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## **8<sup>th</sup> CII-EXIM BANK Conclave on India Africa Project Partnership**

**18 – 20 March 2012; Taj Palace; New Delhi**

***“Creating Possibilities: Delivering Value”***

**A Report**

## **Executive Summary**

The 8<sup>th</sup> CII-EXIM Bank Conclave on India-Africa Project Partnership, organised by the Confederation of Indian Industry (CII) with the support of the Ministry of External Affairs and the Ministry of Commerce & Industry, Government of India, brought senior ministers, government representatives, business heads, bankers, young parliamentarians and other thought leaders from both regions on a common platform to architect the future course of the bilateral partnership. The deliberations at the Conclave were mainly governed by the goals set at the 2<sup>nd</sup> India-Africa Forum Summit held in Addis Ababa in May 2011, and the changing contours of the global economic landscape.

Mr Anand Sharma, Minister of Commerce, Industry & Textiles, Government of India, set the tone for the deliberations with his observation that as the global economy faces stiff headwinds resulting in contraction of markets and dip in trade and investment flows, deeper India-Africa economic cooperation will provide the growth impetus to global economy.

Capacity building is the cornerstone of the India-Africa cooperation framework. Elaborating on this, Mrs Preneet Kaur, Minister of State for External Affairs, Government of India, stated that India is firmly committed to the goal of setting up 32 capacity building institutions at the regional level and 40 such institutions at the bilateral level in Africa.

It was cited that Indian banks could offer training support to African banks and financial institutions in diverse streams by leveraging their own experience and institutional base. Indian institutions could offer similar capacity building support in several more critical business sectors.

African leadership has taken cognizance of the importance of moving up the global economic value chain. Manufacturing has assumed key significance in this context. The African leaders present at the Conclave said that India could be trusted partner to African states that seek to enhance their manufacturing competitiveness. This will entail significant knowledge sharing and capacity building initiatives.

Global manufacturing competitiveness will also hinge on the quality of physical infrastructure available in Africa, at the country and regional levels. Africa needs an estimated \$93 billion a year for infrastructure development, and faces a large funding gap. The delegates said that Indian infrastructure companies could play a greater role in strengthening Africa's physical infrastructure sectors spanning roads, railways, ports, airports, waterways, etc.

Mining is one sector that has seen increasing India-Africa cooperation down the decades. It was suggested that as the mineral-rich African countries aim to step up value-added activities, Indian mining institutions like the Geological Survey of India (GSI) and Bureau of Mines could offer proven expertise in disciplines like geological surveys and exploration, upgradation of skills of geologists in Africa, and measures to curb land degradation where mining activities are underway.

Sharing of common experiences with regard to protection of interests of local communities in regions where mining activities take place will be of essence to the African societies. Green mining was cited as another emerging area primed for bilateral cooperation.

The deliberations pointed to India's strident progress in the IT, communications and ITES sectors. It was suggested that as Africa seeks to access affordable IT solutions to drive economic growth, Indian IT sector could play the catalyst role. Here, India's own experience of driving IT & telecom penetration in the rural areas were seen as highly relevant to the African economies. ICT capabilities could also serve as a strong foundation for e-governance.

Pharma and healthcare were cited as equally promising areas of bilateral cooperation. Over the years, Indian pharma companies have won the confidence of African societies by delivering affordable, life saving drugs. However, there has been a campaign from certain global quarters to undermine the Indian generics. Mr Anand Sharma stated equivocally that the Indian government and industry will counter the claim that Indian generics are sub-standard by unswervingly adhering to the standard practices, thereby ensuring that the poor in India and Africa get easy access to generics.

At the same time, there was a felt need to harmonise the pharma regulatory structures in Africa. The different regulatory systems at work currently make it difficult for Indian companies wanting to set up their manufacturing base in Africa. Inadequate banking facilities and distribution network are some of the other key issues that need to be addressed.

It was suggested that African governments would be better placed by improving the pharma distribution mechanisms within their respective economies. Inefficiency in the distribution structure tends to raise the cost of drugs several fold. It was also suggested that India and Africa should look to fuse the advantages of traditional medicines with modern medicine to make medicare affordable to all in Asia and Africa.

For long, African people in need of advanced medical attention have travelled to India to avail of the facilities offered by leading Indian hospitals and healthcare entities. Today, African countries are seeking Indian expertise for establishing advanced healthcare

facilities in their own geographies at optimum costs. The deliberations at the Conclave referred to the new opportunities for collaboration between Indian and African healthcare entities.

India and Africa are emerging as major stakeholders in promoting a global green economy. Yet, green initiatives taken by Indian entities in Africa in areas like renewable energy programmes, green manufacturing, climate change initiatives, etc, make up only a small part of India's greenfield projects in African countries. It was suggested that Indian investments in green projects for sustainable development must be stepped up in a big way.

A special session on biomass power generation, organised with the support of UNDP, drew attention to the increasing climate change fears, rising fuel prices and the current energy production and consumption patterns which make a strong case for promotion of biomass-based power production. The expert panel observed that the real challenge lies in creating commercial opportunities in environmentally sustainable businesses. This will be best addressed when government agencies and private organisations act in consort, across India and Africa. When that happens, several renewables like biomass, solar, wind, geothermal, etc. will become more commercially viable.

Areas like these when developed will also drive rural entrepreneurship, solid waste management, rural industrialisation, etc.

Agriculture-related trade and investments have always been a key part of India-Africa economic engagements. Today, as Africa sharpens the focus on food security, India is best placed to trigger a Green Revolution in the region. Indian farm sector companies are investing in Africa. Looking ahead, the focus of these companies could be on driving value addition. There could be fruitful Indian participation in the fields like agriculture R&D, water conservation, irrigation, drainage facilities and capacity building.

Central African Republic was the Guest Country at the Conclave, and Zimbabwe the 'Focus Country'. At the focus session on Central African Republic, the delegates spoke about opportunities for Indian businessmen to invest in sectors such as mining, energy, infrastructure, telecom and housing.

Likewise, Zimbabwe is another country that beckons Indian investments in areas like mining, agriculture, education, healthcare, among others.

Overall, the Conclave saw the presence of nearly 700 delegates from 41 different African countries. 39 ministers addressed the Conclave, and 200 projects worth \$30 billion were discussed during the course of the business meetings.

The 9<sup>th</sup> edition of the Conclave will be held in New Delhi during March 17-19, 2013.

## **DAY 1**

### **Inaugural Session: India-Africa: The Growing Partnership**

Opening Remarks:	Mr Chandrajit Banerjee, Director General, Confederation of Indian Industry (CII)
Welcome Remarks:	Mr B Muthuraman, President, CII
Keynote Address:	Mr Anand Sharma, Minister of Commerce, Industry & Textiles, Government of India
Special Address:	H.E. Mrs Joice Mujuru, Vice President, Zimbabwe
Special Guests:	H.E. Prof. Faustin Archangel Touadera, Prime Minister, Central African Republic H.E. Mr Jonathan Wutawunashe, Dean, Diplomatic Corps
Closing Remarks:	Mr Syamal Gupta, Chairman, CII Africa Committee

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As the global economy faces stiff headwinds resulting in contraction of markets and dip in trade and investment flows, deeper economic cooperation between India and the African nations will provide the growth impetus to both the regions. Stating this, Mr Anand Sharma, Minister of Commerce, Industry & Textiles, Government of India, said, "We will have to act together. In doing so we will emerge as the engines of global economic recovery."

Mr Sharma said the world is witness to a rebalancing of the economic order. This presents new growth opportunities for India and Africa which are endowed with rich natural and human resources. Within one year, the GDP of Asia, European Union and North America would be of almost equal size. Also, India figures among the largest global economies. Likewise, the GDP of Africa is expected to exceed \$2.5 trillion in a little over a decade. The changing global order has set the tone for stronger India-Africa partnership, he said.

Drawing attention to the capacity building requirement of Africa, Mr Sharma said the Indian government will fast-track the setting up of the proposed specialised capacity

building institutions in Africa. "Education is the most potent tool of empowerment of people," he said.

Touching upon the subject of food security, Mr Sharma said that as many as 80 Indian companies have invested in Africa's agriculture sector. Looking ahead, the focus of these companies would be to drive value addition in this sector, while initiating steps to curb post-harvest losses by building support infrastructure.

Noting that India's strident progress in the ITES sector has contributed toward reducing the country's technology divide, he said that promotion of this sector could achieve similar results in Africa.

