond Pipeline

The diamond jewelry supply chain, called the diamond pipeline, comprises exploration, the mining process, sorting, cutting, polishing and making of jewelry until it reaches the consumers.

Gem quality diamonds are sent to diamond cutting and trading centers in Antwerp, Mumbai, Tel Aviv, New York, China, Thailand or Johannesburg. Experts in diamond cutting and polishing, known as 'diamantaires', cut rough diamonds into various shapes like round, oval, pear shape, heart shape, etc. They are polished and classified based on the 4 Cs – cut, colour, clarity and carat weight.

The diamonds are then sent to wholesalers or jewelry manufacturers in 24 registered exchanges or bourses across the globe. The final stage of the diamond pipeline is when diamond jewelry is sold by retailers to the consumer. The USA represents the largest market, forming 50 percent, followed by Japan (15 percent), Italy (5 percent), India (3 percent), China (2 percent), the Gulf (2 percent) and other countries (23 percent). Diamonds form an exclusive category of luxury goods and symbolize emotions such as affection, with many cultures considering them as the ultimate in jewelry.



Diamonds in different colors and shapes.

© Vaskoni | Dreamstime.com

The Australian Diamond Industry

Australia is known for the Argyle diamonds it produces. These diamonds are obtained from the Kimberly region in North Western Australia and are remarkable for their exotic colors and brilliance.

The Argyle Diamond pipe was located after several attempts and studies by geologists in 1979. The mine is the largest natural diamond resource in the world.

The Argyle mine yields a third of the world's annual supply of diamonds, which are comprised of 45 percent near gem quality, and 50 percent industrial quality diamonds. The gem quality diamonds include rare and highly valued pink diamonds, along with the brilliant champagne and rich cognac diamonds.

The 45 hectare Argyle diamond mine and the alluvial deposits in adjacent Smoke and Limestone Creeks yield the pink diamonds. The host rock for them is lamproite rock rather than the regular diamond hosting kimberlite rock.

The mine is also known for the high technology it uses. After removing the diamond ore by blasting, it is processed and screened and separated by gravity separation techniques. X-ray sorting is employed to finally recover the diamonds as it fluoresces under X-rays.

Argyle diamonds fall into three main categories: pink, champagne, and white diamonds. The 4C's guide to quality and value applies to colored diamonds also. However, these are graded for their intensity of color, not lack of it.

Argyle diamonds are harder than other diamonds due to the complex atomic structure, which also gives the beautiful colors. About 70 percent of Argyle diamonds fluoresce blue in ultra-violet light, showing off dazzling visual blue arrays.

Sorting is done using a series of mechani-

cal sieves and then the smaller stones are separated based on color and shape using hi-tech equipment. But final valuation is done by experts who are still preferred over any advanced machine, and who consider the clarity, size, shape and color of the diamonds.

Polishing of the stones is done in Perth, where both traditional methods and modern equipment are employed to convert the rough stones to sparkling gems. Laser devices, automatic bruiting and computerized polishing devices are used. Then the diamonds hit markets in Antwerp in Belgium and Mumbai in India.

Perth, the Western Australian capital city, serves as the centre for sorting, cutting and polishing, as well as the marketing centre for the Argyle diamonds.

Indian Diamond Industry

India was home to many diamond mines centuries back but has none now. It gave the world the most famous of all diamonds for its size, brilliance and beauty, the Kohinoor. Although the mines have dried up, the art of diamond cutting and jewelry fashioning is at its peak in India, mainly concentrated in Surat in Gujarat state.

India is the biggest diamond cutting center for small roughs for jewels, which would have otherwise gone for industrial use. The Indian diamond trade comprises more than \$US4bn dollars in exports every year. The diamond trade is controlled by some companies and families belonging to Palanpur in Gujarat.

According to reliable sources, 8 out of 10 diamonds in the market are cut and polished in Surat. This industry grosses \$US10bn in annual exports for India. The rough diamonds come to Surat as rough crystals retrieved from mines in South Africa and other African mines. From Surat they again set sail as smooth gems to Antwerp in Belgium, the seat of the international diamond trade under the control of Hasidic Jews and Jains from Gujarat.

Further giving a boost to the diamond trade in Surat, the Indian Diamond Institute (IDI) is opening a state-of-the art diamond and jewelry training institute called City Centre in Vesu in 2011.

The institute has been built at a cost of \$US130mn and is being funded by the Indian central government under the ASIDE scheme. Equipped to train students in jewelry designing and manufacturing, the institute will leverage digital learning facilities.

The course content designed to churn out artisans skilled in diamond grading, computerized diamond planning, jewelry casting and manufacturing, jewelry model making, gold assaying and refining, advanced jewelry designing, jewelry model making, jewelry business management, etc.

The global economic downturn in 2008 had affected the diamond industry badly, and Japan's polished diamond import market had just started to recover with imports reaching \$US72mn in January 2011, an in-

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Cambodia Divided over Medicines – Traditional over Modern?

BY KEVIN LIU

There has been a lot of progress in the health-care sector in terms of advanced medicines and technology, but for Cambodians there remains a dilemma – to approach traditional practitioners or modern professional doctors.

One of the main reasons for this dilemma is that the younger generation is more inclined towards the modern medicines while the older generations still have faith in traditional ways of curing.



Royal Palace, Cambodia © Camille Tsang | Dreamstime.com

The belief amongst older Cambodians is that everything in this world has a spirit and it is their ancestors who are protecting them from the afterlife. Hence, if these spirits are angered by doing something wrong, then people are punished and this

could include some form of sickness or ailment. Traditionally, when a person falls sick in Cambodia, the first visit is to the traditional doctor. Only when there appears to be no hope do people turn to professional medical care.

Kim Sunly, working as a surgeon at Phreak Kosamak Hospital, says that, “People spend too much time with traditional doctors. When they finally switch to modern medicine the disease has gotten a lot more serious.”

In fact, Sunly admits that, “Sometimes we aren’t able to cure them. People are not gods, but traditional doctors act as if though they can cure every type of disease.”

He further cautions that, “Someone who recovers after seeing a traditional practitioner hasn’t benefited from effective treatment, but has recovered because his or her body was able to fight the disease naturally.” [A-P](#)

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crease of 44 percent compared to January 2010.

Sparkle 2011, an event which took place in Surat, highlighted current industry problems due to rough diamond shortages, their high costs, recession effects, shortage of skilled labor and so on. Plans were drawn up to conduct short term upgrading courses to provide necessary skills for cutting and polishing the gems.

Training is also provided in diamond grading to employees in association with the Gemological Institute of America. The state government of Gujarat supports the efforts of the Surat Diamond Association, Surat Municipal Corporation (SMC) and Gems and Jewellery Export Promotion Council in tiding over the difficulties faced by the industry.

Thailand Diamond Business

Thailand specializes in producing exquisite diamond jewelry. The Thai diamond market abounds in oval cut diamonds, brilliant cut diamonds, princess cut diamonds, emerald cut diamonds and marquise cut diamonds. Buyers can find diamonds in varied colors such as yellow, pink, green, blue, red, black and white. The market here is very active, with trade worth several million dollars taking place daily.

The industry used to employ some 10,000 people before recession woes set in. Now the numbers have reduced considerably. Thailand imports rough diamonds mostly from South Africa which are then cut and processed and exported as jewelry. Diamond exports are lesser in value compared to imports as Thailand uses rough stones for its own industrial use.

Big and small jewelry factories in Thailand employ specialist designers. The manufacturing centers include small jewelry workshops to large factories where men and women assemble mid to high level diamond jewelry pieces.

According to the Thai Gem and Jewellery

Traders Association, overall jewelry exports may reach their highest levels in five years. The annual export value stood at around \$US10bn in 2010 which is expected to increase further, overriding exports of computers and automobiles. This burgeoning trade includes jewelry made with diamonds, rubies and sapphires of various hues.

China and India lap up 30 percent of the total export market, the United States at 20 percent, followed by the Latin American countries. Thailand is famous for the high quality of diamonds it uses sourced from abroad and the unique sensational designs that skilled artisans create.

To showcase the indigenous designs and prowess in this field, gems and jewelry fairs are organized by concerned trade associations which attract a lot of foreign presence. The exquisite collections help jewelers garner huge export orders, thereby taking the Thai jewelry industry to new heights.

Hi-Tech in Diamond Jewelry Making

Apart from the hi-tech equipment used in the drilling of mines, retrieving of diamonds, X-ray sorting techniques and other polishing techniques, there are also complete manufacturing ERP solutions. DiaSoft is an inventory tracking and decision support system which computerizes the entire tracking process.

The Oracle 8i platform serves as an integrated diamond manufacturing management solution developed by industry veterans. The user interfaces are designed to be simple and the reporting process is flexible. The entire manufacturing management is greatly simplified by DiaSoft. However the product is highly complicated, incorporating all permutations, combinations and possibilities which are essential to cater to the needs of diamond manufacturers. It is truly a “digital nervous system” according to DiaSoft sources.

The Stock Tracking System uses a bar code-based tracking to capture data, which is then fed into the tracking system. This

not only saves a lot of time and energy but also eliminates data capture errors, thereby enhancing the tracking performance.

The tracking speed is improved by allowing forward-backward tracking of the diamonds. A packet of diamonds in the diamond pipeline can be easily tracked back to its original rough besides retrieving details regarding the entire diamond pipeline route. The software will reveal the name of each handling person, time and date of receipt of the stone, time and date of return of the stone, weight loss in the process, etc. Information is available for each individual diamond as given by the bar code on the packets.

A natural crystalline mineral, diamond is a transparent form of pure carbon denoting strength and purity. It may be the oldest thing many people own, as it was formed 3 billion years ago in the depths of the earth and brought up above by volcanoes.

A few carbon atoms each bonded to four other carbon atoms forming a uniform cubic crystal structure gives rise to diamonds that display unique physical, chemical and optical properties. Coal is also made of carbon atoms but the bonds in a diamond make what it is, “King of gems”. [A-P](#)

FURTHER READINGS:

- **Wikipedia: Diamonds**
<http://en.wikipedia.org/wiki/Diamond>
- **The World Diamond Council**
[http://www.worlddiamondcouncil.org/download/resources/documents/Fact%20Sheet%20\(The%20Diamond%20Industry\).pdf](http://www.worlddiamondcouncil.org/download/resources/documents/Fact%20Sheet%20(The%20Diamond%20Industry).pdf)

FACTOIDS:

- It may be the oldest thing many people own, as it was formed 3 billion years ago in the depths of the earth
- According to reliable sources 8 out of 10 diamonds in the market are cut and polished in Surat. This industry grosses \$US10bn in annual exports for India.

Envisioning Peace and Prosperity in Northeast Asia

The Universal Peace Foundation (UPF), an NGO in special Consultative Status with the Economic and Social Council of the United Nations, organized an International Leadership Conference (ILC) on the theme – Interfaith Harmony & Global Cooperation, in Seoul, Korea, which was held from January 21st to the 25th of this year.

Dr. Kook Jin Moon, Chairman, Tongil Foundation, Korea, was one of a number of very high level speakers who addressed 200 delegates from more than 70 nations. The two core themes of the conference were “interfaith harmony” and “peace and security in East Asia.”

Below are some of the excerpts taken from the conversation held with Kook Jin Moon by Dr. Ronki Ram, ICCR Chair Professor of Contemporary India Studies at the Leiden University Institute for Area Studies & International Institute for Asian Studies, Leiden University, The Netherlands, who was recently in Seoul to participate in the above mentioned ILC.

Your father established the UPF as a global peace organization. What do you believe are the main postulates of the world peace vision of the UPF?

The UPF looks at world peace in a broad manner. It perceives peace as positive, holistic and indivisible. Holistic and positive peace not only transcends a negative view of peace that harps on defending national borders while equipping nations with military prowess, but looks forward to bring peace through peaceful means. Peace at a larger level of the whole world depends on initially creating peace at home rather at the very individual level.

The first step towards that direction in the concerted efforts of UPF is building peace through nurturing peaceful values at the family level. For the UPF, family is not an isolated inward-looking unit. In fact, it looks at family in a much broader sense that brings together the entire humanity under one God and transforms it in to a single universal unit capable of living together peacefully with a committed sense of working in harmony with one another for the benefit of all humanity.

For a durable peace to prevail at the world level, one has to follow certain moral codes of conduct. My father and mother Rev. Dr. and Mrs. Sun Myung Moon, the founders of UPF, laid emphasis on the following core values:

We are one human family created by God. The highest achievements of men and women are rooted in spiritual and moral developments. The family is the “school of love and peace”. Peace comes through dialogue and cooperation. Ser-

Speaking on the latter topic, Dr. Moon emphasized the urgent need to properly understand the growing influence of China in the volatile region of Northeast Asia and its implications for the peace in the region as well as the immediate and larger international environment.

He was of the considered opinion that the expanding Chinese influence in the region would have direct bearings on the polity and economy of South Korea.

He cited numerous examples from the Chinese dynastic shifts that brought significant transformations in the domestic milieu of the Korean peninsula. Given the fast expanding pace and influence of Chinese economy the world over, Dr. Moon talked about how it will give rise to a series of emerging challenges for South Korea in particular, and the entire Northeast Asian region in general.



Dr. Kook Jin Moon

vice to others is the foundation of reconciliation.

The UPF believes that interfaith dialogue and cooperation through conferences and forums allow participants to share diverse aspects of their rich sacred scriptures and traditions that benefit all people. The UPF participates each year in the UN’s World Interfaith Harmony Week,

International Day of Families, International Day of Peace, and Women’s day. For the UPF, marriage, parenting, and the family are the foundations of human development and they function as building blocks of universal peace. Peace begins in the hearts of individuals and it gets nurtured by loving and stable families at home before it spreads across the entire globe.

Do you think that morality and peace are synonymous?

Morality and peace go together. Peace as a core value of humanity is deeply rooted in morality. Morality resides in the pure and sacred teachings and traditions of different religions of the world. All religions teach living with peace and love. God is the same in all religions. In other words, different religions are, in fact, several ways to reach God and to establish His kingdom of peace and prosperity on the only known habitable earth planet in the vast cosmos.

The UPF encourages interfaith dialogue among the religions of the world through interfaith conferences and peace forums, where representatives of different religious faiths converge together to share the invaluable teachings of love and peace of their respective sacred texts and traditions.

Democracies represent the will of its citizens and are accountable to the custodians of real sovereignty – the people. There is a worldwide-accepted thesis that democracies seldom fight among themselves. They also, in my view, seek peaceful solutions to the problems which are otherwise tagged to be resolved through violence.



Dr. Kook Jin Moon with Professor Ronik Ram and Dr. Lakhvinder Singh in his office in downtown Seoul.

Interfaith dialogue reminds us of the underlying eternal unity of the entirety of mankind and encourages cooperation, mutual respect and synergetic understanding through the realization of the fact that we are all members of one family under God as taught repeatedly by my father, Rev. Dr. Sun Myung Moon.

In what way does interfaith help bring world peace?

Religion occupies the mind of all of us. We are all believers in one way or another. Each one of us considers his or her religion as the most sacred and full of wisdom to enrich our lives both in this world and the next. But unfortunately our myopic vision about the understanding of the religions of our fellow travelers on this planet has led us astray and often brought us many times face to face with severe disaster and mutual destruction of life and property.

It was out of this sheer misunderstanding that we started considering the other religions as opponents and consequently that has led to religious wars and conflict. The UPF believes in eternal unity of the different religious faiths in the world and firmly believes in highlighting their common message of world peace and each religion's teachings of leading a morally rich life as offspring of one God.

To bring all the religions of the world together under one roof we need to learn the common inherent message and teachings of these varied faiths. UPF has been actively pursuing this pragmatic way of interfaith dialogue for the realization of peace. We firmly believe that interfaith is a key to world peace. We must make sincere efforts to bring together different religions of the world under one roof to eliminate misconceptions and misunderstandings and avoid narrow readings of them.

The coming together of all religions is as important for world peace as the coming together of all nations under the UN. The much talked about clash of civilizations thesis needs to be blunted by spreading the positive message of inherent and eternal unity of all the religions of the world. This

is why we need constant interfaith conferences and forums.

How do you explain the decline of US influence in Northeast Asia and its implications for Asian Security?

The vacuum created by the decline of US influence in Northeast Asia will certainly be filled in by the fast expanding Chinese influence in the region. China has already started building up its strong naval presence here, which, even with a most conservative estimate, can not be simply called just a commercial presence. The fast expanding Chinese influence generates unease in the minds of the people living in the countries in Northeast region. What further aggravates the fear is the non-democratic character of the Chinese state. The enormous military spending by China is the hidden narrative of its fast expansion in the region.

For China to expand further in the larger international environment, the Korean Peninsula is surely in their sights. The Korean peninsula carries tremendous strategic importance in this region of newly flourishing economies. The smoldering embers of WWII and the consequent long spell of the cold war left an indelible mark of fear of being run over by some over ambitious political actor in this volatile region. For the democratic South Korean state to further strengthen its economy peace in the region is an utmost requirement.