He also referred to Indian pharma companies facilitating the delivery of affordable life-saving drugs in Africa, positively impacting the lives of many people in the region. "We will counter the campaign that generics are sub-standard and we will ensure that the poor people get easy access to generics," he said.

Underlining India's stakeholder interest in Africa's prosperity, Mr Sharma said the two Forum Summits held in New Delhi and Addis Ababa have clearly shown that India follows a consultative approach toward Africa. It was the Africa Union that decided upon the nature of participation at the Summits.

He urged African countries to also explore new business opportunities in India. With close cooperation, the 21<sup>st</sup> century will well and truly belong to India and Africa.

Mrs Joice Mujuru, Vice President of Zimbabwe, said in her special address that Zimbabwe has ushered in a competitive business environment through the Medium Term Plan launched in 2011. Now, as the country aims for double digit GDP growth by 2015, many business sectors are offering attractive investment opportunities. Indian companies are poised to leverage the business opportunities in diverse areas like mining, manufacturing, power generation, telecom, and tourism.

Mrs Mujuru laid particular emphasis on value added business activities, which would be catalysed with foreign direct investments. She made a special reference to the diamond polishing and cutting industry in Zimbabwe which would greatly benefit from closer business engagements with Indian companies.

Mr B Muthuraman, President, CII, said in his address said, "The Indian industry has established its footprint in Africa, guided by the emerging opportunities in the region instead of any government mandate. As a result, India's business engagements with Africa are driven by the economic rationale, which I believe is a sustainable model of partnership."

Referring to the new African economic dynamism that coincides with India's sustained 7% GDP growth, he said there are several new possibilities for India-Africa partnerships, more so in the manufacturing sector. Africa has the potential to become the world's leading manufacturing hub by the year 2030, and India is ideally placed to facilitate Africa's industrialisation.

Earlier, Mr Chandrajit Banerjee, Director General, CII, said in his opening remarks that the Conclave has the presence of delegates from 40 different African countries. Among them, there is also a group of young parliamentarians who are at the Conclave to participate in the deliberations.

Mr Syamal Gupta, Chairman, CII Africa Committee, presented the vote of thanks.

The Conclave also hosted a technology show with the assistance of the Council for Scientific & Industrial Research (CSIR), Government of India, where India's Triple A technologies were showcased.

For time, United Nations Development Programme (UNDP) has also played a key role at the Conclave through knowledge transfer and by conducted two sessions on key areas – alternative energy development and energy-efficient technologies for small and medium enterprises.

## **DAY 2**

### **Special Plenary I: India-Africa: Partners in Progress**

Opening Remarks:	Mr Chandrajit Banerjee, DG, CII
Keynote Address:	Mr T C A Ranganathan, Chairman & Managing Director, EXIM Bank of India
Special Address:	H.E. Prof. Faustin Archangel Touadera, Prime Minister, Central African Republic
Special Address:	Mrs Preneet Kaur, Minister of State for External Affairs, Government of India
Closing Remarks:	Mr Syamal Gupta, Chairman, CII Africa Committee

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Technology, investments and training form the core of India-Africa partnership. India has offered its expertise and resources in these areas at the pan-Africa, regional and bilateral levels with great success. Stating this in her special address, Mrs Preneet Kaur, Minister of State for External Affairs, Government of India, said that India's efforts

to set up 32 capacity building institutions at the regional level and 40 such institutions at the bilateral level will support Africa's drive to meet the Millennium Development Goals (MDGs) and also strengthen its human resources base.

Mrs Kaur said that Government of India's concessional lines of credit to different African states have catalysed infrastructure development and capacity building initiatives in the region, besides paving the way for private investments in the recipient economies. The minister said the 35% increase in India-Africa bilateral trade flows in 2011-12 over the previous year augurs well for the bilateral cooperation and partnerships.

Mrs Kaur also said that the recent launch of the India-Africa Business Council, the 2<sup>nd</sup> India-Africa Trade Ministers Meet, and numerous workshops held for the training of African people will go a long way toward strengthening the African business drive to move up the global value chain. Value addition is critical to African industry's global competitiveness.

Mr Faustin Archangel Touadera, Prime of Central African Republic, said his country was honoured to be the 'Guest Country' at the Conclave. "A new eastern wind is blowing over our continent," he said to illustrate India's growing role in Africa. Mr Touadera said that the bilateral ties with India need to be revitalised through greater investment flows, and technology sharing.

Indian companies could play a vital role in tapping Central African Republic's vastly untapped hydro resources, and mineral and agriculture resources. Positioned in the "heart of Africa", this country could also serve as a gateway to regional markets. Central African Republic has some 470 minerals. Transportation infrastructure development and telecom are areas where Indian cooperation and partnership could make a difference to Central African Republic. Other potential areas of cooperation are: agriculture, mining, tourism, telecom, energy development, education and sanitation.

Central African Republic has 50 million hectares of arable land and vast livestock resources which can be turned into significant productive assets through close cooperation with India.

Mr Touadera acknowledged the benefits the Government of India concessional line of credit (LoC) has delivered to his country. At the Conclave, EXIM Bank of India and the Government of Central African Republic signed an agreement for a new LoC valued at around \$60 million. The LoC will be directed for projects in agriculture and mining sectors.

Mr TCA Ranganathan, CMD, EXIM Bank of India, said that even as Indian companies are increasing their footprint in African markets, Indian industry would do well to strengthen the 'Brand India' presence in Africa.

He observed that while Indian exports of machinery items, electrical items and transport equipment to Africa have grown, their share of Africa's total imports of these items is very small. "Indian companies have not focused enough on the African markets," he said. Indian exports account for only 3% of African imports.

Given that Africa needs an estimated \$93 billion a year for infrastructure development, and faces a large funding gap of about \$45 billion, opportunities are aplenty for Indian infrastructure companies.

Mr Ranganathan also said that Indian banks could offer training support to African banks and financial institutions in diverse streams by leveraging their own experience and institutional base.

Mr Syamal Gupta, Chairman, CII Africa Committee, observed India's economic growth and Africa's economic resurgence have created new possibilities for partnerships.

The session set the tone for the second day's deliberations covering a large number of business sectors.

### **Plenary Session II: Trade & Project Financing in Africa**

Session Moderator: Mr David Rasquinha, Executive Director, EXIM Bank of India

Panel: Ms Margit Thomsen, Executive Director-NIS, African Development Bank

Mr Amr Kamel, Director, Banking Operations, Afrexim Bank

Mr Alex Gitari, Director, Finance, PTA Bank

Mr M Bassary Toure, Vice President, BOAD

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2020 Africa is estimated to be a \$2.6 trillion economy with a 1 billion working population and consumer spending of about \$1.4 billion. Stating this, Mr David Rasquinha, Executive Director, EXIM Bank of India, said that inadequate infrastructure growth, small local markets, and poor international lending are pulling down the growth of the African economy. Absence of investment grade and non-investment grade credit rating

systems for sovereign countries in Africa restrains the ability of international lenders for providing long-term financing for infrastructure projects in the continent, he said.

“Reported losses in Africa due to poor infrastructure amount to \$17 billion,” he said underpinning the importance of infrastructure development in the continent.

Talking about the credit flow from the country, he said that Indian FDI in Africa is largely concentrated on telecom and construction sectors. The EXIM Bank LoC is mainly given for infrastructure projects such as power, road, and rail.

Mr Rasquinha said the bank is deeply involved in areas like soft skill development, capacity building, technology knowledge transfer and training in exports.

India is a leading nation in the global economy and facilitates development initiatives in many developing countries in general and Africa in particular, said Ms Margit Thomsen, Executive Director-NIS, African Development Bank. She said that despite the monetary crisis engulfing the many global markets including Europe, many African countries are registering GDP growth of 5-6%. Ghana has been consistently registering 13% GDP growth.

Yet, a large portion of the African population lives in poverty, she said pointing to the importance of inclusive growth. Ms Thomsen said like in India, Africa is also experiencing the emergence of a strong middle class. “But the challenge is inclusive growth, as 50% of the African population live in poverty,” she said adding that the human resource challenges in Africa will be enormous with Africa touching 2.5 billion population by 2050.

Talking about South South Cooperation and the India’s leadership role in promoting it, she said that this cooperation framework will guarantee inclusive growth in African through transfer of relevant technologies, and financing of development initiatives.