In what ways you think that Seoul can meet the expected challenges from the expanding Chinese presence in Northeast Asia?

If Seoul wants peace to prevail in the Northeast Asian region, it needs to strengthen itself militarily. In international relations, after all, what matters is security. And South Korea has to develop its own security to preserve and promote its economic and national interests in the region in particular, and on the larger world canvas in general.

The UPF believes that interfaith dialogue and cooperation through conferences and forums allow participants to share diverse aspects of their rich sacred scriptures and traditions that benefit all people.

Security is a long-term project. One can not construct it overnight when the enemy is already at your doorstep. The people of South Korean society should receive military training and be ready to willingly come forward and join the army at the time of national emergency in the wake of any foreign invasive aggression. They must learn how to handle sophisticated weapons for self-defense. In fact, weapons should be provided to people to meet the crisis if and when it erupts.

You can not mobilize people just at the crucial hour of crisis and start distributing weapons to them. They need to be prepared well in advance to take on the crisis boldly. A militarily strong South Korea would further strengthen democratic forces within and without. For democracies to survive amidst autocratic regimes military prowess is the prerequisite.

Don't you think that the militarization of the South Korean peninsula will go against the very spirit (moral and religious) of your father's peace mission or of the UPF?

I believe in democracy and earnestly believe that the great natural power, i.e., God, is closely watching us. The military build-up in democratic South Korea would not be deployed for the purpose of aggran-

Q&A

dizement and bullying around. The only purpose of building military infrastructure in South Korea would be for the sake of self-defense and ensuring peace

to face any possible onslaught. A country which believes in God and which puts strong emphasis on stable family ties and promotes interfaith dialogue would never be the first in initiating conflict with any other nation. It would deploy its military buildup only for self-defense to guard its national interests and borders and to ensure peace for the welfare of all in the region and beyond.

in the region. If you really want peace, you need to be thoroughly prepared and ready

What could be the implications of building an open defense pact against China and the possible Chinese reactions to it?

The UPF encourages international cooperation and, as needed, the formation of a joint democratic front against autocratic regimes of war. The main purpose of building a defense pact is to help in building up a peaceful environment in the region and an era of peaceful interactions among the states of the Northeast region.

China need not to worry about such democratic and peaceful fronts. As we all live in a globalizing world, the solutions to the problems faced by mankind need inputs that are global in scope as contrasted with the traditional isolated national ones. The more the nations come together in peaceful manner to seek common solutions to their transnational problems, the more effective they will be in tackling them in a win-win situation. The time has passed long ago where we can operate in a zero-sum-game environment. The UPF firmly stands for win-win solutions as against that of the zero-sum-game.

Do you think that an alliance of democracies will facilitate peace in Asia?



Rev. Dr. and Mrs. Sun Myung Moon founder of Universal Peace Federation.

The Universal Peace Federation (UPF)

The Universal Peace Federation (UPF) is an NGO in Special Consultative Status with the Economic and Social Council of the United Nations. UPF is a global association of conscientious individuals and committed organizations dedicated to the noble cause of building a peaceful world, where each individual can fully realize her/his potential in a peaceful way while living together with others in freedom, harmony, and cooperation, with prosperity for all.

UPF works to achieve these goals with a special focus on interfaith dialogue, peace education and service to humanity. UPF brings together the efforts of many individuals and organizations to build a world of universal peace. Centered on universal spiritual principles, UPF programs focus on four core areas: 1) building of strong, healthy families; 2) promoting interfaith harmony and cooperation; 3) building a culture of service, reconciliation and partnership; 4) revitalization of the United Nations.

UPF's many peace initiatives include efforts to establish an interreligious council at the United Nations; regional and national peace councils; peacebuilding initiatives in Middle East, Northeast Asia/South Asia, Africa, and the Americas; the promotion of the Bering Strait Peace Tunnel; and, the World Peace Blessing.

The idea of an Interreligious Council at the UN was first advanced by the UPF Founders, Rev. Dr. and Mrs. Sun Myung Moon, in August 2000. Since then, there has been a steady development of both local and international initiatives to gather support for this idea among governments, religions, faith-based organizations and other NGOs. A number of regional and national interfaith councils have also been created, most recently in Thailand.

The UPF Peace Council of Nepal helped facilitate the meeting of government and Maoist forces to negotiate peace in that country, and the UPF Secretary General

serves in the National Congress. In Sri Lanka, UPF has worked to put an end to violence, sponsoring good governance programs at the parliamentary level, along with other conferences and interfaith youth service programs.

Through its Middle East Peace Initiative (MEPI), UPF is promoting understanding and reconciliation among Jews, Muslims, and Christians in that troubled region, sponsoring fact-finding tours; interreligious dialogues; service projects; and programs in the arts and sports. The Africa Peace Initiative program includes work with African nations to educate a new generation of leaders through character education; interfaith; service; and sports. UPF is also working with the African Union on a project to eliminate disease in Sub-Saharan African nations.

The Northeast Asia Peace Initiative aims at the peaceful reconciliation of the Korean peninsula through people-to-people diplomacy; cultural exchange; service programs; humanitarian relief; and the creation of a Peace Embassy in Pyongyang.

The idea of an Interreligious Council at the UN was first advanced by the UPF Founders, Rev. Dr. and Mrs. Sun Myung

The Tongil Foundation,

The Tongil Foundation, (Founder: Rev. Dr. Sun Myung Moon, officially Foundation to Support the Holy Spirit Association for the Unification of World Christianity) is a nonprofit foundation in Korea whose purpose is to support the work of the Unification Church and its affiliated nonprofit organizations by providing funding support and management consulting services. The Foundation manages many of the assets of the Unification Movement in Korea, including a group of for-profit companies known collectively as the "Tongil Group". These include two re-

Yes, very much so! Democracies represent the will of its citizens and are accountable to the custodians of real sovereignty – the people. There is a worldwide-accepted thesis that democracies seldom fight among themselves. They also, in my view, seek peaceful solutions to the problems which are otherwise tagged to be resolved through violence. Democracies shun violence to begin with. But they never surrender to the regimes of terror and mindless violence because of the fact that violence, once left unchecked, spreads like a contagious disease. We have many examples where democracies fought even offshore to contain the deadly virus of violence and extremism.

Where do you place India in your peace building initiatives in Northeast Asia in particular and the entire Asian continent in general?

India is the largest working democracy in the contemporary world. Moreover, the Republic of Korea and India share many similarities. People of India and South Korea believe in strong family ties, the presence of God everywhere and in interfaith dialogue and communal harmony. The coming together of South Korea and India

The time has passed long ago where we can operate in a zero-sum-game environment. The UPF firmly stands for win-win solutions as against that of the zero-sum-game.

would not only be the coming together of just two democracies, it will be a strong union of two great nations of Asia that not only believe in democracy but also promote strong family ties and faith in a single God.

Where do Japan and Russia (two other major powers in this part of the world) stand in this scheme?

Japan and Russia are our natural allies. In the post-Cold War era, the phenomenon of bipolarity has given way to multi-polarity in the context of power politics. As far as peace in the Northeast region is concerned, the UPF encourages active participation of all such powers that promote better understanding about the politics and economics of this region and are eager to build a stable peace for the benefit of humanity at large. The prevalence of stable peace in the Northeast region will provide a conducive environment for the better understanding of complex relationships between Russia and Japan, which would ultimately make a solid contribution for deepening peace and democracy in this region. (A-P)

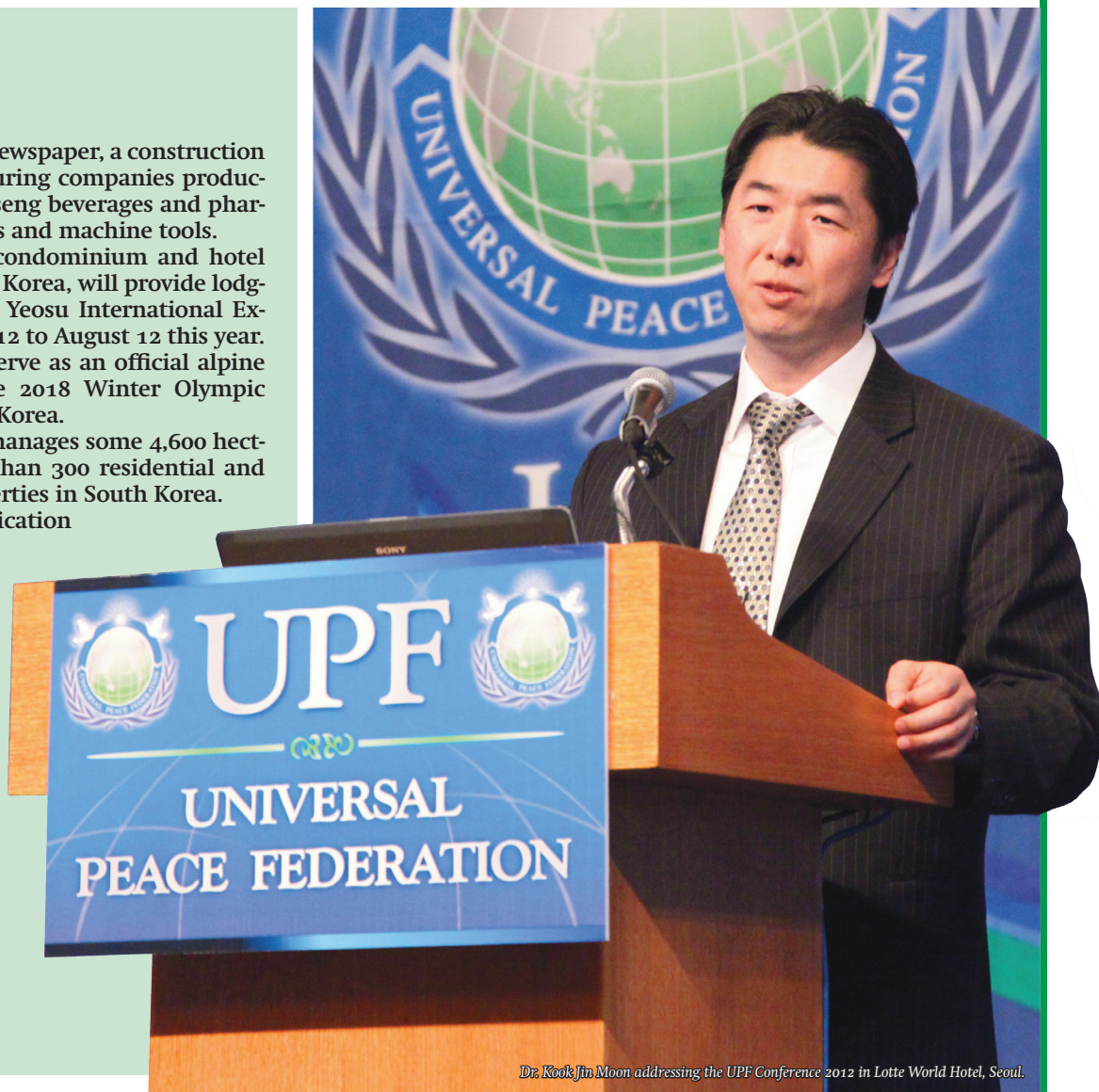
sort companies, a daily newspaper, a construction company and manufacturing companies producing everything from ginseng beverages and pharmaceuticals to auto parts and machine tools.

The Ocean Resort, a condominium and hotel complex in Yeosu, South Korea, will provide lodging facilities during the Yeosu International Exposition 2012 from May 12 to August 12 this year. Yongpyong Resort will serve as an official alpine event venue during the 2018 Winter Olympic Games in Pyeongchang, Korea.

The Foundation also manages some 4,600 hectares of land and more than 300 residential and commercial rental properties in South Korea.

In addition to the Unification Church, Tongil Foundation supports a variety of nonprofit projects, including the Universal Ballet and the Peace Cup international football tournament.

Tongil Foundation is governed by a board of directors. Mr. Kook Jin Moon serves as chairman of this board. (A-P)



Dr. Kook Jin Moon addressing the UPF Conference 2012 in Lotte World Hotel, Seoul.

Third Son Inherits North Korea's Dynasty After His Father's Death

BY DONALD KIRK

It's the season for birthday bashes in North Korea. North Koreans showered superlatives of praise for the late "Dear Leader" Kim Jong-il on what would have been his 70th birthday on February 16 had he survived the heart attack that killed him two months earlier.

On a beautiful day mingling mourning for Kim Jong-il's death and celebration of the anniversary of his birth, crowds swarmed Pyongyang's Kim Il-sung Square, named for his father, the "Great Leader" who ruled for nearly half a century before dying in 1994.

Kim Jong-il's third son and heir, Kim Jong-un, picked by his father as the third-generation leader of the dynasty, proclaimed as "supreme leader" of the army, the state and the Workers' Party, was the star of the holiday. Not since the funeral for Kim Jong-il on a snowy day in late December and then an appearance the next day before tens of thousands in Kim Il-sung Square had the son been visible for so long in public. This time, blessed with sunny skies, Kim Jong-un managed a benevolent smile and salute for the soldiers on parade before leading hundreds of the elite past his father's portrait in the memorial hall where the late leader's body lies under glass.

The observances for Kim Jong-il's 70th year were a dress rehearsal, or preview, of much more elaborate ceremonies, still years away in planning, for the 100th anniversary on April 15 of the birth of Kim Il-sung. The primary aim on that occasion will be to demonstrate North Korea's rise as a "strong and prosperous nation" in breath-taking displays conceived to dramatize the enduring power of a dynasty that has ruled the North since the founder of the dynasty, "Great Leader" Kim Il-sung, a former Soviet army captain, was installed by Russian forces at the end of World War II. The theme for that occasion will be to demonstrate North Korea's rise as a "strong and prosperous nation" in breath-taking formats conceived to dramatize the enduring power of the regime.

In the early planning stages, the assumption always was that Kim Jong-il and Kim Jong-un together would appear before cheering crowds in May Day Stadium, where North Korea every year stages mass Arirang games in which 50,000 people flip flash cards in the stands depicting scenes of glory while another 50,000 enact the same scenes on the playing field below. The displays are expected to focus as much on Kim Jong-un's as yet unproven prowess as on the legacy of his father and grandfather. With Kim Jong-il gone, "North Korea is concentrating on how



North Korea's New leader Kim Jong-un

to legitimize the son's leadership," said Kim Tae-woo, a long-time military analyst who is now president of the Korea Institute of National Unification in Seoul. "He's in the middle of a regency system. Sooner or later, problems will be revealed."

The question is whether Kim Jong-un, the youngest of his father's three sons, not yet 30, will say a few words at his grandfather's birth centennial either while reviewing the massive military parade as it passes before him on Kim Il-sung Square or from a place of honor high above the great show in May Day Stadium. Either venue would be most appropriate for the young man who has thus far uttered no words in public. Like his father, who in more than 17 years in power is known to have spoken just one brief sentence as recorded by North Korean state broadcasting, Kim Jong-un prefers to leave the talking to 86-year-old Kim Yong-nam, titular head of state. At what Pyongyang's Korean Central News Agency called "a national meeting" on the eve of the anniversary of Kim Jong-il's birth, Kim Yong-nam, as chairman of the presidium of the Supreme People's Assembly, hailed the late "Dear Leader" for "leading the most brilliant life of a peerlessly great man" who made his country "a nuclear state."

The allusion to North Korea's nuclear weapons confirmed the pride engendered by the country's success in developing nuclear warheads as well as the enduring nature of the program – and the certainty that nothing will change in the initial phase of Kim Jong-un's leadership. No one believes that North Korea is going to abandon the program in negotiations with the United States or South Korea – or in the six-nation format that also has included China, as host, Japan and Russia. North Korea has conducted two underground nuclear tests, in October 2006 and May 2009, and is assumed to be preparing for a third while developing the mechanisms needed to attach these fearsome weapons of mass destruction to missiles capable of reaching targets as near as Japan – and as far as the U.S. west coast. The nuclear program will go on regardless of the transition from father to son.

But who's really in charge? More than ever, that question seems critical. Kim Jong-un was reported on the eve of the 70th an-

niversary ceremonies to have promoted 23 generals. Was he aware of the promotion order before the announcement – and who's calling the shots? Nowadays, it's assumed that Kim Jong-un is acting at the behest of the generals – and Jang Song-taek, the "uncle," married to Kim Jong-il's younger sister, who also holds the rank of general but rose to power as a skillful party hack with a direct line to his brother-in-law. It seems unlikely that the top military people would really want Uncle Jang telling them what to do.

Surrounded by friends, relatives and advisers like these, has Kim Jong-un been told to keep his mouth shut? Or is he just showing the instincts of his father? The 70th anniversary of his father's birth offered no clues. Instead, the whole occasion seemed to cover every imaginable form of tribute for Kim Jong-il, who suffered a stroke in August 2008 but recovered enough to go on frequent visits to military units, factories and farms in the last three years of his life, often in the company of his chosen son. Bronze statues of both Kim Jong-il and Kim Il-sung on horseback were unveiled, figure skaters and synchronized swimmers performed in his memory, his name was gouged out of the rock on a mountain and commemorative stamps and coins were issued. As if all that weren't enough, the day before came the announcement of Kim Jong-il's posthumous promotion to "generalissimo" – a tribute to his "revolutionary courage" though he's not known to have had military training, much less been exposed to gunfire.