Focusing on bilateral trade relations, she said the larger part of Africa’s trade is with BRIC countries. “At present, the bilateral trade between India and Africa is touching \$46 billion. But it can go up to \$75 billion by 2015,” she remarked adding that India should be the leading partner in the growing global trade with Africa. “Many of the emerging trade partners are also investing in Africa and they are proving to be highly effective in meeting Africa’s developmental objectives including infrastructure development,” she said while quoting a recent study.

Commenting on green initiatives taken by India in areas like renewable energy programmes, green manufacturing policy, climate change initiatives, etc, she said 5% of India’s investments in Africa are in green projects. “We need more investments in green

projects for sustainable development,” she opined adding that the continent has the potential to leapfrog in the renewable energy sector.

Referring to the various financing initiatives, she said ADB provides guarantees to SME projects, trade financing, and encourages public-private partnerships.

Stating that 6 out of 10 growing countries in the Africa offer excellent return on investment and macroeconomic stability, Mr Amr Kamel, Director, Banking Operations, Afrexim Bank, emphasised that the prospect of South-South investment cooperation is enormous.

Currently, trade between Africa and BRIC countries stands at 20% of their respective trade volume. “It can go up to 50% by 2030,” he suggested.

Inviting India to be part of the stakeholding of PTA Bank, Mr Alex Gitari, Director, Finance, PTA Bank, said China is part of the Board of Governance of the bank which has got representation from 18 countries. He said that Government of India and EXIM Bank of India in particular have helped African countries in developing infrastructure. “We have utilised \$100 million of LoC provided by the EXIM Bank of India and the projects executed with this financing option are 100% successful,” he said adding that the bank supports India and Africa cooperation across diverse business sectors. “We have a subscribed capital base of \$1.3 billion,” he said.

In terms of financial support, the PTA Bank provides trade financing, supports import and export of critical materials from the member countries, and infrastructure financing for developing infrastructure in all sectors with a minimum loan of \$ 1million for a tenure of 15 years. “If the project is of strategic importance the infrastructure loan can go up to \$ 5 million,” he said.

To take the India Africa partnership in investment financing to the next level, he recommended that private investors from India should get into joint ventures with African counterparts for infrastructural development. “The challenge is to create a win-win situation,” he observed.

Mr M Bassary Toure, Vice President, BOAD, said that the commercial sector takes 53% and non-commercial sector 47% of the total project funding of the West African Development Bank. He said that at present the focus of investment financing is largely on infrastructural development. “We need to focus on innovation and social infrastructural development,” he said. The bank has contributed 40% of investment requirements of the energy sector in western Africa.

In the interactive session, the panelists viewed that the PPP model should be encouraged for infrastructure development in the Africa. Concerns were also raised on the issue of slow implementation of projects due to financing and administrative problems.

EXIM Bank of India's latest report on 'Trade and investment potential between Indian and southern African investment communities' was released at the session.

### **Plenary III: Partnerships to Harness Human Potential**

Session Moderator: Mr Gurjit Singh, AS – ESA, Ministry of External Affairs, Government of India

Panel: Dr. Kaba Urgessa Dinssa, State Minister of Education, Republic of Ethiopia

Ms Marie Genevieve Stephanie Anquetil, MP, Mauritius

Mr P Rajendran, COO, NIIT

Mr Alaya Bettaieb, Minister of State for International Cooperation, Tunisia

Mr Maiozo Sichone, MP, Zambia

Dr Naresh Trehan, CEO, Medanta

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"Human resources in Africa, like human resources in India, are youthful, vivacious and looking to the future," said Mr Gurjit Singh, Additional Secretary, MEA, Govt of India.

In regard to bilateral cooperation, he cited four different capacity building initiatives underway, as per the announcements made at the India-Africa Forum Summit. He added that these capacity building initiatives are meant for young parliamentarians, government officials, professionals at chambers of commerce, and mediapersons from Africa.

India offers around 22,000 scholarships to students of Africa every year. African nations need to reach out to India to access support and expertise in these, he said.

Mr Singh said the essence of India-Africa partnership lies in people-to-people relationships. He informed that India is committed to build over a 100 capacity building institutions in Africa over a period of time.

Mr Kaba Urgessa Dinssa, Education Minister, Ethiopia, lauded the role of CII in boosting India-Africa economic cooperation. He observed that the Ethiopian government has implemented policy changes, resulting in double digit GDP growth and improvements in the domestic education sector. However, the country faces acute shortage of faculty, particularly in disciplines like business studies, economics and engineering. Indian professionals could bridge this capability gap.

Ethiopia pursues investor-friendly policies, and this should indeed attract Indian investors in greater numbers, he said.

Ms Marie Genevieve Stephanie Anquetil, MP, Mauritius stated that her country has had a long-standing relationship with India. Education has emerged as a major area of cooperation with a number of Indian educational institutions setting up their branches in Mauritius. She observed that the medical sector engages people from both countries, and Indian companies like Fortis are already having a presence in Mauritius.

Mauritian nationals are receiving training in accounting, banking, diplomacy, IT, defence, security, parliamentary practices in India. She stressed the need to strengthen cooperation in areas like hospitality and tourism. Mauritius also benefits from tele-medicine facilitated by the Pan Africa eNetwork (PAN0 project).

Mr P Rajendran, COO, NIIT, said his company has played a pioneering role in spreading IT education in Africa. He stressed that leveraging technology alone will drive human capacity development. Rajendran said the current situation in Africa demands three-pronged skill development: bottom-up, lateral, and top-down.

Mr Alaya Bettaieb, Minister of State for International Cooperation, Tunisia, underlined the importance of people-to-people contacts within the overall India-Africa engagements. He lauded the efforts for Muhammad Yunus of Bangladesh who led the microfinancing movement in Bangladesh.

Mr Bettaieb underscored that venture capitalists can play a crucial role in the development of Africa and said that the mining sector is primed for such investments.

Mr Maiozo Sichone, MP, Zambia laid emphasis on driving Green Revolution in his country and the role that India can play in this direction.

Dr. Naresh Trehan, Chairman & Managing Director, Medanta stated that India and Africa need to team up to fuse the advantages of traditional medicines with modern medicine to make healthcare affordable in Asia and Africa. He mentioned that 20 years ago the situation in healthcare in India was the same as it exists in Africa today. There was dearth of physicians and hospitals. India along with several other countries, including those from Africa, became signatories to the 1978 Alma Ata Declaration which underscored the significance of primary healthcare and gave the slogan of “health for all” as a goal to be achieved by 2000. Dr Trehan mentioned that McKinsey was commissioned to do a reality check on the state of healthcare facilities in India.

Dr. Trehan said that India has since achieved very positive results, and can provide international standard healthcare at one-tenth of the cost elsewhere. However, he cautioned that if the people of India and Africa do not devise their own ways instead of adopting what the West does, they will not be able to make healthcare available to a large section of their population.

### **Parallel Session I: UNDP Session on Biomass-based Power Production**

Session Moderator: Mr Srinivasan Iyer, Assistant Country Director  
(Energy & Environment), United Nations Development Programme

Panel: Ms Alexandra Solovieva, Deputy Country Director (P),  
UNDP

Mr Ashok Chaudhuri, General Manager, Ankur  
Scientific Energy Technologies Pvt. Ltd

Mr Gaurav Narang, Malwa Power Plant Ltd

Mr V K Jain, Director & National Project Coordinator,  
UNDP/GEF Biomass Power Project Ministry of New  
and Renewable Energy, Government of India

Mr B V Rao, General Manager, IREDA

Dr S N Srinivas, Programme Analyst (Energy and  
Climate Change), UNDP

Mr Martin Krause, Team Leader - Environment and  
Sustainable Development, UNDP Thailand

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The session directed attention on the factors that underscore the growing need for biomass power generation, and the challenges that biomass power companies face in terms of fuel availability, financing of business, cost of power generation, among others.

Ms Alexandra Solovieva, Deputy Country Director (P), UNDP, noted that increasing climate change fears, rising fuel prices and the current energy production and consumption patterns make a strong case for promotion of biomass-based power production. However, progress on this count is not “fast enough”. This will change as more private enterprises explore the opportunities to invest in environmentally sustainable businesses.

Ms Solovieva said that prices of non-renewables will continue to increase and there will be less secure access to these resources in the coming times. This situation can be counterbalanced with the creation of commercial opportunities in environmentally sustainable businesses.

The increasing cost of energy signals the need for developing renewables. High energy costs are affecting the competitiveness of manufacturing firms in diverse areas including steel, ceramics, etc.

Ms Solovieva said that UNDP is acting in consort with several national governments to encourage the creation of a favourable environment for clean tech development and promotion. The objective is to create an eco-system that supports expert advice, training of people in the supply chain and shopfloor workers, etc. She said that institutional finance for clean tech needs greater focus.

Ms Solovieva noted that India has taken bold steps in this direction by putting in place the Energy Conservation Act, Bureau of Energy Efficiency, etc. Similar initiatives could be taken across Africa too.

Mr Ashok Chaudhuri, General Manager, Ankur Scientific Energy Technologies Pvt. Ltd, said that large biomass gasifiers face the problem of getting adequate feedstock, whereas the smaller units are able to manage the inputs more efficiently.

He said that biomass power producers use less diesel power, and less space and water. This is highly environment-friendly. Units of 11KWe are net producers of electricity and operate round the clock, meeting the rural electricity needs quite

efficiently. By linking the 11 KWe units at the tailend of the grid, grid problems like T&D losses can be addressed, he said.

The social benefits are many, such as, creating wealth from waste, new employment generation, greater income distribution, greater opportunity for rural entrepreneurship, and green electricity generation.

Bio-mass power generating units have 80% plant load factor, and do not cause environmental pollution. They also yield charcoal that can be used for domestic energy purposes. The capacity of gasifiers range from 10KWe to 2MW.

Biomass gasifiers in India largely use rice husks, agriculture residues, wastewood, branches and twigs, bamboo and pine needles, sugarcane, and wild bush. Propagation of some of these raw materials has contributed to the greening of wastelands.

Biomass electricity supports irrigation, rural electricity, and grid power, among other uses. Some of the by-products of biomass power generation are also used as bio-fertilisers.

Mr Gaurav Narang of Malwa Power Plant Ltd said that biomass generation unlike solar and wind power generation is not location-dependent, and requires less investment. Biomass is available everywhere, and it is “a pure play business”. The main challenge is to arrange adequate volume of fuel, he said. His company uses gasifiers that can run on multiple fuels, and hence is able to curtail the inputs costs. The company has also undertaken energy plantation, planting ‘napier’ crops on 500 acres.

Mr V K Jain, Director & National Project Coordinator, UNDP/GEF Biomass Power Project Ministry of New and Renewable Energy, Government of India, said there is 16,000MW biomass energy potential in India. However, 70-75% of the biomass is being used as fodder and only 120-150 million tonnes is going for biomass electricity generation.

He said that one key impediment is lack of site-specific information on biomass availability.

Mr B V Rao, General Manager, IREDA, said the promotion of biomass power generation is constrained by lack of long-term policies at the state level. Tariff levels vary widely between states. Biomass plants come up in rural areas where the grid is weak.

This industry needs efficient systems handling and transportation support, he explained. Biomass units in the rural areas also face constant power tripping. And as their productivity dips, the chances of loan default also increase.

Mr Rao suggested that biomass power tariff must be linked with biomass production costs.

Dr S N Srinivas, Programme Analyst (Energy and Climate Change), UNDP, said that biomass power generation can curb the 25,000-30,000MW deficit diesel power generation to a great extent. He said the key challenges are access to proven technologies, lack of proven revenue models, competing uses of biomass, lack of investor interest, and lack of tariff systems for off-grid power.

Mr Martin Krause, Team Leader - Environment and Sustainable Development, UNDP Thailand, said that back in 2001 there were very few biomass plants in Thailand. But today the country has seen a steady increase in biomass power generation, supported by fuel price risk management, a supportive policy environment, access to commercial loans at favourable terms.

In the interactive session, Mr Krause said that Asia has larger biomass projects than Africa. The key constraints in Africa are high custom duty on equipment imports, limited capacity of local technicians, and limited credit availability for biomass power companies.

Mr Rao said that 99% of biomass power generation is installed in rural areas. What is needed is a realistic assessment of biomass availability and utilisation.

The session concluded with the panelists making a strong case for policies to be made more favourable for biomass power generation.

## **Parallel II : Guest Country: Central African Republic – Agenda to enhance Investment**

Session Moderator: Mr K S Aswathanarayana, CEO, Jaguar Overseas Ltd

Panel: Mr Anicet Parafait MBay, Minister of State, in charge of Transport Development, Central African Republic

Mr Leopold Mboli Fatran, Minister for Energy and Hydraulics, Central African Republic

Mr Fidele Goundjika, Minister of Agriculture and the Rural Development, Central African Republic

Ms MaryIn Mouliom Roosalem, Minister of Commerce and Industry, Central African Republic

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Located at the heart of Africa, Central African Republic is rich in mineral deposits and natural resources, much of which are untapped owing to limited physical infrastructure. As the country unfurls a series of political and economic reforms, investment opportunities are opening up for overseas companies.

Elaborating on private investment prospects in Central African Republic, Mr K S Ashwathanarayana, CEO, Jaguar, said Indian business could invest in projects covering mining, energy, infrastructure, telecom and housing, among others. There are more than 30 locations where hydropower plants could be set up. Abundant availability of limestone also makes it attractive to set up cement plants. India could also share its know-how in infrastructure development and housing. "We could also share our experience in housing. This could be used to address the shortage of affordable housing in the capital city of Bangui," said Mr Ashwatnarayan.

Central African Republic is aiming for investments across core sectors including transport, energy, agriculture, health and infrastructure. "We want to mobilise this partnership for development of infrastructure in our country. As you are aware, we are a landlocked country. The country gets heavy rainfall and most of our infrastructure is in a bad shape. We need better road, rail, other forms of transport, and water supply," explained Mr Anicet Parafait MBay, Minister of State, in charge of Transport Development, Central African Republic.

Mr MBay said that improved roads infrastructure will help the mining sector. He pointed out that the country is rich in deposits of uranium, diamonds and other minerals. "We are planning to modernise roads around Bangui .Once the road network is set up we will be able to exploit the minerals around these areas," he said.

Some of the key development programmes on the anvil are: construction of three hydroelectric power stations on the watercourses in Dimboli, Kotto and Baidou; building of a bridge on river Ubangui between Bangui and Zongo, and electrification of the Zongo town.

Mr Leopold Mboli Fatran, Minister for Energy and Hydraulics, Central African Republic, said the country's energy potential has not been fully tapped into. As a case in point, the country has vast water resources but the people do not have sufficient access to drinking water. The government is looking for funding in all these areas including energy segments like renewables. "We know that India has launched widescale programmes on renewable energy including wind energy. We have come here to learn about these and to get the supported of India," said the minister. "Our institutional and legal frameworks allow companies to easily invest in these sectors."

In the agriculture sector, Central African Republic has two major Millennium Development Goals to be realised: poverty alleviation and food security. Considering that almost 62% of the population lives in rural areas, this is a large potential area for development and investment in these areas. "We see the agricultural sector as the basis of economic development. By 2015, we would want the agriculture sector to be profitable and productive. It should be able to create large-scale employment and income generator," said Mr Fidele Goundjika, Minister of Agriculture and the Rural Development, Central African Republic.

The government is also looking to mechanise and modernise agriculture. Lack of access to production facilities, limited use of automation and difficulties in accessing markets were cited as some of the key challenges for the sector.

Ms MaryIn Mouliom Roosalem, Minister of Commercial and Industry, Central African Republic, elaborated on how the government is taking initiatives to improve the investment climate in the country. "Given the geographical position of our country, we are at the crossroads of activities in the region. Central African Republic offers immense potential for investments and we have initiated numerous programmes to encourage investors." She also mentioned how the government has created a single window representing all the ministries in the country in the effort to facilitate investments. "This allows investors to set up a company in Central African Republic in less than seven days. Moreover we also offer substantial fiscal exemptions and custom exemptions depending on the strategic character of the activity."

The session concluded with the delegates agreeing that the bilateral ties will board a high growth trajectory in the coming years.

### **Parallel Session III: Agriculture: Leveraging Indian Model for African Growth**

Session Moderator: Mr L H Dabi, Member CII Africa Committee & VP  
Kirloskar Brothers Ltd

Panel:

Ms Amelia Muendane Nakhare, Deputy Minister of Planning & development, Mozambique

Mr Bright Rwamrima, Minister of Agriculture, Animal Husbandry & Fisheries, Uganda

Mr Shyam Vembar, Vice President - Agribusiness, Mahindra & Mahindra Ltd

Mr R K Agarwal, Chief Engineer – Rural & Urban Development, WAPCOS

Mr R P Singh, Adviser, Seftech India Ltd

Mr Rajiv Wahi, President, International Tractors Ltd

Dr S N Pandey, Director – Agro Tech Division Lucky Exports

Mr Mohammed, African Development Bank

### **Proceedings**

The African quest for self reliance in food and agricultural products was the focus of the deliberations. India's successful experience in increasing productivity and attaining self-sufficiency through the much heralded Green Revolution was cited as an inspiration for Africa in their journey toward food self-sufficiency.