The real point of all the hoopla has been to project the image of Kim Jong-un as a credible leader of a country suffering from endemic hunger and disease after years of economic mismanagement and devastating central planning. Kim Jong-un, since his father's death, has appeared on camera on frequent visits to military units – a campaign to show that he is perpetuating his father's policy of "songun," meaning "military first." Somehow the young man needs to convince everyone he's capable of leading the country despite his inexperience.

Kim Yong-nam indicated the underlying insecurity as he called on "all the party members, servicepersons and people" to "protect Kim Jong-un politically and ideologically with their lives and get united around him." As if to fend off criticism, Kim Yong-nam upheld "the spirit of single-minded unity to invariably defend the center of the unity and the center of the leadership no matter how much water may flow under the bridge." Did the reference to water flowing "under the bridge" in the official Korean Central News Agency article suggest dissent boiling beneath the surface – even hostility among jealous family members?

While Kim Jong-un plays the title role bequeathed to him by his father, showing off his image as the genial if rotund "supreme leader" of just about everything, his older half-brother, Kim Jong-nam, past 40 and even fatter, is left totally out of the picture. In fact, he may be suffering hard times in exile in China for having wondered, in an interview with a writer for Tokyo Shimbun, "how a young successor with some two years (of training as heir) can retain the absolute power" of their father.

North Korea and maybe China, according to a Russian weekly, *Argumenty i Fakty*,

may have borrowed a leaf from the United Nations, which imposed sanctions on the North after its long-range missile test in April 2009 and then its second nuclear test in May 2009. In the case of Kim Jong-nam, according to the paper, North Korea and China have cut off his funding, and he was kicked out of the luxury hotel in which he was living in the gambling enclave of Macau, on China's southeastern coast, after racking up an unpaid bill of \$15,000.

Kim Jong-un, meanwhile, is carrying off the act of heir to the throne to perfection, at least on camera. But what does he sound like, and what does he have to say? All the words of praise for the dynasty founded by "Great Leader" Kim Il-sung, who died in 1994, as well as pleas for total loyalty, flow from the mouths of the same clique who've been running things for years. The difference now is that before Kim Jong-il died of a heart attack in December, this bunch of old men presumably acted on the leader's orders. The apparent goal is to prop up the kid with the same degree of loyalty and respect, but to what degree does the new leader have to yield to the "suggestions" and "advice" of generals who think they know what's best? A recurrent theme, among the most oft-quoted lines in the North Korean media, is, "I would be willing to sacrifice my life" for the new "supreme commander." Nice talk, but how safe is he from those who telling him what to do?

An extraordinary display of the roly-poly Kim Jong-un riding a white horse, while reported by the North Korean media to have recommended a military response to any U.S. attempt to obstruct a missile test, convinced analysts that the young man would enjoy the trappings of power for the foreseeable future. "The messages the NK leadership has tried to project are stability, continuity, and control," said Scott Snyder, senior fellow for Korea Studies at the Council on Foreign Relations. But, he added, "I do not know what is happening under the surface or if these messages reflect reality in Pyongyang" amid efforts "to convince the world of the legitimacy of a third-generation family succession to someone so young."

Doubts about Kim Jong-un's qualifications may explain the way the North Korean media observed his birthday on January 8th of this year. The Workers' Party newspaper Rodong Sinmun published an editorial paean to his prowess but did not report on any birthday celebrations. While a two-day holiday was declared, North Korea has been avoiding confirming Kim Jong-un's exact age, believed to be 28 or 29. Beforehand, there were rumors that his age would be given as 30, putting his birth in line with the 70th and 100th anniversaries of the birth of his father and grandfather. Why not? The answer seems to have been that too many people knew he was not yet 30 – and the topic of his extreme youth would make people all the more aware that he had no qualifications for leading the country.

Kim's oldest brother, Kim Jong-nam, in his comment to Yoji Gomi of Tokyo Shimbun, hinted at the lack of confidence behind the campaign to glorify the new

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Nuclear Security Summit in Seoul

BY ANSHU SHRIVASTAVA

Scheduled to take place in Seoul from March 26 to 27, 2012, the "2012 Seoul Nuclear Security Summit" will discuss issues such as cooperative measures to combat the threat of nuclear terrorism; protection of nuclear materials and related facilities; and prevention of illicit trafficking of nuclear materials.

Around 50 heads of state from countries such as the U.S., China, Russia, Japan, Australia, India, Brazil, Israel, Pakistan, Saudi Arabia, Singapore, South Africa, the European Union, and more, as well as officials from the UN and IAEA, are expected to participate in the discussions.

The Seoul Summit's main objective is to deter terrorists from acquiring and using nuclear materials. The falling of nuclear weapons into the hands of terrorists is a persistent risk, and countries all across the world fear for the safety of their own nuclear materials and facilities. The September 9 2011 terrorist attack on America underscored that the threat of nuclear terrorism is very much real and that the most powerful country's nuclear facilities may also not be 100 percent secure despite all its nuclear policies and security measures.

The 9/11 attack was also a wake-up call for the countries possessing nuclear materials as they realized the need to strengthen their nuclear security and re-define their nuclear policies to prevent nuclear materials from falling into the hands of the terrorist or nuclear facilities coming under terrorist attack.

Additionally, last year's nuclear accident at Fukushima, following the major 9.0 magnitude earthquake and the 15 meter tsunami, raised concerns around the world about nuclear safety. The accident at the nuclear plant was due primarily to nature's fury but many countries fear similar kind of accidents at their nuclear reactors due to sabotage by terrorists.

Hahn Choong-hee, sous-sherpa and spokesman of the preparatory secretariat for the Seoul summit, told the press that the "Fukushima accident highlighted the potential threat of a terrorist attack aimed at sabotaging a nuclear plant's essential systems, such as its power supplies, pumps and cooling processes."

According to an AFP report, he said that

the Fukushima accident would loom large over the March 26-27 Seoul Summit, which will seek to restore confidence in the nuclear industry after the Fukushima disaster in Japan.

Hahn said that threats to the security of nuclear material posed by instability in the Middle East would also be on the summit's agenda, and also ongoing efforts to stop terrorists building a "dirty bomb" with radioactive material.

Today, the threat of terrorism is no longer confined to a particular geographical region and no country can deal with the threat of nuclear terrorism in isolation. The organizers of the summit believe that there is a need to recognize the importance of nuclear security at the summit level and seek cooperation.

The Nuclear Threat Initiative's (NTI) Nuclear Material Security Index notes that there is no global consensus about what steps matter most in achieving nuclear security. Rodrigo V. Alvarez, an international partner of the Fissile Materials Working Group (FMWG), said in a report that the Seoul Nuclear Security Summit in March will be a critical opportunity for states to improve global cooperation on nuclear terrorism prevention.

"Given that international terrorist networks move, communicate, and operate across international borders, all nations need to join together to ensure that there are no gaps in global nuclear security," Alvarez said.

The security of nuclear materials and facilities is seen as a national responsibility. And, most countries believe that it's the duty of each country to adopt a secure policy that strengthens security of nuclear materials and the facilities. There is, however, considerable scope for international cooperation to strengthen nuclear security objectives and standards, according to sum-

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A Naval Commando slithering from a Sea King helicopter, during the Naval Exercise TROPEX-2012, off Vishakhapatnam on February 08, 2012.

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Growing Indian Defense Budget

BY ANURADHA SHUKLA

India's defense budget has shown a substantial increase in the past five years, according to defense experts and analysts.

Following the recent budget announcement by the Defense Minister A. K. Anthony, for the fiscal year 2012, the focus returns to India's growing defense spending. In a recent announcement in the Indian Parliament, the Minister said that India's defense expenditure in the last decade has amounted to US\$98.35 billion.

The growth in allocation of funds towards building defense resources has been in discussion over the past few years and it has become the center of several debates following a study led by the Confederation of Indian Industry (CII) and KPMG, a global auditing firm.

The study reports that in the past four years, the country has spent nearly US\$25 billion on acquiring defense equipment from global sources. The research also notes that the defense ministry will continue to forge new deals through the next couple of years as well, spending nearly US\$41.99 billion.

Defense experts and strategic analysts also endorse the likely hike in Indian defense expenditure over the next ten years and predict that spending will double as India needs to completely replace the nearly 20-year old equipment, commissioning the latest defense systems that include advancing technology.

The spectrum of defense spending would typically include: heavy-lift aircraft, submarines, attack helicopters, 155mm howitzers and warships.

Defense Spending in the Past Decade

India has over the past ten years spent extensively on equipping India's forces with aircraft, warships, arms, and radars from Russia, the US and European countries. These deals have included buying US\$2.1 billion worth of reconnaissance aircraft

from Boeing, the leading US-based aerospace supplier; a whopping US\$4.1 billion worth of medium range missiles from IAI (Israeli Aerospace Industries) and nearly US\$965 million on upgrading the MiG-29 series with Russian Aircraft Corporation. Poseidon P-8I patrol aircraft for the Navy, costing US\$2.1 billion for eight such aircraft, were purchased in 2009, while a further four costing US\$1 billion are being approved and waiting for shipment.

Reasons Why India is Bolstering its Defense Forces

India's defense expenditure has shown a four-fold growth in the past decade, revealing the nation's aspiration to meet certain short-term and long-term goals. The immediate and most compulsive reason is the nearly 70 percent redundancy factor in defense equipment. Across all the three defense forces, equipment has become obsolete, ineffective and does not match the real-time manoeuvrability required to protect the nation's borders high-up in Himalayan altitudes or preserving the coastlines along the Eastern and western coasts.

India's security concerns along Pakistani borders are paramount with regard to India's defense ministry investing in acquiring sophisticated surveillance and deep-penetration equipment to protect and secure India's borders.

Another very important long-term goal that India will satisfy by acquiring a new arsenal array is to build up an impregnable military capability, given the rising growth of China's defense forces in the region and the lining up of its defense forces along India's borders, especially along Tibet.

The third long-term goal for defense spending is Homeland Security. Laxman Behera, a leading name in defense analysis and a research fellow at Indian Defense Strategic Affairs, says that, "Homeland security's budget was US\$4.4 billion last year. Internal security has urgent needs that cannot wait. Overall, we are compelled to modernize forces including the police."

Soon to be Purchased Equipment

Analysts predict that in the next few years, the Defense Minister will go on a

massive upgrading spree, replacing India's decades old, and technologically-defunct equipment in a phased manner, and that defense-related spending will be in the region of close to 2.5 percent of GDP. With the aim of modernization, India is thus poised to become the world's foremost defense consumer, reaching stupendous figures of \$200 billion spent just on acquiring new defense systems. Preliminary surveys covering expenditure growth from 2001 to 2012 shows a massive four times increases in defense spending by the nation.

Heading this list is a yet-to-be finalized US\$10.4 billion deal to purchase the MMRCA (multi-medium role combat aircraft), a total of 126 such machines for the Indian Air Force. Other expenditures in the pipeline include Hawk Advanced Jet Trainers, Super Hercules (C-130J) as well strategic transport aircraft like airlifting C-17, likely to cost the exchequer US\$36.3 billion for the 2011-2012 fiscal year.

In the next few years India will invest heavily in buying advanced technology equipment for all the three defense forces. First on India's shopping list is the E-2 Hawkeye aircraft, a state-of-the-art advanced aircraft with some of the most sophisticated detection technologies such as radar system that can cover territories 300 percent more than existing radar systems. These are expected to be more advanced than the Northrop Grumman E-2D Advanced Hawkeye aircraft used by some of the leading defense forces in the world. The sophisticated E-2 alone is likely to cost US\$232 million.

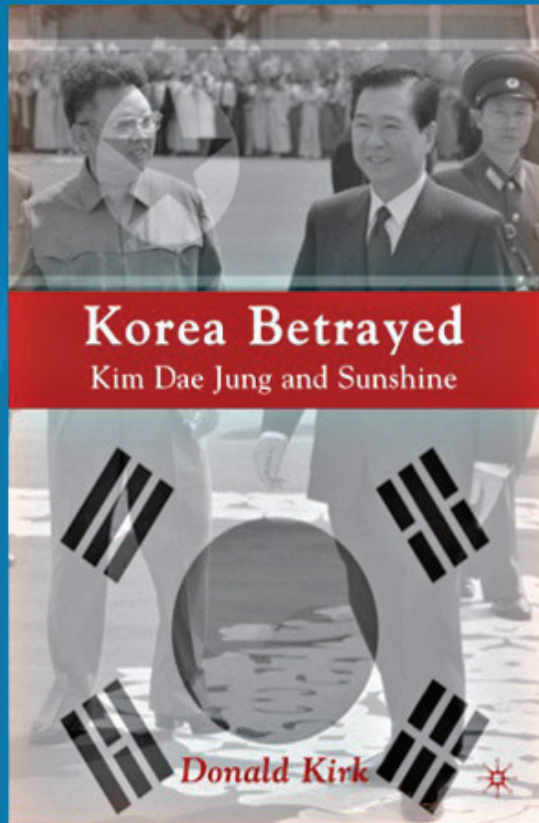
India Alluring Market Space for Defense and Aerospace Companies

India is today a dream destination for most defense and aerospace companies based in Europe, Russia and the US. While most of them have already provided India with their latest defense equipment, some of the nation's expenditure includes upgrading of modern aircrafts and equipment.

Heading the list are the 51 Dassault Mirage jet, which though finalized in 2011 with a down payment is now completed with the payment of US\$2.4 billion. Dassault and another company Thales will now upgrade equipment of the aircraft and will include latest changes to upgrade them to match the latest 2000-5 regulations.

Further upgrades will include the Thales RDY2 multimode radar, to include advanced navigation systems electronic measurement calibrations for faster assessment. Rafale, one of the premier defense equipment companies, will offer its MPDU mission computer for installation on the Mirage aircraft. In fact, Rafael is expected to work more closely on several other defense projects. Contracts have been drawn to include Rafael Advanced Defense System's medium-range air-to-air missile with Tejas light combat aircraft, one of India's indigenous combat aircraft series. It is expected that this new equipment integration will increase the Indian Navy's aircraft Harrier FRS51 prowess, as they will now allow all-weather, infrared-guidance as well as active-radar guidance.

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Korea Betrayed

Kim Dae Jung and Sunshine

Praise:

"The late Kim Dae Jung--the remarkable political dissident who rose to be President of South Korea and to win the Nobel Prize for Peace--is revered internationally, but his reputation in his native South Korea is much more controversial and contested. In this critical biography, Donald Kirk--a journalistic eminence who has been covering Korea for more than 30 years--helps us understand why this could be so. In his fascinating book, Kirk not only traces Kim Dae Jung's great political rise, but also details the moral and financial corruption that came to engulf, and permanently tarnish, the 'DJ' Presidency. *Korea Betrayed* will be a welcome addition to the bookshelf of every student of modern Korea. Kirk's account of the failure of DJ's 'Sunshine Policy' toward North Korea, furthermore, should be 'must reading' for all American policymakers before they prepare to deal with Pyongyang."--Nicholas Eberstadt, Henry Wendt Chair in Political Economy, The American Enterprise Institute.

About the book:

For the first time, using original sources and his own reporting going back to 1972 when he met Kim Dae Jung at his home in Seoul, Donald Kirk explores the great untold story of modern Korean history. This book recounts the rise of Kim Dae Jung from an oppressed region of Korea, beginning with his schooldays, his activities in the Korean War and his entry into politics. The book addresses his populist politics, his ascent to the national stage and his encounters first with the dictators who tried to take his life and then had him tried and sentenced to death for the Kwangju revolt. The book outlines DJ's life in exile in the United States, his great return to Korea and his entry into presidential politics climaxed by his election in 1997 at the height of economic crisis. Focusing on DJ's Sunshine policy, his summit with North Korea's Kim Jong Il and his drive for the Nobel, the book tells the story of payments that brought about the summit and the prize along with the corruption that ensnared his sons and top aides.

About the Author:

Donald Kirk, journalist and author, has covered Korea for American newspapers and magazines beginning with assignments there as Far East correspondent for the *Chicago Tribune* in the early 1970s. Since then he's reported from Korea for *The Observer* of London and *USA Today* and served as Seoul correspondent for the *International Herald Tribune*, the *Christian Science Monitor*, CBS Radio and the *Asia Times*. He is the author of two books on Korean economic issues, *Korean Dynasty: Hyundai and Chung Ju Yung* and *Korean Crisis: Unraveling of the Miracle in the IMF Era* as well as books on his years as a war correspondent in Vietnam and a Fulbright research scholar in the Philippines. He currently travels to Korea and elsewhere from his home base in Washington, D.C.