Mr L H Dabi, Member CII Africa Committee & VP Kirloskar Brothers Ltd, initiated the session with a presentation on his company Kirloskar Brothers Ltd's forays into the agriculture sector in various African counties. In Senegal, the company achieved unprecedented success by delivering pumping and irrigation solutions that helped the country attain food production self-sufficiency. Today, the country's meets 59% of its food needs from domestic production. Rice production in the country has reached 600,000 tonnes, a six-fold increase in production in two years.

Mr Dabi said that India has already demonstrated to the world how food self-sufficiency could be achieved by way of a Green Revolution that was orchestrated in the country in the 1960s and 1970s. Out of India's 170 million hectares of arable land, 60 million hectares are under irrigation, which is one of the prime reasons for the country's successful journey to self-sufficiency in food production. He noted that today India is one of the largest producers of rice, milk, coffee, cotton etc: "We are talking about a Second Green Revolution in India," he said.

Mr Dabi pointed out that in the case of Africa, although the land is extremely fertile only 6% of the cultivable land is irrigated. Kirloskar Brothers provides affordable technologies to African countries to improve their irrigation systems.

Ms Amelia Muendane Nakhare, Deputy Minister of Planning & Development, Mozambique, said that Mozambique's ties with India in the farm sector are growing rapidly. The country has adopted structural reforms to fast-track sustainable social and economic development. As a result, the country has recorded annual growth of 8% which is among the highest among non-oil African economies. This achievement is also attributed to the country's political stability and its productive integration with the regional markets.

Mozambique is an agrarian country with agriculture accounting for 24% of its GDP. The main issues that the agricultural sector in Mozambique faces are: (i) low productivity levels; and (ii) lack of adequate mechanisation and irrigation. The goal of the country is to increase the annual agriculture growth to 7.5% which now stands at 5.5%.

Stating that increasing farm productivity levels and stimulating the small and medium enterprises are high on the country's agenda, she said that India's expertise is welcome in areas like (i) R&D; (ii) water conservation; (iii) irrigation; (iv) drainage facilities; and (v) agriculture technical training/agrarian technical schools. Mozambique government is committed to increase private sector investment in agricultural sector by providing infrastructural facilities and other administrative feasibilities, she said.

Giving the Uganda perspective, Mr Bright Rwamrma, Minister of Agriculture, Animal Husbandry & Fisheries, Uganda, said that 65% of Uganda's population of 34 million people are engaged in agriculture. He said that India could help the country with support in areas like (i) farm mechanisation; (ii) irrigation; (iii) fish farming; and (iv) R&D.

The main problems that Uganda faces in agriculture are related to: (i) water management; (ii) post harvest management; and (iii) value addition. He said that Indian companies investing in the farm sector in Uganda could benefit from the wider access to regional markets in eastern Africa. He reiterated Uganda's urgency to engage Indian entities in skill and knowledge development.

Mr Shyam Vembar, Vice President - Agribusiness, Mahindra & Mahindra Ltd, said the key challenges for Africa's agriculture sector include fragmented land holding, inadequate knowledge of farming technology, inadequate infrastructure, inadequate sources of financial solutions, limited market linkages, low level of mechanisation and poor economic support.

He suggested that the thrust should be on soil and water conservation, procurement systems, storage and transportation, advanced farming processes, mechanised farming, access to retail/modern retail chains and a free national market. Other major areas of importance in relation to value addition are: software, hardware and enablers. The software will be linked to the regulatory framework and policies like subsidy policies, access to market, and shall drive knowledge and technology dissemination. The hardware will include seeds, tractors and other equipment. Access to finance could be put under the bloc enablers.

He said that greater private sector engagement and public-private partnership in select areas would serve the economy well. Micro-irrigation, solar power development and water harvesting are some of areas where Indian companies could in a major way.

Mr R K Agarwal, Chief Engineer – Rural & Urban Development, WAPCOS, suggested that though the African continent has a lot of natural resources including water resources and cultivable land, agriculture has seen stunted growth. To jump-start the farm sector, the region will need to focus upon superior technological inputs, judicious use of irrigation water, farm mechanisation, use of high yielding seed varieties, effective measures to control insects and pests, green houses for cash crops, watershed management, and proper marketing and capacity building. He pointed out that finance is available for the sector but there is a lack of bankable projects. WAPCOS is operating in 25 countries across Africa, in areas like water conservation, power and infrastructural development and range of consultancy works.

Mr R P Singh, Adviser, Seftech India Ltd, reiterated the similarities – climatic, water, hard-working nature of people – between India and Africa. There is abundance of natural resources in Africa. India can do a lot for the further development of Africa, he suggested.

The main issues for the African agricultural sector are: (i) poor seed varieties; (ii) soil and water conservation; (iii) warehousing and storage; and (iv) food processing. The other issue is that productivity of staple foods in Africa is very low. Seftech owns large farms in Africa and has agricultural experts on its panel. The company's mission statement is promotion of agriculture by (i) increasing the area under high crop varieties of rice, wheat and maize; and (ii) enhancing farm production. At present Seftech has a 544,000-tonne rice processing facility and a 750,00-tonne wheat processing capacity. They also handle fruits and vegetables processing. He said that Seftech has 5,000 technology transfer licenses in its hand.

Mr Rajiv Wahi, President, International Tractors Ltd, said that in the face of growing world population, food security is a big issue to be tackled globally. Though Africa has

the most fertile land and enough water resources, they lack enough food supplies. Africa with its large fertile land and water resources has the potential to be the 'food grain basket of the world', he said. The need of the hour is a Green Revolution in Africa. Mechanisation, irrigation and training are going to play a very important role in achieving this objective.

The \$5 billion LoC opened for Africa by Indian government could be used by private sector in the agriculture sector too. Sonalika has a presence in more than 31 countries in Africa. 'We are very keen to increase our footprint in Africa. Let us work together to bring Green Revolution in Africa,' he said.

Dr S N Pandey, Director – Agro Tech Division Lucky Exports, said cotton grows in many African countries with Mali and Egypt producing 630 kg and 800 kg per hectare, respectively. Africa has good climatic conditions for cotton but the yields are very low. The main reasons for the low cotton yields are: (i) low irrigation (only 10-15% of area is cultivable); (ii) low yielding cotton varieties; and (iii) insufficient use of organic and inorganic fertilisers.

The high rate of Bt cotton use and ratio of NPR usage is a reason for the high cotton production in some other countries. African countries should adopt these productivity increasing methods in their cotton farming. Mr. Pandey said in Sudan there could be fruitful sharing of local and Indian cotton varieties. He specified some initiatives taken by the Indian cotton farming sector like less government intervention, modernisation, use of high yielding seeds and price support system as model policies for the grooming African cotton farming sector.

Mr Mohammed of African Development Bank -- a key financier and investor in Africa -- raised some key issues to be deliberated upon: (i) commercial viability of agriculture; (ii) food security; and (iii) proper environmental and social management.

The session concluded with the panel underlining the importance of food security for India and Africa, and how Africa could indeed become the future food basket of the world.

## **Parallel Session IV: UNDP Session on Energy Efficiency in Small / Medium Industrial Enterprises**

Session Moderator:	Mr Srinivasan Iyer, Assistant Country Director (Energy & Environment), UNDP
Panel:	Ms Svati Bhogle, Secretary, Technology Informatics Design Endeavour (TIDE) Mr Manoj Upadhyay, Director, MPK Steels (I) Pvt. Ltd Mr ACR Das, Industrial Adviser & NPC, Ministry of Steel, Government of India Dr S N Srinivas, Programme Analyst (Energy and Climate Change), UNDP Mr Martin Krause, Team Leader - Environment and Sustainable Development, UNDP Thailand

### **Proceedings**

More than 250 tea companies operating in south India were oblivious of the energy efficiency implications on their business until Technology Informatics Design Endeavour (TIDE) undertook an energy audit of their operations and subsequently advised them on adopting energy efficient systems. Providing an overview of the interventions made, Ms Svati Bhogle, Secretary, TIDE, said as a first step her team established baseline data on the energy consumption of these companies and educated them of the fact that energy inputs account for 40% of their manufacturing costs.