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Canada 's Harper Tilts Toward Trade in China

BY VICTOR FIC

Canadian Prime Minister Stephen Harper's China policy resembles a gyroscope – it hugs the terrain.

Once upon a time, this hardcore conservative loudly insisted that he would trade with China, but spurn bowing “to the almighty dollar,” i.e., he would press Beijing on human rights. During his 2009 sojourn there, Harper publicly chastised his hosts, with his disdain for the Communist party quite evident.

But on his latest trip to the Middle Kingdom between February 7th and 11th, he clearly felt the gravitational pull of China's booming market – and tilted that way. True, Harper plainly told Chinese officials that he disliked their decision to veto UN resolutions about Syrian dictator Bashar al-Assad. Plus, he raised the case of Husayin Celil, a Canadian citizen and ethnic Uyghur who champions that ethnic group's rights in China – and who is currently detained there.

The outstanding feature of this journey, however, is that Harper avoided confrontation to secure a bevy of 23 business deals worth almost US\$3 billion.

To be sure, China is subtly claiming victory. Vice Premier Li Keqiang insisted that the two countries must seek “common ground while shelving differences.” He must be pleased that the new accords accelerate the bilateral trade. Since 2001, two-way commerce has tripled to reach nearly US\$60 billion in 2010. China is now Canada's second biggest partner while the former's investment in the latter totals US\$ 14 billion.

The centerpiece of Harper's visit is a Foreign Investment Protection (FIP) agreement that will, supposedly, provide security to Canadians investors. They have long bemoaned arbitrary Chinese decisions and loss of copyrighted products. Now Beijing pledges to create a neutral dispute resolution mechanism.

How do Canadian experts evaluate Harper's efforts? One leading analyst is Charles Burton, a councilor in the Canadian embassy in Beijing between 1991 to 1993 and 1998 to 2000. In fact, Harper invited him to join the entourage, but Burton, “although honored [was] too busy.” However, he granted over 50 interviews regarding the summit, a signal that Canadians are eager for insights into China.

To start with, he insists that Harper's 2009 visit “was not a disaster. We got an agreement on boosting Chinese tourism to Canada, which is up 25 percent” This time, “Harper spent half his time raising social issues such as Syria and Celil”, the Uygher Canadian whose agitating for the rights of that ethnic group within China has caused Beijing to detain him.

Harper mainly pushed commerce, though. Burton stresses that the “main



Canadian Prime Minister, Stephen Harper

trade focus was the FIP. We experienced rife copyright violations and proprietary production processes transferred to China. We have not seen the final FIP text and also wonder if China will honor its concessions.” It may yet be a flash point because while Harper praised it for ending 18 years of talks, the other side said that the partners will try to “finalize” the text.

A second pact will permit Canadian uranium producers greater access to China's non military nuclear industry. The globe's leading uranium producer, Cameco Corp, is Canadian. To secure that agreement, Harper loosened Canada's accountability rules over how the uranium is used, even though China has a military nuclear sector.

The uranium exports do not trouble Burton, however. “We haven't seen the specific wording yet. We are concerned about the international non-proliferation provisions. But I am confident Ottawa would not sell uranium unless there are safeguards to ensure peaceful use.”

Burton recalls that, “At the G-20 summit in Toronto two years ago, Beijing committed itself to currency revaluation so exports would be cheaper. That came up again.” But he rues that after he gave an interview to a Chinese media source, “it edited out that part.”

Other accords linked the two countries in energy, natural resources, education, science and technology and agriculture.

Amidst the celebratory mood, China's Premier Wen Jiao broached the option of a free trade pact. But Canada's Minister of Trade, Ed Fast, replied, “Lets not get ahead of ourselves here.”

Why is Canada reticent? Burton warns that, “We are not confident that China will accept the loss of certain weak sectors, for instance if Canadian apples are freely available, it would likely devastate China's produce. We have much more competitive services in banking, insurance and some high

tech aspects as in mining. With unfettered access, China cannot compete. Overall, China is less developed and so we doubt its sincerity.”

If such negotiations do occur, considering that Li will probably become Wen's successor later this year, Harper and his team will benefit from the high level contacts. In fact, Harper returned to Canada with two panda bears, a gift popular with the Canadian public. It was one of Beijing's traditional ways of signaling ‘friendship.’

Burton looks forward to a Sino-Canadian joint report to appear in May. He added that, “It will explore how complementary the economies for beneficial trade. But free trade is another matter. Look at the North American Free Trade Agreement (NAFTA). It has a terrific number of provisions. If you stacked up those documents, they come to two meters.”

A star project in the offing is China's participation in Canada's Northern Gateway plan to lay an oil pipeline to super tankers anchored the latter's West Coast. They will ship the fuel to China. Burton explains, “It needs China's expertise in areas like infrastructure. China is eager to get oil from more stable countries than its present suppliers such as Iran. We have seen US\$18 billion in Chinese state owned firms' investment in Canada's top eight oil projects in the past two years.”

China's point man Li is optimistic. After enthusing that the agreements with Harper unprecedentedly raised Sino-Canadian trade ties, he exclaimed that there is a “long way to go” for full maturation. Speaking before Canadian executives who accompanied their leader, Li explained that, “China is facing mounting resource pressure.” (A-F)

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leader. Discarded by their father as a successor more than ten years ago while gaining a reputation as an international playboy, Kim Jong-nam talked about the build-up of his brother while expressing misgivings in an interview with Gomi, author of a new book based on interviews and email exchanges with the eldest son. Kim Jong-nam expected “the existing ruling elite to follow in the footsteps of my father while keeping the young successor as a symbolic figure,” he was quoted as saying in a burst of the kind of frankness that he has displayed in earlier encounters with the Japanese media. It was “difficult,” he went on, “to accept a third-generation succession under normal reasoning.”

That perspective from a close but clearly disillusioned relative jibes with the views of foreign analysts who wonder how long Kim Jong-un can last – or whether he can ever take charge of his own destiny and that of his people. “The efforts to put Kim Jong-un front and center immediately reflects a rushed succession process,” said Victor Cha, who advised on the National Security Council during the presidency of George W. Bush. Cha, now a professor at Georgetown University in Washington, predicted “a potemkin leadership transition” in Pyongyang “will likely run into problems.” (A-F)

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mit's organizers.

At their website, the summit's organizers said that the main objective of the Nuclear Summit process has been to "focus high-level global attention on the threat posed by nuclear terrorism and the measures required to address the global challenge of preventing terrorists and other non-state actors from gaining access to sensitive nuclear materials, technology and information."

The nuclear ambitions of Iran and North Korea, the so called rogue nations, are also a major concern for a majority of countries participating in the summit. Recently, Iran loaded domestically produced fuel into a research reactor in Tehran, which has triggered an alarm bell across the world. Also, President of Iran Mahmoud Ahmadinejad enumerated advances in his country's nuclear program and according to reports, ordered Iran to "go build" four more nuclear research reactors in addition to the one currently operating in Tehran.

Hahn told reporters that at the Seoul Summit, they do not plan to officially discuss Iranian and North Korean issues. But the recent pronouncements coming out of Iran may put the country's ambitious nuclear program on the discussion agenda.

Hahn said that the summit may send an implicit message to nuclear-ambitious North Korea – although the country's nuclear issue is not on the summit agenda.

The first Nuclear Security Summit was held in Washington in 2010 and President Barack Obama inaugurated it. The participating leaders discussed issues pertaining to dangers of nuclear terrorism and the increase of awareness of these dangers. They discussed plans to strengthen nuclear security by preventing the misuse of nuclear materials by non-state actors.

Stanley Foundation's "Planning for Success at the 2012 Seoul Nuclear Security Summit" report noted that the first summit succeeded in establishing a consensus that nuclear terrorism is a serious threat to all nations, and to secure all vulnerable material within four years.

The Washington summit saw participating nations committing to strengthening nuclear security and reducing the threat of nuclear terrorism. The Seoul Summit is expected to consolidate the first summit's commitment and discuss international cooperation to effectively deal with nuclear terrorism.

At the Washington summit, President Obama indicated probable agenda priorities for the Seoul Summit. These included: deepening of cooperation and strengthening the institutions and partnerships which may help prevent nuclear materials from ever falling into the hands of terrorists; strengthening the International Atomic Energy Agency (IAEA) with the resources and authorities it needs to meet its responsibilities; and taking specific and concrete actions to secure the nuclear materials and to prevent illicit trafficking and smuggling.

As a host of the second nuclear security summit, South Korea plans to play a

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Is the South Korea-US Korus Heading for a Chilly Autumn?

BY VICTOR FIC

For proponents of expanded trade relations with the United States, if the South Korea's left wing opposition parties win the presidential election in late 2012, the political atmosphere will be as cold as Korea's recent winter, the coldest in 65 years.

The cause of the big freeze will be the Democratic United and Unified Progressive Parties' (UDP and UPP) icy resolve to scupper the Korea-US free trade agreement (KORUS FTA). On February 8th party leaders warned that this is their ambition when they publicly read a letter addressed to US President Barak Obama that 96 national assemblymen signed as a show of resolve. "If we win the presidential election and if our demands for renegotiations are not met by that time, the KORUS FTA will be terminated by Clause 2, Article 2.4.5 of the agreement." That section provides that after six months, the accord will end if one side opts out in writing.

True, Korea-watchers might point out that the left wing Roh Moo-hyun administration negotiated on nine out of ten sections that incense the critics as "poisonous." Also, one of the most vociferous rejectionists is none other than Democratic United Party Chairwoman Han Myeong-sook. She was the prime minister when the two allies talked out the original pact, only to then strike the post of a nationalist as the next election looms.

One alleged weakness of the KORUS, alleges her side, is the Investor-State Dispute Settlement (ISD) that is supposedly unfair to Korea. Enter Gordon Flake, the executive director of the Mike and Maureen Mansfield Foundation created in 1983 "to promote understanding and cooperation in US-Asia relations." It is named in honor of Mike Mansfield, the American ambassador to Tokyo during the Reagan years who became controversial among trade hawks in his own

country who accused him of appeasing a mercantilist Japan. Therefore, Flake's pointed, candid rejection of the South Korean oppositions' machinations stands out in bold relief. In his public rebuttal, Flake meets the critics' points head on – and adds more.

To start, he finds that "ROK trade agreements, including the one with the European Union" contain that same measure. Veteran students of South Korea might also chime in that left leaning civic groups and politicians additionally bemoan the "unfairness" of the Status of Forces Agreement (SOFA) that covers the legal aspects of the American soldiers positioned in country under the 1954 mutual security pact. In fact, Seoul negotiates similar or more restrictive terms when it deploys its troops abroad.

"individuals and institutions...most vested in KORUS as a strategic initiative [are] the primary prism through which a new government in Korea will be viewed."

However, a sense of grievance runs deep in Korean society. Flake asserts that whatever the Korean misgivings, they can address them through "the normal course of diplomacy." He flayed Han for exaggeratingly denouncing KORUS as a "treacherous deal," as if the US had schemed to stab Korea in the back when in fact the terms of the accord are transparent and the negotiations that begat them widely covered by the media and conducted in good faith. Flake charges her and her like minded politicians as posturing in public and creating an issue for domestic consumption that "will negatively

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Trade with South Korean and American Flags
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Xi Jinping's American Debut

BY VICTOR FIC

“Xi who?” That seems to be the reaction of many Americans to the visit of China’s Vice President Xi Jinping. He has far less name recognition in the West than either President Hu Jintao or Premier Wen Jiabao.

The baffled multitude must learn his name, however, and start examining his policies, because this fall the 58-year-old Xi steps up to become Hu’s successor for likely the next half of a decade.

Mainstream experts predict that at around 2020 or soon after, the ‘Middle Kingdom’ will surpass the ‘world’s lone superpower.’ Thus, it will likely be Xi who will preside over his country’s vertiginous ascent toward that historical turning point. So what did his first trip to the U.S. signal about him?

Overall, his maiden appearance before Americans saw him eagerly projecting the image of a cool headed professional apparatchik who, like other Chinese leaders committed to economic modernization, appears in a western suit. To start, he cooed reassuringly about expanding imports to ameliorate the US’s growing trade deficit that hit US\$295 billion in 2011. When he toured the farm state of Iowa, the Chinese side pledged to purchase over US\$4 billion in soybeans this year – an all time high.

On February 17, he dispelled concerns that China would experience slowed growth that will roil the world economy in late 2012. “China’s economy will maintain stable growth...there will be no so-called hard landing,” Xi said.

He also showed his understanding of the US domestic scene when he appeared in Los Angeles to address not only firms, but also state governors eager to boost exports, joint ventures and bilateral investment. After all, major states such as California are akin to countries whose leaders can and do court China with considerable leeway, apart from the federal government. Specifically, Li promised that, “We will encourage more consumption, imports, and outward investment.”

He has his work cut out, however, because irate Congressmen accuse China of unfairly subsidizing large state companies that export, undervaluing its yuan currency, stealing copyrighted products and hindering foreign investors. Xi reassured that, “We are strengthening intellectual property protection through a mix of administrative and judicial measures.”

Simultaneously, Xi signaled that he is no pushover. While in Washington before LA, he asserted that the US must fix its own economic problems – not blame China: “Speaking frankly, an important aspect of addressing the imbalance in Chinese-U.S. trade is the United States’ own economic policies and structural adjustment.” This usually means that Beijing wants the US to cut its deficit. Plus, he prodded the US to liberalize export controls.

Assuredly nervous that candidates running for the oval office this year might press these ‘hot button’ issues, Xi displayed his public relations skills. With US Vice President Joe Biden escorting him, the pair ventured to the International Studies Learning Center in Los Angeles. Its American students there learn Chinese, and Xi saw students leaping during a lion dance performed for him.

As for Biden, late last year, US President Barack Obama anointed him the administration’s point man to coordinate and front China policy so that it remains coherent – and in the public eye. It was during that same season that Obama also committed the US to ‘return to Asia.’ It broadly means that as Washington withdraws its troops from Iraq and Afghanistan, it will concentrate more on shoring up its presence in Asia overall. In fact, Obama announced that in the future, he would deploy US soldiers to north Australia. It triggered concern – but not alarms – in Beijing, where nationalists insist that Washington’s grand plan is to encircle China so as to ‘block its rise.’

Biden sought to promote a framework of responsible conduct when he intoned on February 17 that even with trade tensions, “we absolutely agree wholeheartedly, that the future [will] be written in large part by how well the [US] and China meet their mutual responsibilities, for us to cooperate...” Ji himself broached that theme two days earlier: “China has become the United States’ fastest growing export market. A prosperous and stable China will not be a threat to any country,” he promised. But are storm clouds of conflict gathering? Mitt



Xi Jinping, Chinese Vice President and expected new leader of China.

Romney, a Republican candidate, denigrated Xi’s visit as “empty pomp.”

What is the judgment of objective experts? Paul Evans is the director for the Institute for Pacific Affairs in Vancouver and a thirty year student of Sino-Western relations. He asserts that, “the visit is about managing a full spectrum of security, economic and global challenges with a full house of American domestic players. There is symbolism regarding the American embrace of the next generation of China’s leadership and creating positive initial images.

Ji watching the LA Lakers is like Deng Xiaoping wearing a ten gallon cowboy hat while circling the Houston astrodome.” That was during his 1979 visit during the Jimmy Carter administration as part of the process that eventuated in normalized relations. Overall, Evans intones that, “no global bilateral relationship is now more important or complicated. Both sides sense that the relative power equation is shifting and see the [constructive] status quo persist but realize it is unsustainable [so are] deeply anxious. The Greek historian Thucydides (460 - 400 BC) claimed that the Peloponnesian war (431 - 404 BC) in ancient Greece arose because rising Athenian power scared rival city state Sparta. America’s fear of China is growing and both sides are seeking to avoid a fateful decline. Economic linkages and agile diplomacy are the two tools on which they agree.”

So Xi’s American debut was a moderate success, if only because both the host and guest promoted pleasant atmospherics and inked some substantial deals that will, temporarily, placate US hard liners on trade. His visit also avoided gaffes or any public fracas. But the historical stage is set for Xi to now help steer his country until it supercedes the US within the middle future. We would all do well to get acquainted with the name of man who will be soon be one of the globe’s most powerful persons – Xi Jinping.

(A-P)

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leading role in “coordinating participating countries’ views on key nuclear security issues and lead discussions on the drafting of the ‘Seoul Communiqué’, which will be the final document of the Seoul Summit.”

Earlier this year in January, a meeting of the Sherpas for the 2nd Nuclear Security Summit was held in New Delhi, India. Attended by 49 participating countries and four international organizations, this meeting’s main agenda was “consideration of the draft communiqué that would be adopted by the Summit in Seoul.”

Additionally, negotiators from around 49

participating nations also have reached an agreement “in principle” to minimize the civilian use of highly-enrichment uranium (HEU).

The Seoul Summit is not without its share of opposing voices. The parties and organizations opposing the event say that the summit does not discuss nuclear disarmament and non-proliferation and only concentrates on nuclear security. South Korea’s main opposition party, the Democratic United Party, said that it has decided to join a coalition of more than 40 political parties and organizations that oppose the Seoul Nuclear Security Summit.

“We are for non-proliferation of nuclear and denuclearization of the Korean Peninsula,” Jong-seok, secretary general of the DUP, told the press. “We also believe in reduction of nuclear energy and development of alternative energies, and that is why we decided to join this initiative.”

Hans-Ulrich Seidt, Germany’s ambassador to South Korea, told The Korea Times that, “We hope a very positive message will be sent in this summit that proliferation and nuclear weapons programs run outside the prohibitions of the NPT, and that is something the world community should not accept in the 21st century.” (A-P)

Technology

Japan Tests Nuclear Plant Under Watchful IAEA

BY LYNETTE WU

Japan, the world leader in nuclear power generation, lacks natural resources required to sustain itself, especially in terms of power generation. Japan was once totally dependent on oil imports for its energy sources. In order to reduce its import bill and to attain stability in terms of power generation, Japan started to employ nuclear power for its electric power needs. The 1974 world oil shock also contributed to this policy change.

Japan's Tryst with Nuclear Power Generation

Japan started its first nuclear generation plant in 1954. According to government reports, it now has 54 nuclear generation plants operating at various locations spread across the country, accounting for 30 to 35 percent of its total energy requirements.

The Japanese government operates its nuclear power plants under the aegis of the Japan Atomic Energy Agency (JAEA). The organization had provisioned for the geographic conditions inherent in the region and included features in the nuclear power plants for mild earthquake resistance, which still stand vulnerable to earth quakes of higher magnitude.

Fukushima Disaster a Setback to Nuclear Power Generation in Japan

The March 11th 2011, Fukushima Daiichi Nuclear power disaster caused by a major earthquake measuring a magnitude of 9.0 on the Richter scale was a major blow to Japanese authorities, as it led to large scale leakage of nuclear radiations into the sea, soil and surrounding atmosphere. Though media reports commended the government for its swift evacuation of the 160,000 residents around the plant while declaring a nuclear emergency, it did not fail to report that were significant numbers of people exposed to higher nuclear radiations than internationally permissible limits.

Causes of the disaster

On the day of the disaster, reactors number 1, 2, and 3 of Fukushima Daiichi Nuclear power plant were in operation, whereas reactors 4, 5 and 6 had been laid to rest for routine inspection purpose. On being hit by the earthquake the three reactors in action developed complications as the generators were at their peak, so that halting them at that point of time using the immersion of control rods and downpour of water from helicopter instantly was not possible. The result was the explosion in the reactor due to accumulation of hydrogen gas, leading

to the collapse of the central dome of the reactor. The same occurred with 1, 2 and 3 reactors, but reactor 1 was more severely damaged, leading to leakage of nuclear radiation in the near vicinity. A similar pattern of explosion resulted in reactor 3 as well.

Considering the effect of radiation leakage from reactors 1 and 3, operators started pumping sea water to instantly cool reactor 2. However, their attempts failed and resulted in the explosion and severe destruction of the reactor. The resulting fire spread to the main electricity power supply and back-up generators, making it harder still for operators to bring the situation under normalcy. The situation worsened as reactor 4 continued to burn for two long hours. This resulted in the used up fuel storage pool at unit reactor 4 catching fire and nuclear radiation being released directly into the atmosphere, according to IAEA sources.

Soon after the incident, Prime Minister Yoshihiko Noda called for an emergency meeting and declared all nuclear power plants across the country to be shut down. This was adopted as a precautionary measure, as seismic reports suggested possibility of successive earthquakes of similar magnitude to occur in the next 7 days.

Ban on Nuclear Power Plants Causes Severe Power Supply Shortage

The sudden halt in power supply resulted in a rapid shortage of power across the country, forcing the government to revisit its ban on nuclear power plants. This prompted the adoption of limited nuclear power generation, leading to the authorization to start 3 out of the existing 54 nuclear power plants to begin generation. The government then immediately commenced its emergency reconstruction program to secure the destroyed nuclear power plant.

However, media continued to report news of protests against the government move to restart the Fukushima nuclear power plant following completion of repairs. People opine that Japan has perhaps failed to take lessons from previous nuclear accidents and that the government contin-

ues to ignore public opinion in its restarting of the plant.

IAEA Invited to Evaluate Tests of Power Plant

Government news reports quote that the Japanese government, after the construction program in early January at Fukushima Daiichi power plant by its Nuclear and Industrial Safety Agency (NISA), invited the Vienna-based IAEA to evaluate stress test at the affected locations and ascertain the safety of the power plants.

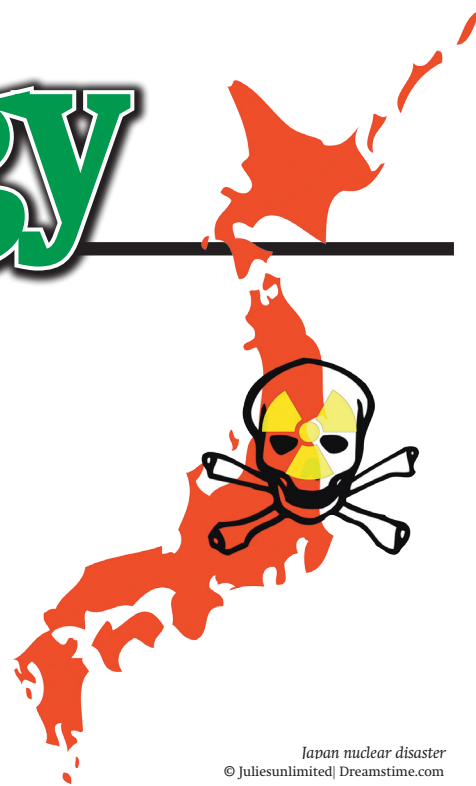
As per the request from the Japanese government, a 10-member team headed by James Lyons conducted a detailed examination and reported impressive execution of safety measures. In reports released, the evaluation included, "Stress tests through computer simulations evaluated a nuclear reactor's buoyancy to severe shocks after a triple meltdown at Fukushima plant since last year's earthquake and Tsunami." Lyons and his team members, following their detailed testing, concluded that, "NISA's instructions to power plants and its review process for the comprehensive safety assessments are generally consistent with IAEA safety standards."

Protests Continue as Doubts Persist

Nuclear analysts have clearly assessed that the Fukushima Daiichi plant disaster is the world's worst nuclear calamity, after the Chernobyl incident 25 years ago. And even a year later, thousands of people believe that the region is still unsafe due to high radiation levels.

Despite government reports that NISA officials have successfully completed their first assessment test on two still reactor units located in Oi, western Japan, which can resist high magnitude earthquakes and tsunamis, public opinion is yet to change. The negativity amongst the public, media reports suggest, was also boosted by two members of NISA stating that "the stress tests passed on the reactors were within a

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Japan nuclear disaster
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From Left to Right: Mr. Kim Byeong Jin, Ms. Kim Seoung Jung, Ms. Seoung Jon Min, Dr. Amitabh Arya, Mr. Lim Hyeon Jin, and Mr. Park Chan Rok at SNUH campus in Seoul.

Emerging Nuclear Medicine Technologies in South Korea

BY AMITABH BH ARYA

Nuclear medicine is a branch of medicine in which radioisotopes are administered for the diagnostic and therapeutic purposes in various disorders of the human body.

In nuclear medicine, clinical information is derived from observing the distribution of a pharmaceutical administered to the patient. By incorporating a radionuclide into the pharmaceutical, measurements can be made of the distribution of this radiopharmaceutical by noting the amount of radioactivity present.

The most common type of imaging procedure is in-vivo [Latin for 'within the living'], using a gamma camera which measures the gamma rays emitted by the radionuclides administered in the body.

The short half-life and permissible small doses of radioactivity administered have the least hazards of radiation to the body, and with side effects that are relatively very rare. The best part of nuclear medicine is that it does physiological studies of the body without any direct physical intervention.

The imaging technique reveals the body's biochemistry depending upon the choice of radiopharmaceutical used. This is in contrast to other types of imaging in radiology. For example, X-rays, ultrasonography, or MRI & CT scanners which reveal the anatomy of the body.

To measure very low amounts of radioactivity, high sensitivity, whole-body counters with heavily shielded probe detectors are used. In-vitro [Latin for 'within glass'] studies are done with samples taken from the patient - breath, blood, urine and faeces

samples may be used to find the amount of radiopharmaceutical present. These studies are done with gamma & beta counters.

Since the diagnostic information is provided by the action of the pharmaceutical, the role of the radioactivity is a purely passive one, enabling the radiopharmaceutical to be localized.

The future of Nuclear Medicine in Korea looks very bright, with the government also investing in this branch of medicine extensively, knowing full well its importance in the early detection of disease, management and follow up of patients in various disorders, especially cancer.

The PET [positron emission tomography] scanner provides molecular imaging of the biology of normal cellular function and its transformation to disease in a living subject. This is done by selecting targets of normal tissue and disease of biochemical processes of interest and labeling a molecular probe selective for the target with a positron emit-

ting radionuclide. For example, fluorine-18, carbon-11, nitrogen-13, oxygen-15, etc.

With the emergence of PET/CT hybrid scanners in 1998 and the recent innovation of PET/MRI hybrid scanners, we can do both molecular and anatomical imaging of a patient with the same camera. It is highly helpful for the very early diagnosis of various disorders, especially in cancer. Thus, for the treatment and management of various disorders, nuclear medicine has a very crucial role.

Another very important role it plays is in 'therapeutic' nuclear medicine. An example is seen in radioiodine [I-131], which has been used since the 1950s for the assessment, imaging and treatment of goiter, thyroid nodules and thyroid cancer, producing remarkable results.

There are many other radionuclides like Phosphorus-32, Samarium-153, etc., which are used in therapy for pain palliation in cancer patients when the cancer has spread to the bone; to control pain it is given orally/intravenously, and it also prevents the continuous use of high potency pain killers which leads to harmful side effects. Thus, nuclear medicine provides a good quality of life for cancer patients.

There are many other radionuclides available for therapy in various disorders and also in various types of cancer.

Nuclear Medicine in South Korea

Korea has long history of nuclear medicine. The first Korean Society of Nuclear Medicine [KSNM] was formed on December 28th, 1961. Currently nuclear medicine in Korea has achieved great advances both in infrastructure and manpower. There are 159 PET scanners here, and the first clinical application of radioiodine [I-131] in thyroid disorders in South Korea started in 1959, in Seoul National University Hospital [SNUH] in Seoul.

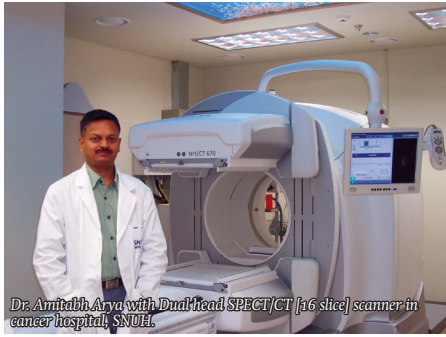
The first radioisotope clinic was inaugurated in 1960, also at SNUH with the introduction of dot scanners (scintillation counters) for imaging in the year 1961, which were the predecessors of the present gamma camera, or PET/CT scanners.

Other milestones include the year 1969, when the first gamma camera was started in SNUH in the radioisotope clinic. The in-vitro labs for the blood measurement of thyroid function tests was started in 1975 in the radioisotope clinic.

In 1978, an independent Department of Nuclear Medicine was started in SNUH in the same year SNUH became an independent institute and also started the 99mTc [molybdenum-technetium] generators for the production of 99mTc [technetium] isotope, which is used to label kits for the different scans of various parts of the body.

Radioimmunoassays [RIA] were started at SNUH and also for outside hospital and clinics in South Korea from 1980. From 1986, SPECT [single photon emission computed tomography], a dual head gamma camera, was introduced, especially for brain and cardiac imaging, along with the imaging of various other organs and parts of the body.

In 1991, a nuclear medicine lab was opened in Boramae Hospital, renamed in 2008 as Seoul National University Boramae Medical Center. In 1994 the first PET scan-



Dr. Amitabh Arya with Dual-head SPECT/CT [16 slice] scanner in cancer hospital, SNUH.



Delegates at the 50th Golden Jubilee Annual Conference of Korean Society of Nuclear Medicine (KSNM), SNUH, Seoul in November 2011.

ner was installed in SNUH and in the following year a 13 MeV medical cyclotron was also installed.

Further advancement occurred with the starting of the first PET-CT scanner in SNUH in the year 2003. In the same year, SNUH started a branch hospital known as Healthcare system Gangnam Center and a PET-CT scanner was introduced there in the same year.

In 2008, another cyclotron was started at Seoul National University Bundang Hospital and in the same year another milestone was achieved with the opening of a Nuclear Medicine Department at Seoul National University's Boramae Medical Center.

In the same year an 18MeV cyclotron was installed exclusively for research purposes in the Biomedical Science Building in SNUH.

The bioluminescence imaging system and an optical imaging system were introduced in 2006 and 2008 for animal research in SNUH.

In 2008 an animal SPECT-CT scanner was installed in Seoul National University's Bundang Hospital.

In the year 2009, an animal PET/CT exclusively for animal imaging and research was installed at SNUH. This led to the introduction of the latest research in molecular imaging and multimodality nuclear imaging.

Presently South Korea is at the forefront of nuclear medicine technologies, both in human and animal research, as well as for the treatment and diagnoses of various disorders of various parts of the human body. There are many nuclear medicine centers in various government and private hospitals and medical universities here.

Future Of Nuclear Medicine In South Korea –

The future of nuclear medicine in Korea looks very bright, with the government investing in this branch of medicine extensively, knowing full well its importance in the early detection of disease, management and follow up of patients in various disorders, especially cancer.

Korea is expected to have a fully operational 100 MeV accelerator, exclusively for the use of radioisotopes for nuclear medi-

Nuclear Medicine in SNUH

Seoul National University hospital, Korea's premier institute of higher learning, is ranked as one of the topmost centers in nuclear medicine.

Presently, the Department of Nuclear Medicine at the University Hospital boasts of a dedicated & highly motivated team of professors and their faculty in clinical and research work in humans and animals. There is a team of resident doctors for clinical nuclear medicine and a team of researchers from physics, chemistry and biology.

The Department of Nuclear Medicine at SNUH boasts some of the best equipment of clinical and research work in nuclear medicine, viz. –

1. Basic research labs for cancer treatment and other diseases.
2. Three PET-CT systems.
3. Two SPECT-CT [16-slice CT] dual head gamma cameras.
4. One mini-PET scanner [PEM – positron emission mammography] – to assess breast cancer.
5. Nine gamma cameras.
6. One PET-MRI scanner – installation is presently going on and will be operational very soon.
7. Two cyclotrons – one for clinical work and the other dedicated for research work.
8. One animal PET-CT system for animal research.
9. Two in-vivo optical imaging systems for animal research.
10. One in-vivo fluorescent imaging system for animal research.
11. One animal PET-MRI system [PET compatibility with animal MRI prototype was developed at SNUH, Nuclear Medicine Department].
12. One in-vivo confocal microscopy with raman spectrometer for animal research.
13. One thyroid uptake system with pinhole collimator gamma camera, exclusively for thyroid gland imaging.

Asian Regional Cooperative Council for Nuclear Medicine

The Asian Regional Cooperative Council for Nuclear Medicine [ARCCNM], Asia's premier cooperative body to co-ordinate research among Asian medical research institutions, is headquartered at the Department Of Nuclear Medicine in SNUH.

ARCCNM was founded by the Department of Nuclear Medicine in the year 2001 for the development of Nuclear Medicine in Asia in cooperation with seven Asian countries. Today there are 18 member countries of ARCCNM, including India.

In the year 2005, IAEA designated the Department of Nuclear Medicine at SNUH as the world's first and only "Collaborating Center for Nuclear Medicine and Molecular Imaging". Through this program, academic and research co-operations were established with nuclear medicine scientists worldwide.

In the year 2009, to facilitate the development of molecular imaging and to promote research in Asia, FASMI [Federation of Asian Societies of Molecular Imaging] was established at SNUH.

There are many nuclear medicine centers in both government and private hospitals in South Korea doing clinical and research work, but SNUH has the unique privilege and distinction to have been at the forefront of the growth and development of nuclear medicine for the last 50 years.



Seoul National University Campus in downtown Seoul.

cine, by the end of 2012.

By 2016, the start of a radioisotope production cyclotron for the exclusive use of nuclear medicine departments in South Korea is expected.

Nuclear medicine is rightly called as "molecular nuclear medicine", as it identifies the normal and abnormal regional molecular processes in the different organs of the body, while radiology is the structural imaging of the body using CT, X-ray, MRI and ultrasound.