The tea companies use electrical energy for CTC, packaging activities and for the conveyor systems, whereas thermal energy is used for drying and withering activities.

For the tea industry that was coming out of a period of recession, energy efficiency was not a focus area. TIDE launched multi-pronged awareness building and communication programmes to educate the industry about energy efficiency. A set of ten films on energy efficiency interventions was developed and circulated among the companies.

TIDE conducted preliminary energy audit in 250 companies, detailed energy audits in 95 companies and developed technical reports for 100 companies. The team established one energy lab and four fuel labs in the tea clusters.

TIDE developed a self-assessment scorecard for the companies. “We were able to shift the focus of companies from access to finance to access to new technology.” In time, 214 of the 250 tea companies purchased 1,014 new energy efficient equipment. As a result of these interventions, an estimated Rs 12.5 crore savings were made by raising the energy efficiency levels.

These companies were able to make the big shift using their own resources, and without any subsidy or regulatory compulsions.

Mr Manoj Upadhyay, Director, M P K Steels (I) Pvt. Ltd, explained how energy efficiency levels were raised in his steel rolling plant. The initiatives resulted in 69.2% rise in productivity and 46.2% cut in energy consumption. Greenhouse gas emissions were also cut appreciably.

Mr ACR Das, Industrial Adviser & NPC, Ministry of Steel, Government of India, said that under the 12<sup>th</sup> Plan energy efficiency in the secondary steel sector will receive focused attention.

Dr S N Srinivas, Programme Analyst (Energy and Climate Change), United Nations Development Programme (UNDP), said the common learnings are: access to proven technologies, credible suppliers, baseline measurements, among others.

He emphasised the need for energy efficiency in the use of electric motors. 40% of electricity passes through motors.

The key learnings are: awareness levels, use measurement metrics, establish benchmark standards, policy interventions.

Mr Martin Krause, Team Leader - Environment and Sustainable Development, UNDP Thailand, spoke about energy efficiency interventions in Vietnam’s ceramic and brick kilns. The energy efficiency levels there were raised through awareness building initiatives, capacity building, financing of projects and technology demonstrations. Thus, traditional kilns shifted to vertical shaft kilns. Coal-fired ceramic kilns shifted coal to gas-fired kilns.

These companies used their funds or raised loans to meet the efficiency goals, he said. They recorded internal rate of returns of 18-20% within a timeframe of 2-3 years, a period in which they could repay their loans. “We also conducted financial risk assessments for the kilns,” he said. A Loan Guarantee Fund was also set up to facilitate easier credit flows. All this contributed to attractive RoI, a competitive business environment, reduced costs and a healthier environment.

The session directed sharp attention on the need for evangelizing energy efficient systems among industrial enterprises, both for commercial success and environment protection.

### **Parallel V: Eastern & Southern Africa – Taking the Partnership Forward**

Session Moderator: Mr D S Dhesi, Joint Secretary, Ministry of Commerce and Industry, Government of India

Panel: Mr Chirau Ali Mwakwere, Minister of Trade, Kenya

Mr Kebede Chane, Minister of Trade, Ethiopia

Ms Amelia Kyambadde, Minister Trade Industry and Cooperative, Uganda

Mr Robert K Sichinga, Minister of Commerce, Trade and Industry, Zambia

Mr Cyril August Chami, Minister for Industries, Trade and Marketing, Tanzania

Mr John Bande, Minister of Industries and Trade, Malawi

Mr Tjekero Tweya, Deputy Minister for Trade & Industry, Namibia

### **Proceedings**

“Lopsided balance of trade is not the way forward for regional economic cooperation,” stated Mr Chirau Ali Mwakwere, Minister of Trade, Kenya. Mr Mwakwere stated that today each nation has its own economic agenda, and hence regional cooperation is needed, and regional economic cooperation will become successful only if the growth strategies envisage a road map for meeting the objectives of individual nations.

He said that the balance of trade between Kenya and India is heavily in favour of India, and that it needs to be corrected. India should not keep all its manufacturing activities confined within its boundaries, but try to invest in countries like Kenya and benefit from the proximity of the regional markets. India will find great investment opportunities in infrastructure development, manufacturing capacity building, transport and corridor development, he said.

He added that India has made giant strides in economic development, but if it wants continue its march on the high-growth trajectory, it would need to find grounds of common synergy with African nations. Mr Mwakwere pointed out that one such area of synergy between Kenya and India could be the cotton industry in which India has the both the experience and the know-how.

Mr D S Dhesi, Joint Secretary, Ministry of Commerce and Industry, Government of India, informed that India has already started talks for Free Trade Agreement (FTA) with COMESA. He also stressed that there is a need for regional economic integration in Africa to make the region attractive for investments. Mr Dhesi pointed out that COMESA region has witnessed robust economic growth even when the world was facing economic recession. India mainly exports electrical and electronic goods, automotive components and pharmaceutical products to COMESA region. India's total trade with COMESA has risen three-fold between FY2004-05 and FY2009-10. During FY2009-10, the COMESA region accounted for around 38% for India's total exports.

Mr Kebede Chane, Minister of Trade, Ethiopia expressed gratitude to India for extending concessional LoC and for offering scholarships to the students of Ethiopia. India has invested \$ 5 billion in Ethiopia in industries like agriculture, pharma, and mining, etc. He further informed that in 2011 India's trade with Ethiopia stood at \$550 million.

India has already provided LoC for rural electrification and sugar production projects. The India Africa Cooperative Forum has helped Ethiopia in the development of railways. Mr Chane stressed that Ethiopia's ambitious but achievable plan for infrastructure development requires huge investments, and therein lies the opportunity for India. He said that India can help Ethiopia improving its service delivery system and invited Indian investors to participate in this.

Ms Amelia Kyambadde, Minister Trade Industry and Cooperative, Uganda, pointed out that the India-Africa partnership has to focus upon a sustainable framework in which trade flows are not lop-sided. Africa offers abundant natural resources and low cost labour, but there are many challenges to be overcome. She mentioned that trade deficit, inadequate access to financial services, infrastructure connectivity, low purchasing power and high mortality of MSMEs are among the main challenges. She stressed that African countries need to learn from Indian work culture and ethics, savings habit and investment culture and corporate best practices. She urged the governments to bring down the non-tariff barriers.

Mr Robert K Sichinga, Minister of Commerce, Trade and Industry, Zambia underscored the need for free trade agreements, and tripartite agreements to pave the way for

foreign investments in Africa. He also said that African countries including Zambia do not want to just export their raw materials. Countries like India need to come forward and produce finished products locally to make the trade relationship sustainable.

Mr Cyril August Chami, Minister for Industries, Trade and Marketing, Tanzania, noted that Tanzania is mainly an agricultural country but only 11 million hectares of land has been cultivated. Around 71 million hectares of land is waiting to be utilized, which can happen through foreign direct investment.

Mr Chami lauded India's strong linkages with regional integrative forces in Africa. He pointed out that Indian companies should look to set up manufacturing facilities in Tanzania to produce and process products locally. He added that Tanzania is a poor country, and if the products are produced locally, the companies will not only generate employment opportunities but also make basic goods available to the people of the region at fair prices. He said that Indian companies operating in Tanzania are likely to face power and infrastructure issues but these are not insurmountable.

Mr John Bande, Minister of Industries and Trade, Malawi, observed that regional partnership and robust partnership programs can play a crucial role in the growth story of Africa. He cautioned that the roadmap of these partnerships has to accommodate the economic aspiration of the economic groupings.

Mr Tjekero Tweya, Deputy Minister for Trade & Industry, Namibia, stated that equitable growth and mutually beneficial strategies will be crucial toward making India-Africa partnership sustainable. Reducing tariff barriers will also pave the way for more FDI in the region.

Mr Tweya observed that today India is emerging as an economic superpower; and the Conclave offered African nations an opportunity to partner with India so that both can benefit from the mutually beneficial economies of scale in business. Countries like Namibia need to enhance trade and business opportunities with India to reduce, if not completely eliminate, poverty of its people.

Infrastructure development in Trans-Kalahari corridor offers India a great opportunity to invest and be part of the Africa growth story. Mr Tweya stated that Namibia looks forward to India to turn its natural resources into economic wealth through value addition with the help of India's technological prowess. Namibia wants equitable growth of its country by forging mutually beneficial economic and trade relationship with India.