With the advent of hybrid /fusion scanners like PET with CT [computed tomogra-

phy] of radiology, called PET/CT scanners, and now with the latest technological advancement of PET fusion cameras with MRI of radiology, PET-MRI scanners, this is the beginning of an era of fusion imaging of anatomy with molecular imaging. [A-P]

**The writer is an Associate Professor in the Department of Nuclear Medicine at Sanjay Gandhi Post Graduate Institute Of Medical Science, Lucknow, Uttar Pradesh, India, and is currently posted as Visiting Fellow, Department of Nuclear Medicine, SNUH, Seoul Korea. He can be reached at dramitabharya@yahoo.com*

Chinese Air Purifier Market Growing

BY AMANDA MIN CHUNG HAN

Ms. Shieh, an architect based in Beijing, is considering buying an air purifier for her house. An American-born Chinese, Ms. Shieh came to China a couple of years back to follow her job.

Before the move, she was concerned about different food and a language barrier, since her Chinese wasn't fluent enough. But she didn't pay much attention to poor air quality.

The first few months seemed alright. The sky of Beijing was always cloudy and a bit gloomy but still tolerable. The real shock came when she was sleeping in the middle of the night during winter time. "I couldn't breathe. I felt like I was choking." The relatively colder temperature during night time made all the pollutants stay near to the ground. She also could then see how much dust she was being covered with everyday, no matter how often she cleaned her room. She stopped drying her laundry outside because it smelled funny and white clothes always ended up with dirt on them.

She is not the only one in China who considers the purchase of an air purifier. Many foreigners in this nation, especially those with children, are either thinking of buying a purifier or already bought one or two for their home. Air purifiers are not yet very common in Chinese homes, as compared to South Korea or Japan, for example. One of the reasons that Chinese consumers care less for air purifiers is that the price is relatively expensive compare to other household appliances. The average price of air purifiers in China in 2008 was \$US285 and it rose to \$US315 in 2009. Considering the starting salary of a college graduate in China is only around \$490, an air purifier is quite a pricey purchase.

Although air pollution both indoors and outdoors can cause serious health problems, many people consider only outdoor air to be potentially harmful and thus they wear masks when they walk outside. According to much research, however, the levels of indoor air pollution can be high enough to be classified as hazardous to one's health. Since there is always plenty of construction and renovation going on, there is always the possibility of formaldehyde, benzene and other such pollutants reaching inside households. One research claimed that breathing the air in Beijing has led to a loss of 5 to 6 years in life expectancy there. Due to the increasingly unbearable air quality in China, people are gradually gaining awareness of the importance of air purifiers.

Recently one of the air purifier companies in this nation revealed on their web-

page that many government officials use their brand of purifier to get fresh air. The Chinese air purifier company proudly announced that there were more than 200 purifiers installed in government buildings, including the Great Hall of the People, and the office of President Hu Jintao. Also the company mentioned that the residences for senior leaders and their families were equipped with air purifiers of the company brand.

The result of this attempted promotion brought about huge criticism towards government officials. While the United States Embassy regularly monitored the air quality level in Beijing at a 'hazardous' level, the Chinese government kept to their stance that 'the air is a little polluted but not so

Many foreigners in this nation, especially those with children, are either thinking of buying a purifier or already bought one or two for their home.

bad'. And yet the government officials' contradictory attitudes to filthy air provided a good platform for air purifiers companies to promote their products. Before the government officials' affection for air purifier was revealed not many people were considering having one at home.

Around this time, the sale of air cleaning items skyrocketed at retail stores. Some stores even saw a 50 percent month-on-month leap in air cleaning equipment sales. One of China's big home appliance suppliers, Gome Electrical Appliances Holding Ltd., has seen air purifier and humidifier sales grow by a leap of 30 percent since last November.

According to air purifier manufacturing companies, only less than 1 percent of Chinese households has an air purifier. Many people wear a mask in the streets in order not to inhale foul air, but not many of them are now concerned with the quality of the indoor air of their home. The TechSci Research report 'China Air Purifier Market Forecast & Opportunities 2016' estimates a CAGR (Compound Annual Growth Rate) of 36 percent for the next 5 years because

Continued on Page 48



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Ionic air purifier filter close up

Continued from Page 32

The Defense Ministry also stated in the Parliament recently that priority was being "given to ensure that artillery units are equipped with modern weapons." The latest array of equipment for the Army is likely to be in the region of US\$13 billion and will provision for the increase in soldiers, about 90,000, for four new divisions being planned for stationing along Chinese borders.


Making an announcement at Hyderabad's AvioTech, an aerospace space division, Rahul Gangal says that, "The army will purchase 2,600 vehicles as part of its future combat vehicles program, and it is likely to see strong public and private sector participation from ordnance board and industry players such as Tata Group."

The Navy too is likely to include a refitted aircraft, INS Vikramaditya, and will add nine other surface warships to its fleet. Reports quote that these will include the Shivalik-class frigate, the Kolkata-class destroyer, an antisubmarine warfare corvette, offshore patrol vessels, two Talwar-class frigates from Russia, three catamaran survey vessels, and 25 fast interceptor craft.

Further reports from the Defense Research and Development Organization say that, "the organization is likely to spend around US\$4 billion over the next three years on locally manufactured strategic and tactical missiles, including the Astra air-to-air missile, BrahMos supersonic cruise missile, Akash surface-to-air missile and the Shourya ballistic missile. Also scheduled for production are 1,100 Pinaka rockets, 1,000 84-mm rocket launchers and 7,500 missiles."

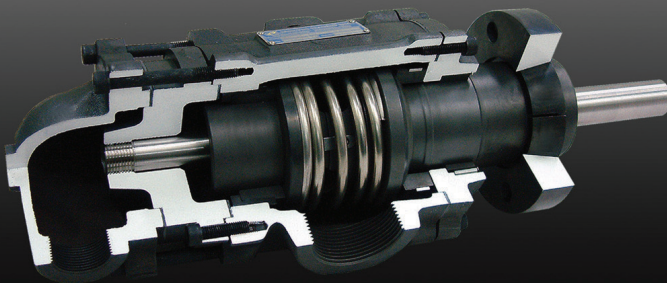
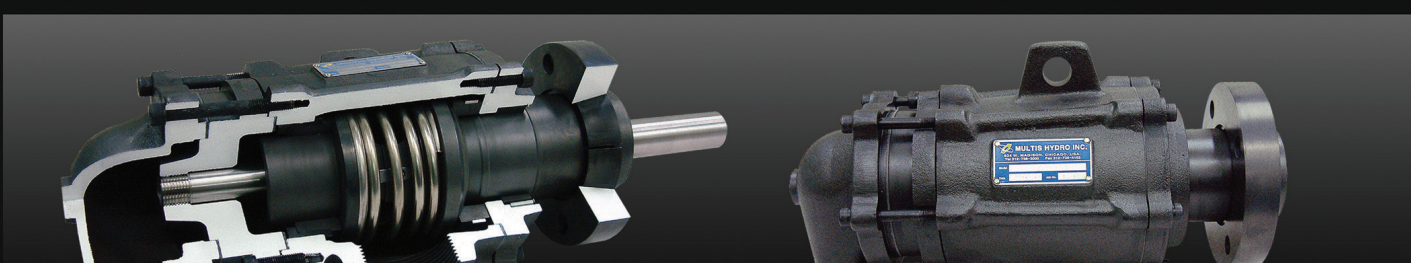
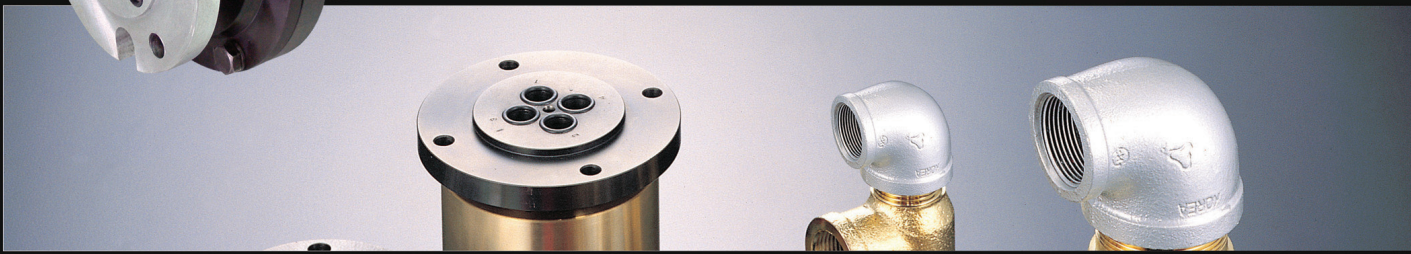
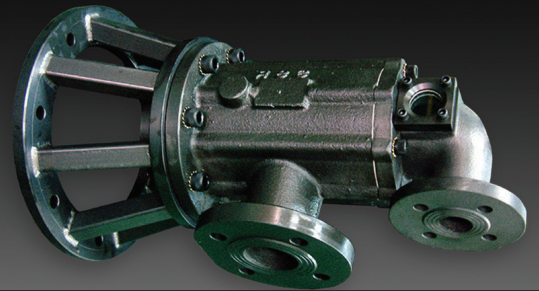
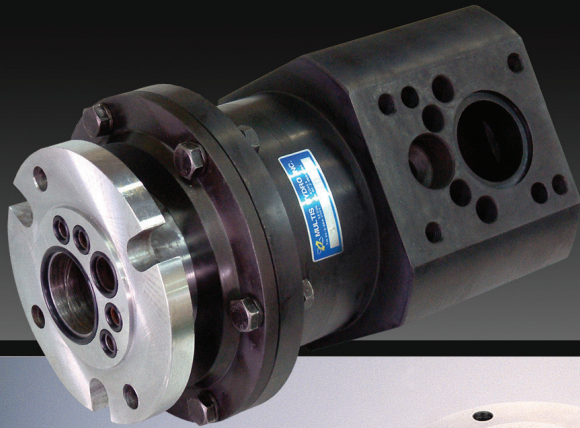
Though the government has made the necessary allocations, the ministry has failed to utilize all the annual funds, says a recent new report. The reason for non-utilization has been the complex procurement process which has caused delays in implementing long-term plans. Delays have resulted in cost-escalation as well as lower-generation technology equipment.

However, in the past few months, a fast-paced process has been adopted to optimize procurement of equipment leading to not only immediate commission of some vital defense spending but which has also resulted in India's defense forces, in small parts and sections, being equipped with advanced and sophisticated equipment that are not only safe and secure for Indian forces but which incorporate the latest technologies as well.

Poised to become a super-power, India is backed by well-defined borders and it is mandatory that it defends its borders to prove its sovereignty. It is critical to the region that India has the military capability to intervene and pledge support to smaller neighbors in the region. Hence, India is compelled to spend more than 2.5 percent of its annual GDP to maintain its defense capability in order to continue to be a powerful military force. Ironic though it may seem, this spending is being done to maintain balance of power in the region, as India continues to be a forceful advocate of World Peace. 

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Nayan Chanda

Author, Journalist, and Editor of Yale Global Online Magazine
at the Yale Center for the Study of Globalization

By Emanuel Pastreich

Emanuel Pastreich, President of The Asia Institute, recently had an opportunity to speak with Nayan Chanda, renowned Indian author and journalist, about Korea's new global role. Mr. Chanda is one of the leading experts on the topic of globalization. His comments on Korea are of particular value because of his conception which does not assume the West to be the center of globalization forces. Mr. Chanda has visited Korea frequently and also held a talk related to this issue at the Asia Institute in 2009. His work is admired for his strong historical sense: he traces globalization, largely based on trade, back over the last two millennia.

Chanda's best known book is *Bound Together: How Traders, Preachers, Adventurers and Warriors Shaped Globalization* (Yale University Press, 2007). It is an insightful discussion of the process of globalization over the last two thousand years. Chanda posits that globalization is driven by traders seeking profits, preachers carrying out a divine mission, adventurers in search of fortune and glory, and warriors seeking loot and power. The book has been translated into Chinese, French, Korean, Japanese, Italian, Turkish and Portuguese. Another of his books, *Brother Enemy: The War After the War*, is probably the most comprehensive study of the aftermath of the Vietnam Civil War and its implications for Southeast Asia. He also co-authored the book, *The Age of Terror: America and the World After September 11*, with Strobe Talbott, President of Brookings Institution.

It is an honor to have you here with us today. You have had a chance to watch Korea evolve over the years as a journalist and writer. Can you reflect on recent political developments in Korea and put them in context for us?

I have watched Korea for decades and find the rapid evolution of that country quite remarkable. We have seen the emergence of a mature political system since the era of Kim Dae-jung, with a diverse political debate and concerns about certain issues that were not on the table previously. I think that the evolution up through President Lee Myung-bak is quite striking. One wonders what the implications will be for the presidential election this year.

Parallel to the political development of Korea has been its astonishing technological evolution. We now find in Korea the most connected country in the world. It has moved ahead of many industrialized countries, and its technological prowess, from automobiles to computers, from silicon wafers to power plants and the latest tablet by Samsung now sets global standards.

How does the Korea you see today look in contrast to the Korea that you first encountered as a journalist and writer?

Korea was a very stiff place when I first arrived here. The environment was formal

in terms of meetings, and it was aloof in terms of personal exchanges. Korea had had a strong military at the center of the political system and that culture made personal interactions and public events quite stiff. The changes over the last fifteen years have been astonishing. Now we have leaders who feel they need to respond to the needs of all citizens by being accessible and flexible. The recent mayoral election in Seoul was another indicator of increased political maturity. The election of Park Won Su confirms that voters clearly are interested in significant change and a more inclusive, more open, society. Such an attitude is a radical change from previous eras when the military set the style and rapid industrialization was the primary concern of most policy makers.

Many of your writings treat globalization in a historical context. That perspective is most welcome, especially for someone like myself who studied pre-modern history and culture.

Of course I am not an expert in Korean history. But I think we can attribute some of the problems to the degree to which the whims of one individual or other once decided the fate of a country. The Korean Joseon Kingdom's decision to keep out all foreigners can be seen largely as the personal whim of the King. In Korea, and in China, the decision-making process for policy was limited to a small group in the palace that could not effectively evaluate the full potential of not only their decisions, but also the challenges to be found in the West. There was plenty of smuggling and informal trade even then, but the nation remained closed to open trade.

One can see many examples of this autocratic response not only to external challenges, but also to internal innovation. Let us take the case of admiral Zheng He in the Ming Dynasty. At the beginning of the 15th century Zheng He built the world's most impressive navy at that time. His innovations and his fearless efforts brought about tremendous advancements in marine sciences and navigation in just one generation. His seven voyages through Southeast Asia and all the way to Africa established new potential trade routes and gave the Chinese confidence in their ability to conduct long-distance expeditions. China was

then poised to become the major maritime power, but the advances of those twenty-five years were cast aside by a subsequent autocratic government and an ignorant emperor. China went back to being an empire facing inward. In the nineteenth century, when Europe was modernizing its navy, the Empress Dowager Cixi spent the navy's budget to build a pavilion shaped like a boat at the summer palace.

Looking at the global roles of China and India today in historical context is also interesting. In a sense, we can say that although such dominant roles for these nations seem quite alien to many in the West, they have merely regained the role that they played previously, even just a few centuries ago. But at the same time, it is a new world. China and India now have global interests, and a global cultural reach, that they have never had before.

Well, it is indeed a new world that we are witnessing, but that world is still rooted in the past. China and India together produced nearly half the world's gross domestic product in 1700. Both nations had substantial manufacturing bases far before anything in terms of sophistication or scale emerged in Europe. The Chinese were making cast iron in the fourteenth century and they exported it to Europe where such technologies did not exist. The Indians were also leaders in the development of high-quality steel. Both India and China focused on manufacturing technology, the process by which ceramics and silk are produced on a mass scale to high standards of quality. There was no such concept in feudal Europe. As a result, Indian textiles dominated the world until the Industrial Revolution. England had a chronic trade deficit with China through the middle of the nineteenth century.

India and China have certain inherent advantages now, and even back then. Their civilizations are ancient, and strong scholarly traditions in mathematics, engineering and administration served as the foundations for such manufacturing know-how. And the large populations of these two nations, far beyond anything Europe was able to support before the second half of the 19th century, also offered distinct advantages. Since the 1990s, these two countries have managed to reclaim some of the economic dominance they had three hundred years ago. The scale that India and China work on is quite different than that which we find in the West, and this of course has its own advantages.

You have mentioned technology and its role in the development of Asia. It is clear that the

Parallel to the political development of Korea has been its astonishing technological evolution. We now find in Korea the most connected country in the world. It has moved ahead of many industrialized countries...