The session deliberated on strategies and recommendations on broader terms to enhance the COMESA's region's economic relations with India, encompassing in its

ambit areas like agriculture, natural resource, pharmaceutical industry, hospitality industry, etc. as well as issues related to lines of credit.

### **Parallel Session VI: IT & Communications: Enhancing Engagements**

Session Moderator: Mr Tanmoy Chakraborty, Member, CII–Africa Committee & Vice President, Tata Consultancy Services (TCS)

Panel: Ms Ndikumana Victoire, Minister of Trade, Industry, Posts and Tourism, Republic of Burundi

Mr Rajiv Mehrotra, Chairman & MD, Vihaan Networks Ltd

Mr S Swaminathan, CEO, IRIS Business Services Ltd

Mr Karim Ajnarwala, Senior Partner, Anjarwalla and Khanna, Kenya

Mr Kunwar Kishore Arora, Country Head, NCR Services, India

### **Proceedings**

India has built up remarkable ICT capabilities. Stating this, Mr Tanmoy Chakraborty, Member, CII–Africa Committee & Vice President, TCS, said mobile services within the country covered 90% of the total population. Yet, the digital divide exists. “The situation in Africa is a lot similar; we can share our experience and strategies,” he said adding that both India and Africa should bring the benefits of IT and telecom to the deprived sections of society.

Talking about the other challenges in Africa and India, he said that the shortage of power and other infrastructure will hinder the IT and communication progress. “We can’t take the examples of the West which has no infrastructure shortage. We need big investments to counter infrastructure challenges and make progress in IT and communication,” he said.

Ms Ndikumana Victoire, Minister of Trade, Industry, Posts and Tourism, Republic of Burundi, said IT could catalyse the development in Africa. “IT can bring about an economic revolution. Productivity, cost reduction, real time information flow, employment and income generation, and good governance are possible with the effective use of information technology,” she said adding that it would help Africa to be part of the global village.

Referring to the PAN project, she said that IT is the solution for inclusive development. "India should double its efforts to help Africa in this regard," she said pointing out that training, IT equipment manufacturing and infrastructure development should be part of the overall package.

Elaborating on inclusive growth, she said, "Rural Africa should benefit from the IT development." African countries are revising their respective legal frameworks to create a better investment climate in the continent, she said.

She said the challenges and shortcomings could prove to be the business opportunities for Indian companies. "IT can revolutionise other sectors like banking, education, BPO etc," she said.

Taking a cue from the session moderator, Mr Rajiv Mehrotra, Chairman & MD, Vihaan Networks Ltd, said that western technologies are not suited for Africa. "In the case of mobile services, they use equipment that largely runs on diesel which in turn increases the operating cost. Call rates are therefore very high in Africa," he said. "In Africa and India there is enormous shortage of power. Even in a country like Uganda, where oil is comparatively cheap, telecom operators are spending heavily on diesel to run power mobile towers," he remarked.

Talking about India, he said the rural sector contributes significantly to the national GDP. "Rural people will accept any new technology once they perceive the benefit. Africa has to learn from the Indian experience," he said adding that average calling minutes per person is very high in India. "Capital costs have hindered mobile penetration in Africa," he said and suggested that India could offer more appropriate telecom technologies to Africa.

Akash Tablet is another example of an affordable, appropriate technology that can be shared with Africa. "Cheaper IT solutions will help the African economies grow," he said adding that only appropriate ICTs can help reduce the digital divide.

Giving the example of Macedonia for improving their position in the World Bank's global investor friendly nation rating from 67 to 6 within a year, Mr S Swaminathan, CEO, IRIS Business Services Ltd, said, "Adoption of the Extensible Business Reporting Language (XBRL) tool has helped the country improve its investment climate," he said adding that South Africa has already implemented this and six other African countries are planning to implementing it. "Macedonia implemented a platform based on XBRL to ease the process of starting a business. Earlier, it used to take 48 days to complete the process of starting a business. Now it takes only 4 hours," he said.

Giving more details on XBRL, he said it standardises information. “In India, all Mutual Funds are filing their respective returns with Sebi using the XBRL platform. All banks are filing their respective returns with RBI using the XBRL platform and many individuals are using XBRL to file their income tax returns,” he said adding that it helps government agencies to make public expenditure more accountable.

Talking from the financial inclusion point of view, he said, “XBRL allows companies to file their results in English, and those results can be understood in any language. This allows people to participate in the organised business transactions and small investors would benefit from this immensely.”

It allows the possibilities of investing in a country without even visiting that country for approvals. “India and Africa are late to the party,” he said adding that analysts are demanding that data should be processed in XBRL, as it can reduce cost, increase productivity, enhance corporate governance and transparency.

Talking about providing internet connection in hinterlands in Africa, Mr Karim Ajarwala, Senior Partner, Anjarwalla and Khanna, Kenya, said, “Three fiber optical cables are entering from the eastern African coastal side. Now the opportunity lies in providing last-mile connection.” The fastest mobile and Internet penetration is happening in Africa.

Mr Ajarwala said that ICT is the lynchpin of the development agenda in Africa. “Farmers could raise their income and productivity levels by accessing ruling prices real time. Developments like this will help poverty alleviation in a major way,” he said.

Mr Kunwar Kishore Arora, Country Head, NCR Services, India, said innovation should be a key focus area for IT development. “People will embrace technology once it is provided cheaply by designed innovatively.”

## **Parallel VII: Indian Health Products for African Markets: Increasing Access & Improving Health Outcomes**

Session Moderator: Mr Pronab Sen, Principal Advisor, Planning Commission, Government of India

Panel: Mr Alexandre Manguela, Minister of Health, Mozambique

Dr Johny Kalonji, Medical Advisor to the Minister, Ministry of Health, Democratic Republic of Congo  
Mr Arun Kumar Khanna, COO & Executive Director, Emcure Pharmaceuticals

Mr Ranjan Chakravarti, Senior Vice President – Global Strategy, Ranbaxy Laboratories

### **Proceedings**

With India emerging as a hub of high quality, low cost, innovative health products, it has become an important source of affordable medicines and healthcare services for the people of Africa. “We have a range of Indian companies that can compete with the multinationals,” said Mr Pronab Sen, Principal Advisor, Planning Commission, Government of India. “Pharma companies play an important role in expanding the reach of the healthcare network to the remotest parts of the country,” he said.

Mr Alexandre Manguela, Minister of Health, Republic of Mozambique, said his country would not want to be left behind in terms of modern healthcare. “We are making the effort to train our doctors, improve medical education and other healthcare facilities in our country,” he said.

African countries are looking towards India for support in creating the most modern and advanced healthcare facilities at optimum costs. “We want best quality at best price,” he emphasised. Mr Manguela mentioned that to improve the healthcare infrastructure in the country by tapping into capabilities extant in the region. For instance, they are trying to resolve some of their problems by accessing facilities in neighbouring countries like South Africa.

Dr Johny Kalonji, Medical Advisor to the Minister, Ministry of Health, Democratic Republic of Congo, highlighted another key area for development. “For many years we have been transferring patients to leading hospitals in India like Apollo, Max, and Medanta. We are keen to have such facilities in our countries.” Dr Kalongi explained how Indian authorities can help in transfer of technology, equipment and medical expertise. “Indian doctors can come and train our doctors and help equip our hospitals and infrastructure,” he said.

While discussing the benefits that Indian pharmaceutical companies could bring to Africa, Mr Manguuele brought forth the critical issue of quality. “Some people in Africa feel that medicines from India are not of good quality. We need to change this perception,” he said. He pointed out that monitoring quality becomes difficult as there are thousands of pharma companies in India exporting medicines to Africa.

Mr Arun Kumar Khanna, COO & Executive Director, Emcure Pharmaceuticals, explained that the top 50 pharma companies in India are certified by the Indian Medical Association and they enjoy 90-95% share of the total Indian pharma presence in African markets. “So, this is a simple way to see which companies you have to do business with,” he said. Moreover, increase in quality control labs and drug inspection will also help minimise the issue of quality. Among the other measures that can be taken to administer quality are use of quality certifications and insistence on norms set by reputed organisations like WHO. Governments must also play a positive role in implementing these norms.

The panelists agreed that to foster business between the countries it is very important to build trust among the partners. Mr Ranjan Chakravarti, Senior Vice President – Global Strategy, Ranbaxy Laboratories, shared his company’s experience of doing business in more than 42 African countries. According to him, frequent interactions among the people of the two countries will help change the negative perceptions and generate more confidence.