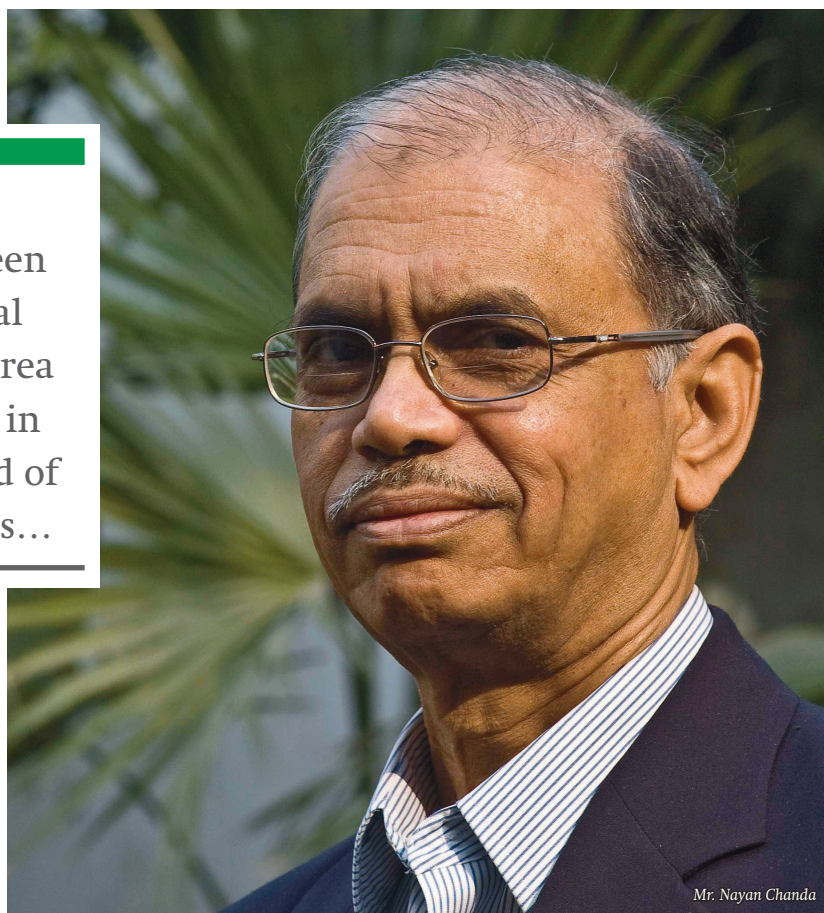
ability of Koreans, and Asians in general, to effectively apply technology has been a major factor in their rise.

I think we find ourselves today on the threshold of a major technological revolution. The changes going on around us today are the equivalent of electrification in the 20th century. Of course electricity was discovered long before it had any practical impact on our lives. The potential for using electricity was there, but people had not figured out a way to design small electric generators, or to distribute electricity through a grid efficiently.

We are reaching the point at which microprocessors will be an essential part of every device. The next generation of network technology requires not only that every machine have an IP address, but also that they can be controlled and function based on the digital signal that they receive from the internet. This development means that we are moving towards a stage at which every device will be controlled by a small handset. The expansion of the internet into everyday products will open up a new horizon for innovation. Korea has taken the right steps to position itself for a major role in this new technological revolution. I think the development of personal technology that can mesh seamlessly with the Internet is the way of the future. Korea is poised to be a major player.

When I came to Korea in 2007, I saw many articles that suggested that Northeast Asia could achieve an economic integration along the lines of the European Union. But recent problems in the European Union have made such analogies rather unpopular. Asia will have to follow its own path.

I think history remains a major factor in efforts to promote greater integration. How history is interpreted and how it is used in the political discourse of each nation can



Mr. Nayan Chanda

impact progress. What I find encouraging in the case of East Asia is that young people across Asia are speaking the same language, using similar terms and assumptions and wrestling with the same issues in the discourse of pop culture. For the next generation there is the potential to create a new dialogue less confined by historical issues of the past. A new Asia can emerge from that new discursive space.

The new presence of India and Southeast Asia in the global economy is slowly restructuring East Asia as well. Let us take the example of Sichuan Province in China. Sichuan was something of a backwater in China, far away from Beijing and not an economic powerhouse. But now Sichuan is benefiting immensely from its ties to India and Southeast Asia. Its geographical position has turned out to be a major asset rather than a liability. In the case of Korea, I know some Koreans who studied languages like Thai and Malay in the previous generation. At the time their work was perceived as obscure subject for academic inquiry. Now they find that they have immense opportunities.

I find that this massive geopolitical shift is best summed up by the growth of the airline industry. When I first came

to Southeast Asia in the 1970s, traveling from Bangkok to any place in China was a matter of around one or two days of travel. There were no direct flights and those flights that were available were more often than not much delayed. You had to travel through Hong Kong and there were hassles at every turn. Now, if you go to the airport in Singapore, or Hong Kong, or Bangkok, there are direct flights to just about every major city.

We see listed on the big board for departures at airports around Asia the names of cities in Southeast Asia and Central Asia, regional China and Russia, that most people had not heard of just ten years ago. It is a new landscape indeed.

For someone like me who has watched Southeast Asia develop over the last forty years, the current state is quite astonishing.

In the case of China, issues like pollution are becoming quite serious concerns. At the moment of China's rise to global power, the number of wealthy Chinese who migrate to the United States and Canada is remarkable. They give as their reason quality of life. They cite pollution as an important factor. They simply do not want their children to grow up in a polluted environment. Of course the poor do not have such opportunities. Globalization is changing the nature of the process of development in unexpected ways. And that process is different from that of previous waves of globalization. (A-P)

Singapore gets a Green Skyscraper

BY XYAN LING

With the world threatened by extreme climatic changes due to green house emissions, one pressing challenge that is posed to modern architects is to build homes or offices which are eco friendly and sustainable in nature, despite having all the modern amenities and facilities available at the user's disposal.

One such marvelous structure built along these architectural concepts is Singapore's Asia Square, located along Marina view at Marina Bay in Singapore. It is the epitome of a technological marvel 'advanced building', a 43 story multipurpose twin tower designed to be eco-friendly and self-sustaining with high-class modern facilities.

Asia Square holds the credit of being equipped with the largest photovoltaic cells (solar panels) installed on its roof, which takes care of a majority of the electrical and lighting needs of the building. Being equipped with on-site energy resource not only ensures the building is at all times energy sufficient, it also complies with some of the most advanced concepts of sustainable energy management life-cycle norms for facilities.

It also boasts of having the first bio-diesel generation plant in a commercial development of Singapore's central business district, which produces pure diesel and gas recycled from used cooking oil and waste derived from many food and beverage outlets. The diesel obtained from the bio diesel plant is utilized for running generators and vehicles operated in the construction works of Tower 2, expected to be completed by 2013.

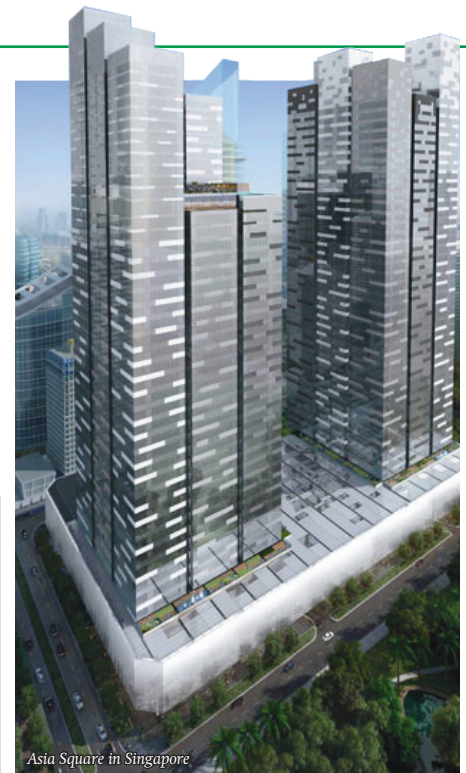
One of the unique features incorporated in the design of this building is the 'Light Tubes', which run along all the ceilings of the buildings, providing natural light for plant life to thrive on.

The other specialty of this building is the self-sustaining lift system, where the kinetic energy generated during the lift movements is converted into electrical energy, stored and made use during the next lift operations. On the whole there is a saving of 20 to 30 percent in electricity consumption.

A healthy indoor atmosphere is created by sterilizing the surfaces and air using natural ultraviolet (UV) rays derived from sunlight thereby killing harmful germs and bacteria.

The building project also has an efficient water recycling plant which recycles the grey water derived from various domestic usages in the building and utilizes it in the flushing of toilets. The water accrued from the cooling towers of the building's air conditioning system is put towards the watering of plants.

Many countries have begun opting for green building systems in their infrastructural development plans, both in the government and private sectors. As green buildings are made up of non-toxic materials and



Asia Square in Singapore

are better ventilated for constant supply of fresh quality air, these are considered to be healthy option for a better society.

Sustainable designed green buildings offer many benefits as they are constructed by intelligent designs strategies and new advanced technologies. There is no doubt that green buildings will soon be a requirement rather than a choice for construction. Adoption of solutions that use sustainable resources are an obvious road-map for the future growth of architecture. As countries across the world grapple with concepts of sustainable urban-housing and commercial development, incorporating environmentally-efficient solutions such as Asia Square will prove to be the way forward. (A-P)

Vietnam's Ba Na Nature Reserve in Need of Stricter Ban on Illegal Poaching

BY DANIEL XUAN

Located on the eastern side of the Indo-China peninsula, Vietnam is mainly covered by hills and has a typical tropical forest cover of 40 percent.

It houses two World Natural Heritage sites and six biosphere reserves which are home to some of the rarest and most endangered species of the world. The Ba Na Nature Reserve is one such forest region that contains 256 animal species and 544 varieties of flora along the Ba Na Mountain region.

However, a recent research team, headed by Professor Le Vu Khoi, a former member of his university's Science and Technology Department, found that the entire District of Hoa Vang in Da Nang Province was un-

...a recent research team...found that the entire District of Hoa Vang in Da Nang Province was under threat as the rich forest resources were being exploited for domestic medicinal requirements.

der threat as the rich forest resources were being exploited for domestic medicinal requirements. The bones, meats and oil extracts of various animals like the tiger, pangolin, giant monitor lizard and the langur populations are highly priced by wild-life traders and they continue to exploit these species in the region. As a result of this, several of the endangered animals like the rare red-shanked douc langurs, unique to Son Tra Island Nature Reserve, were found to be dwindling, with only 171 langurs now being spotted.

The research also listed 27 rare species recorded in the International Union for Conservation of Nature's Red List of Threatened Species, and the team has therefore recommended to the government to strengthen existing laws on restricting trade in endangered animals. Several of the rare species such as the Indochinese tiger, leopard, Asiatic wild dog and the Sambar deer, once spotted in great numbers in these reserves, are now not found. (A-P)

Continued from Page 35

impact US-ROK relations.”

After all, the Korus won the endorsement of a wide swath of US officials and policy wonks and most South Koreans too. It took five years of effort to land the final deal. Also, scores on both sides of the Pacific “viewed [it] as more than just a trade arrangement. It was and is a strategic agreement intended to strengthen and deepen the US-ROK relationship.” Washington has ratified the deal, and therefore, intones Flake, for the opposition to threaten it resort to any tactic to kill it off “is a clear indication that they do not understand or do not value the strategic importance of the deal...their sweeping and hyperbolic denunciations risk being interpreted as anti-American.” Of course, Flake might consider for the militant left in Korea, that is exactly the intention.

In any event, he attempts to appeal to the opposition’s political self interest. Flake reminds them that “individuals and institutions...most vested in KORUS as a strategic initiative [are] the primary prism through which a new government in Korea will be viewed.”

Furthermore, are the critics foolish enough to discount regional and global opinion? Flipping aside the KORUS will alarm its trade partners and investors, who will wonder if the RoK is a reliable partner. As Flake foresees it, “there would be real economic costs and missed opportunities for the ROK [plus] damage to its soft power, and since Seoul has never before repealed an international treaty [it] would cause the ROK’s international position and reputation to suffer.”

There would be no primary or collateral damage to the American reputation because, “Regardless of whether the ROK decides to back out, the US strategic mandate and its credibility in leading a trade and investment liberalization agenda in Asia have been secured” through the Senate’s stamping its approval. Its members, says Flake, realized that Washington had to demonstrate leadership on trade or risk undermining its credibility in the Asia Pacific Economic Conference (APEC) and the ongoing talks for the Trans Pacific Partnership trade dialogue. In fact, if the south does back out, “it is hard to imagine other members of the TPP being interested in including South Korea if it is attempting to repeal a similar trade deal with the United States,” by far its most significant ally.

Flake has much advice for South Korea. First, it should reflect upon its own positive record in boosting world trade and investment. Plus, the country has been “a leader in the G20 [and] successfully negotiated and ratified in KORUS a prototype for the “21st Century” that should eventuate in the TPP. So Seoul “could be a leading voice” for more liberal trade instead of a spoiler that angers others – and isolates itself.

He concludes by asserting that it is “dangerous, short-sighted and unrealistic” for the left wing parties to continue to court confrontation. It remains to be seen if the South Korean-US relationship is heading for an autumn of grievance – and a winter of discontent. [A-P](#)

Thailand Adopts ‘Project Homecoming’ to Recycle Ink And Tone Cartridges

BY RASHMI GUPTA

Ink Cartridge Satogeaeri (or Project Homecoming) is the first ever unique joint initiative of leading brands – Epson, Brother, Canon, HP, Dell and Lexmark – of printers to recycle ink-and-tone cartridges. This project, launched in Japan in 2008, is to be adopted in Thailand later this year.

In Japan, the multinational printer makers have paid for the recycling of each of the used cartridges which their consumers donate to the recycling cause. Cartridges are collected from strategic collection-points, where bins are placed exclusively for used-cartridge collection, and brought to a plant owned by Epson, at Mizube, near Lake Suwa in Nagano Prefecture for recycling.

The Project’s venture was begun by concerned ink-and-toner cartridge manufacturing companies, as they felt it was time to take social responsibility and offer their consumers alternative, environmental-friendly methods to dispose of used-up ink and toner cartridges. Motonori Okumura, COO, Imaging and Information Products Operations Division, Epson, comments that, “The operating cost may be high but our achievement should not be calculated by financial gains.”

In fact, more than 5 million recycled

cartridges have been converted into ‘green products’ such as plastic boxes, pens or flower pots and distributed free-of-cost to needy organizations.

The Project has also donated \$US 120,000 to the United Nations Environmental Program (UNEP) by contributing an amount

...more than 5 million recycled cartridges have been converted into ‘green products’...

of three yen in lieu of every ink cartridge collected by the project since the middle of 2010.

With cartridge manufacturers in Thailand also adopting the recycling project, the increasing inclination of corporations towards adopting greener, sustainable industrial ecosystems that minimize carbon emissions needs to be highly appreciated. [A-P](#)

Taiwan Opts for LED Streetlamps to Lower Carbon Footprint

BY LYNETTE WU

Traditional street lighting in Taiwan is soon to get better lighting technology with the introduction of smart Light Emitting Diode (LED) streetlamps.

These lights are known to be more electricity-efficient, have longer life-cycles, cost-effectiveness, and better performance ratings in comparison to the typical mercury vapor streetlamps and sodium pressurized lamps. Over and above these factors, LED streetlamps are likely to save the Taiwanese government substantial maintenance and replacement costs as well.

Nearly thirty percent of the traditional streetlamps will be replaced, saving nearly 40 percent in costs, that is almost \$US27 million in electricity fees, while it will cost the government US\$66 million to install

LED streetlamps. The phased project is expected to be completed in three to five years and will include a further funding of an additional \$US202 billion. In the first phase about 300,000 streetlamps will be replaced across five municipalities spread over 13 Taiwanese counties.

The Ministry of Economic Affairs said that by replacing traditional streetlamps with LED streetlamps, greater energy-efficiency, substantial cost savings and better quality lighting will now be available across Taiwan.

Taiwan’s progressive adoption of LED technology to light its streets will translate into substantial fall in carbon emissions as well. Close to 1.5 million traditional street lamps will now be replaced with more energy-efficient Light Emitting Diode streetlamps. With countries around the world turning towards more efficient technology to reduce energy consumption and lower energy expenses, the Taiwanese government has taken the initial steps towards its own sustainable energy and energy management. [A-P](#)



Grand Palace Bangkok, Thailand

© Image Focus | Dreamstime.com

Thailand Tourism 'Amazing Thailand' Boosts More Direct Flights to Phuket

BY KEVIN LIU

Phuket is one of the largest of islands of Thailand, located nearly 860 kilometers to the south of Bangkok. Phuket is also often referred as the 'Pearl of the Andaman', thanks to its natural possessions of rocky capes, limestone cliffs, white powdery beaches, tranquil board bays and tropical inland forests. All of these contribute to what has become the most preferred tourist destination in Asia-Pacific.

Phuket topology is rather unique, consisting of 70 percent mountainous region, with the remaining 30 percent being plains. Phuket Island, Phangnga and Krabi are collectively called the 'living room of the world', which had 3.5 million tourists last year alone.

The Tourism department of Thailand has rightly visualized the island's potential and has carried out intense promotions in many countries like the Middle East and India. Airlines such as Thai Airways, Kingfisher and Air Berlin have not lagged behind and have now announced direct flight connections and routings to facilitate international tourists to Phuket. Promotional activities such as special videos on the island's natural heritage through You Tube, and "Amazing Thailand" stalls in various industrial fairs including the Travel Fair at Berlin (the world's most important tourism fair), have ensured Thailand's surging presence on the international tourist circuit.

Thailand's visiting tourists consist largely of the Indian middle class and a growing number of Brazilians, given the increased stability in these economies.

Moreover, says Castlewood Group's CEO, Chris Comer, Singapore's leading commercial real estate company, "Europe is the main source market for Phuket tourism and will continue to be so in the years to come".

Nearly six percent of Thailand's revenues are earned by the tourism industry, and Thailand continues to be a shining example on how to monetize tourism by positioning a nation's exotic destinations as exclusive, luxurious and premium, while offering a variety of tourist-specific packages. Phuket heads the list of such 'dream destinations' in Thailand.

Comer adds that, "The increase in direct flights to Phuket will draw more tourists to the island. The tourism growth in Phuket will create a positive outlook for the hotel industry."

According to Tourism Ministry sources, in 2011 19.09 million tourists visited Thailand, marking an increase of 19.8 percent as compared to the previous year, which contributed \$US23 million to Thailand's tourism revenue. The estimation of tourists for the year 2012 are believed to be set to increase by up to 8 to 10 percent.

In addition, the Tourism Authority of Thailand's innovative marketing blitz for 2012 to attract tourists, using "Amazing Thailand Always Amazes You"

"The increase in direct flights to Phuket will draw more tourists to the island. The tourism growth in Phuket will create a positive outlook for the hotel industry."

theme proves the efficacy of the meticulous research and planning the ministry has adopted to reach out to interested tourists in various parts of the globe. The continual brand-strengthening activities the Thailand Tourism Authority involves itself in provides a unique role model that other countries in the region should replicate to garner impressive increase in visitors.

The aggressive packaging of Thailand's islands has led to more domestic and international flights and tourists visiting these islands for fantastic holiday experience. 

PyeongChang 2018 Winter Olympics

BY JIN-SUK YANG

After two lamentable defeats in a decade of trying, the South Korean city of PyeongChang finally won its Olympic prize, burying two European rivals in a landslide vote for the 2018 Winter Games and bringing them back to the lucrative Asian market.

“This is one of the happiest days for our country, our people and millions of youth dreaming of winter sport,” said PyeongChang bid Chief Cho Yang-ho.

The Koreans lost narrowly in the final round of voting for the 2010 and 2014 Games, but this time they defeated Munich and Annecy, France, by a one-sided margin that few had expected. The status of Korea and the rest of Asia in winter sports have developed comparatively and are still weak due to a smaller winter sports population, lack of facilities to enjoy a variety of winter sports and a short history of them. However, the potential of Asia, with its 4 billion people, is boundless. The 2018 Winter Games in PyeongChang may prove to be a great opportunity to boost winter sports in Asia and add a significant impetus to assist PyeongChang as the hub of winter sports in Asia.

Moreover, hosting the 2014 Olympic Winter Games at PyeongChang holds a significant symbolic meaning and a possibility of bringing an end to Cold War rivalries and contributing to reconciliation in the divided peninsula, as it did in the 1988 Seoul Olympic Games, fulfilling the Olympic ideals of peace and harmony.

Why PyeongChang?

There were three core reasons as to why PyeongChang stood out amongst the other candidates: the potential to grow winter sports across Asia, a compact and efficient Games Plan, and a trusted partnership that has kept its former promises made to the IOC.

Prominently, PyeongChang has shown the potential to grow winter sports across Asia – a new, young and growing market – connecting Olympic winter sports with millions of new, young hearts and minds. Annually 1.5 million tourists visit Korea to enjoy winter sports, and that number continues to increase. Winter sports are becoming more popular among the one billion Asian people living within a two-hour flight distance of PyeongChang, which is emerging as a winter sports hub in Asia. Additionally PyeongChang offered the most compact and efficient games plan, with new, state-of-the-art, competition-tested venues.

PyeongChang Games Plan has two clusters – the Alpensia Cluster (snow events) and the Coastal Cluster (ice events). All competition venues will be accessible within 30 minutes of each other and 90 percent of athletes can reach their venues within 5 to 10 minutes. This will ensure ideal competitive conditions for the athletes and comfortable, quick and safe access for the Olympic Family, media and winter sports fans from around the world.

Lastly PyeongChang has kept the promises to the IOC: it has delivered on commitments, built new infrastructure and new venues. The Alpensia Resort – which will be center stage for the 2018 Games – has already opened and seven of the proposed 13 competition venues are already developed. PyeongChang has staged the annual ‘Dream Program’ since 2004 to provide a winter sports experience to future athletes from countries where there is no winter sports season. In total, 806 future athletes from 42 countries around the world have been invited to the Dream Program and 12 of them have gone on to compete in international competitions for their country.

PyeongChang will work diligently to meet and surpass the standards of IOC’s vision and the Olympic Movement throughout Korea and around the world.

Ever since the launch of the PyeongChang committee, support from the South Korean people has been very high – over 91 percent – and all levels of government support the bid as a “national priority.”

Where is PyeongChang?

PyeongChang is nestled in Gangwon province, a region blessed with valuable ecological infrastructure and a stunning natural environment. Eighty-four percent of PyeongChang’s territory is comprised of high mountains with average elevations of 750 m, ideal for mountain-based winter sports. PyeongChang really comes to life during its long winters, where the abundant snowfalls transform the city into a stunning wonderland of snow-white beauty.

Surrounded by the Taebaek Mountains in the east, the Charyeong Mountains in the southwest, and Mt. Odae and Mt. Gyeong in the north, PyeongChang is ideally situated to be a perfect winter playground. Average altitude is over 600 meters above sea level, with more than 100 surrounding peaks towering over the city at greater than 1,000 meters. Located on an inland highland, PyeongChang’s continental climate provides an average annual snowfall of 250 centimeters.

Besides its natural beauty, PyeongChang




Yu-Na Kim (KOR) © Olga Besnard | Dreamstime.com

truly pursues an eco-city status, enjoying air and water quality levels that surpass international standards. To preserve such superb natural environs, PyeongChang and the venue cities have been developing environmental infrastructure expansion projects aimed at conserving grade-1 water resources, vitalizing ecosystems, improving biodiversity, and recycling waste materials as energy resources. These efforts have led to PyeongChang being designated a ‘Low-Carbon Green Growth Model City’ by the National Government.

Furthermore, all venues used for the 2018 Games will be “Green”, playing a huge role in Korea’s promise to fully deliver on an environmentally sustainable Winter Games. All new competition and non-competition venues to be built for the Winter Games will obtain certification in adherence with the building laws of the Green Building Certification Program, adopted by Korea in 2006, while existing venues will be upgraded to low-carbon eco-friendly facilities that utilize renewable energy, reuse rainwater and wastewater, and adopt natural lighting systems. Ultimately the city will carry out four major environmental projects that have as their respective goals: controlling and neutralizing greenhouse gas emissions; achieving zero discharge (through the reuse, reduction and recycling of waste materials); maintaining water quality levels at the ideal level; and restoring and improving the city’s overall ecosystem.

Last but not least, culture abounds in PyeongChang, where visitors will discover the wonderfully ornate architecture of Korea’s sacred temples and the historic cultural artifacts housed within them. Art is also on display throughout PyeongChang, where creative spaces and outdoor theatres present the beautiful paintings, calligraphy, plays and exhibitions of the area’s artists.

PyeongChang – the New Horizon

With passion, determination, and possession of world-class facilities, PyeongChang will work diligently to meet and surpass the standards of IOC’s vision and the Olympic Movement throughout Korea and around the world. PyeongChang’s 2018 Winter Olympics will offer something truly exceptional for the winter that has never been seen before. 

Traditional Chinese ‘Mechanical Linkage’ Wooden Toys are now Classified as ‘Intangible Cultural Heritage’

BY DAVID WOO

Ecologically friendly wooden toys like whistles, horses, tiny furniture, jumping horses, spinning dancers, and flapping birds that operate on indigenous, age-old mechanical engineering techniques are both a fascinating experience and an eye-opener to the depth and breadth of Chinese traditional handicraft knowledge and practices.

They symbolize the rich and varied cultural heritage of China. These toys are finely hand-crafted from soft wood and are highlighted with imaginary colorful paintings, representative of unique Chinese painting traditions.

Recently, Chinese wooden toys with mechanical linkages were listed in the Provincial Intangible Cultural Heritage, ensuring continuity and preservation of these age-old handicrafts and painting traditions for posterity. These traditional

wooden toys with mechanical systems are a special particularly in the Tancheng Country of East China’s Shandong Province, and they are generally built by drawing extensively from Chinese myth, historical epics, folk tales, and other forms of story-telling common to the region. These toys, with their quaint mechanism that allow them to move, reveal how the Chinese applied the laws of basic science such as physics centuries ago to create toys that engaged young kids for several hours.

These Chinese wooden toys, apart from representing their old culture and tradition, are even to this day used in rural areas for entertainment in the form of musical instruments. They are also found nowadays on sale at many fairs, local markets and specialty shops which are popular among both local and foreign visitors throughout the world. The ‘mechanical linkages’ that are used in these wooden toys are special attractions that amaze not only children but adults as well. [A-B](#)

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restricted range and failed to confirm that reactors are as yet safe,” and also that, “The IAEA visit was purely a public relations task.”

Reports from Professor Hiromitsu Ino of Tokyo University and Masashi Goto, a former nuclear plant design engineer, were quoted as saying that, “It is obvious that a visit by an international organization advocating nuclear power is part of a political agenda that is built into a story already finished in advance.”

News reports also noted that Japan’s power supply would be drastically affected from April of this year onwards, if nuclear power plants were not to commence functioning. They pointed out that the Trade and Industry minister, Yukio Edano, said that, “The nation can survive free of power cuts in summer without nuclear power.”

The prime minister, Yoshihiko Noda, considers that although Japan is trying to advance in power generation out of renewable energy sources, there is also a clear need to maintain a number of reactors alternatively. By 2030, they had aimed to convene 50 percent of electricity power to the country, but were compelled to call these plans off due to the Fukushima Daiichi crisis.

Political analyst Atsuo Ito was quoted by news reports as saying, “The public mistrust towards the government’s handling of information over the nuclear accident is high and I don’t think the review will change that.”

Government Revamps Nuclear Power Generation Policies

In an attempt to boost public opinion

with respect to nuclear power generation, the Japanese cabinet has approved new legislation that delinks it from the Trade and Industry ministry, as it had failed to recognize the danger signals raised by nuclear power plants.

The amendments, according to government reports, will now fix the operational lifetime of nuclear reactors to 40 years, as well as an additional 20 years if they then pass further safety tests. Yet one of the reactor units in Fukushima Daiichi had not undergone service since 41 years ago.

Media reports quoted the Environmental Minister, Goshi Hosono, as saying, “We need to form a new organization urgently, considering the critical gaze of the public and the international community.”

Reports also noted that the proposed new team would not only be comprised of private sector and independent members, but would for the first time disseminate information for public consumption.

Assuring the public, Kiyoshi Kurokawa, the head of the parliamentary committee investigating the causes of the Fukushima crisis, told reporters that, “The myth that nuclear power was absolutely safe is a theme we will explore. We need to find out how such a mindset developed.”

Despite the international endorsement by UN inspectors on NISA complying with tests and safest aspects of the nuclear power station, challenges continue to exist for the Japanese government in the road ahead. NISA experts themselves are not backing the full safety factor of the power plants, and this is building public outrage over their restarting. [A-B](#)

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of increased awareness regarding the importance of purified air. Compared to the global air purifier market, which expects a growth rate of about CAGR 8 percent, China’s market definitely looks much brighter.

The Director at TechSci Research was quoted as saying, “The current penetration level of air purifiers in China is extremely low when compared with countries like the US, Japan and Korea where penetration level is above 20 percent. We forecast that the Chinese air purifier market will surpass \$US14.6 billion by 2016.” The penetration rate of United States is near to 30 percent while South Korea and Japan are at around 20 percent.

Currently many global players are present in the Chinese air purifier market. Global brands target high-end customer groups by pricing units at more than \$UD475. The Chinese air purifier manufacturers generally focus on the low-end market at prices around \$US160-\$320. There are global players from Europe, the United States, Japan and others. Korean air purifier brands Woongjin Coway, Samna Nano Bio, and Chungpung are trying to get more Chinese market share. Japan’s Hitachi, Panasonic, Daikin and Sharp are also significant participants in this market.

Yadu is believed the strongest local player, having acquired more than 50 percent of the air purifier market share in China at one time, but which it then gradually lost share to competitors such as Midea. Currently the biggest market player is Philips, which has about 45 percent of the total market; the second is Panasonic with about 24 percent, followed by Yadu at about 16 percent market share. The remainder is divided by numerous smaller players. [A-B](#)



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GREEN CAMPUS

BY AMANDA MIN CHUNG HAN

As the looming threats of global warming have been increasingly acknowledged, there have been lots of efforts to reduce green house gas and to curb unnecessary energy consumption.



Myungji University Campus in Korea



Daegu University

Government buildings and office buildings which consume much more energy than regular households have put particular effort towards saving energy, partly because of their cost reduction objective. The only organizations which consume as much energy as private companies but which haven't had involvement in energy saving plans have been schools.

Schools, and especially universities, consume energy at rates that are equivalent to major office buildings. The early stages of 'green campus' were more focused on planting trees and other greenery. Seeing green in a campus was good but not good enough to meet the definition of a green campus. By early 2000, universities, especially in Europe, had started low carbon lifestyle campaigns on campus, which then expanded to the U.S. and other world campuses. Korean universities joined this trend in 2008 with the organization of 'Korean Association for Green Campus Initiative (KACGI)'. Nationwide 135 universities joined this Korean green campus association.

Universities save energy and spend their reduced cost for student benefits such as scholarships or the construction of new facilities such as gyms or classroom buildings. Schools that plan to build a new building now adapt energy saving facilities which they formerly did not equip their old buildings with.

Gangnam University, located in Yongin City, a satellite city of Seoul, plans to save 16 percent of its annual energy consumption (10 million kcal) and to reduce 1195 ton of carbon dioxide emission by building a green campus. The school has installed all its sinks, washbasins and toilets as water saving ones. Classroom lights are switched on automatically when people are around and then turned off when no one is there. When a student takes a shower in their dormitory room, the water is treated and then sent to a toilet. The school is also installing air conditioning and heating systems based

on geothermal energy. The university expects to save about \$US725 million a year via green campus installation. The saved money will go primarily to students who need scholarships to continue to study.

Myungji University, also in Korea, has a big water tank in a basement of its engineering department building to collect rain water. The contained water is used in washrooms of the building. Another engineering department building is equipped with solar panels on its roof which generate 44 kw per hour, the equivalent of 80 percent of the total amount of electricity used in the building. These facilities help the school save about \$40,000 per year.

Daegu University encouraged its students to join the green campus project there. The school collected abandoned bicycles around campus to recycle and created a green bike zone. Students can borrow bikes in the zone for free to use on campus.

Chungbuk Provincial College also claimed to be a green campus promising ten energy savings practices. Among those are turning off lights when people are not around, and wearing thermal wear to avoid use of high temperature indoor heating. The college also changed all classroom lights to LEDs, which consume less energy than regular light bulbs. Energy saving sensors were also equipped with LEDs and turn on only when people are around. All windows were replaced to double-glazed panes to contribute to higher energy efficiency.

Chungnam University awards carbon scholarships to students who turn off lights after class and turn off the faucet after using water. Daegu Youngjin College uses water from 150 m underground at its campus for its air-conditioning and heating systems. Duksung Women's University installed solar panel on building rooftops to generate power to use for campus. The school also set up rooftop terraces to keep warmth inside of buildings in winter as well as to make the indoor cool during the summer time. Most

of these universities' going green campus projects are being done by private companies which are then paid by saved energy costs instead of construction costs.

Some universities actively seek students' involvement in green campus projects. Silla University, for example, held a green campus idea contest. It consisted of three categories, namely Green Life Essay, UCC (User Created Contents), and Photo and Poem. All winners made campus life as the topic of their work. Silla University also now offers classes about sustainable development and eco-friendly campus life. Although the courseload demand for those classes was quite high, yet about one third of total students took the classes.

American schools have taken things several steps further. A Sacramento State mechanical engineering senior students group decided to convert waste oil from school kitchens to biodiesel fuel. Their goal is to produce the same amount of diesel which is used to fuel facilities on campus. The school uses about 276 gallons of diesel fuel (at a cost of about \$1000 per month). The biodiesel production facility costs about \$5000 and its biodiesel fuel product costs about \$1.25 per gallon. If the biodiesel production system produces 125 gallons of biodiesel fuel per month, it will reach the breakeven point in 16 months. Students contacted local companies for support in the project. The companies would provide their services and equipment and get paid in biodiesel fuel instead of cash.

The chairman of KACGI, Mr. Shin Ui-Soon, said that most of Korean colleges and universities had been indifferent to the low carbon and green growth paradigm till recently. As more and more schools join KACGI, the organization aims that Korean schools transform into eco-friendly, energy-saving organizations by nurturing green leaders and developing a standard evaluation index for green campuses. (A-P)

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