Discussing the challenges that Indian companies face in Africa, Mr Chakravarti said there was a need to harmonise the regulatory structures in Africa. The large number of countries and their different regulatory systems make it tough for Indian companies looking at setting up base there. Inadequate banking facilities and distribution networks are some of the other key issues that need to be addressed.

Mr Khanna agreed that his company has had to deal with similar problems. “We also faced difficulties in getting letter of credit and faced the problem of reach and accessibility in certain areas. But, over the years we have learnt to work our way around

these challenges.” However, he suggested that the governments in Africa must focus upon improving the distribution challenges. According to him, inefficiency in the distribution structure can multiply the cost of drugs several fold. If African countries are looking at India for affordable drugs, this problem will need to be addressed. One possible way to restrict is to go the Mauritius way; they have to put a cap on the distributor’s margin at 28%.

To encourage more Indian pharmaceutical companies to invest in Africa, the host countries should also look to ease the regulations and facilitate business by setting up free trade and economic zones.

Indian companies like Ranbaxy and Emcure that have been doing business in Africa for many years say they have observed a positive change in these markets in recent years. “The public sector system in Africa is well established. Things are happening and are time bound,” said Mr Khanna. “The level of awareness and skills has also increased over the years.”

African governments are now keen to tap the advantages that Indian companies can offer in terms of quality and affordability. This can help them resolve their healthcare woes by reaching out to a larger population with drugs at lower costs.

The panelists reiterated the huge potential of Africa as a destination for Indian health companies. Spend on healthcare is as high as 10% of GDP in some of the countries. The African healthcare market presents a great opportunity for Indian pharma and healthcare entities.

### **Parallel Session VIII: North & West Africa: Renewing Old Partnerships, Seeking New Engagement**

Session Moderator:	Mr Ravi Bangar, Joint Secretary – West Africa, Ministry of External Affairs, Government of India
	Mr Rajiv Wahi, President, International Tractors Ltd
Panel:	Mr Stephane Brabant, Lawyer (Partner), Herbert Smith Paris LLP
	Mr Nganou Djoumessi Emmanuel, Minister of Economy, Planning and Regional Deelopment, Republic of Cameroon

Mr Kwesi A Seleagodji Lolonyo Ahoomey-Zunu,  
Minister of Trade and Private Sector Promotion,  
Republic of Togo

Ms Mista Beysolow, Minister of Commerce & Industry,  
Republic of Liberia

Ms Claudine Munari, Minister of Trade and Supplies,  
Republic of Congo

### **Proceedings**

India's strong ties with North & West African countries reverberated in the deliberations. Indian companies have played a key role in the development of these regions. Representatives from the region eagerly welcomed Indian companies to invest in their countries.

"North & Western African states are undergoing major economic transformation, triggered by political and economic policies," said Mr Ravi Bangar, Joint Secretary – West Africa, Ministry of External Affairs, Government of India. Indian companies are invested in North & West Africa in various fields like agriculture, mining, manufacturing, telecom, IT, healthcare, among others. The changing political scenario in the northern region has created new business possibilities for Indian investors.

'A vibrant young population is the common feature of India and Africa,' he said. There are many sectors like agriculture, and small and medium enterprises where North Africa would look to collaborate with India. In West Africa, India's largest trade partner is Nigeria and with other countries in that part too India has strong ties.

Mr Bangar said that India has strengthened its diplomatic and economic ties with most North and West African countries. The run-up to the next Forum Summit to be held in New Delhi in 2014 will see many new developments in these bilateral engagements, he reckoned.

Mr Stephane Brabant, Lawyer (Partner), Herbert Smith Paris LLP, said although West Africa is a relatively untapped market for Indian companies because of historical reasons and language barriers, the situation is changing now. Indian business has taken cognizance of the efforts of West African states to usher in regulatory regimes, investment-friendly laws, protection of human rights, among other positive developments. West African countries have demonstrated great willingness to form a common market. Democracy, good governance and the fight against corruption have greatly helped these countries in their integrative efforts. These countries today offer

highly investor-friendly policies. He hoped that India would soon sign the treaties to avoid double taxation with countries in the region.

Mr Nganou Djoumessi Emmanuel, Minister of Economy, Planning and Regional Development, Republic of Cameroon, said the bilateral ties with India are growing steadily. Cameroon is pursuing a strategic action plan which considers energy, economic and financial governance as high priorities. He sought international cooperation and support from external partners for financing and know-how.

Cameroon is taking strident steps in pursuit of good governance, and has created the necessary conditions for private sector investments to grow. Mr Emmanuel said these conditions should raise the confidence of Indian companies to invest in the country, in areas like mining, infrastructure, services, tourism and construction.

Mr Kwesi A Seleagodji Lolonyo Ahoomey-Zunu, Minister of Trade and Private Sector Promotion, Republic of Togo, elaborated on the deepening cooperation between African states and India. He suggested that in the field of healthcare India could offer affordable medicines to fight diseases like AIDS and malaria.

He expressed deep appreciation of the Indian government's concessional lines of credit extended to Africa. Indian government scholarships for African students, and Indian industry's growing engagements in sectors like telecom, agriculture, mining, hotels, roads, railway and constructions were cited as the highlights of the bilateral ties.

Looking ahead, he suggested an audit of the cooperation endeavour, and sharper focus on areas like agriculture production, agriculture research, telecom, transportation, housing and joint production of medicines to quell AIDS and malaria.

Ms Mista Beysolow, Minister of Commerce & Industry, Republic of Liberia, said since the political conflict has been resolved, Liberia is rapidly moving towards development. The country has huge investment potentials. Peaceful elections conducted recently has helped the country gain the confidence overseas investors. A new incentive code and a revenue code have been enunciated. Liberia has 42% of West African forests, extensive coastline, and huge deposit of iron ore, gold and diamonds which attract an array of investors.

She proposed closer cooperation in areas like saw mills, agribusiness, agro industries and infrastructural development. She said that greater focus on South South Cooperation will prompt Indian investors to invest in Liberia and employ the relatively cheaper labour to tap Liberia's potential markets that include Europe, US and regional African markets.

Ms Claudine Munari, Minister of Trade and Supplies, Republic of Congo, deliberated on the abundance of natural resources that the country affords to Indian investments. Capital inflows into mining (iron, potash, zinc, copper, manganese, silver and diamond), oil and gas production and railways are some areas that stand out for bilateral cooperation. Deep water ports, special economic zones, interconnecting roads, huge sub-regional markets and government reforms to improve business environment were cited as strong reasons to drive Indian investment in Congo. He stressed the need for developing internal processing of raw materials and thus create local employment.

The co-moderator, Mr Rajiv Wahi summed up the discussion by noting that Indian technology and products are relevant, adaptable, affordable and appropriate for the African markets. The session ended with a consensus view that a positive transformation is taking place in North & West Africa and spawning new business opportunities for foreign investors.

### **Parallel Session IX: Power: Setting a Sustainable Partnership Agenda**

Session Moderator: Mr K K Kapila, CMD, Inter-Continental & Technocrats Pvt Ltd

Panel: Mr Humberto Brito, Minister of Tourism for Industry and Energy, Republic of Cape Verde

Mr Anupam Mishra, Additional General Manager (Hydro), WAPSCOS

Mr Sanjay Sainani, CEO, Sterling & Wilson International

Dr Arul Shanmugasundram, Vice President, Solar Tata International

Ms Saffia Patel, Partner, Webber Wentzel, South Africa

Mr A K Gupta, Vice President, Angelique International Ltd

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Demand for power is directly proportional to economic growth. Stating this, Mr K K Kapila, CMD, Inter-Continental & Technocrats Pvt Ltd, said, "Africa's largest infrastructure needs are in the power sector - whether measured in generating capacity, electricity consumption, or security of supply."

He said that excluding South Africa and Egypt, no more than 20% (and in some countries as low as 5%) of African population have access to electricity. This figure falls to an average of 2% in rural areas where the majority of Africans live—a far cry from the 35% consumption level, or more, that African leaders wish to achieve in the near- to medium-term.

Mr Kapila said African countries must think out of box. “The sun is free and inexhaustible. Many African countries receive on average 325 days per year of bright sunlight. This gives solar power the potential to bring energy to virtually any location in Africa without the need for expensive large scale grid level infrastructure development. Africa has a long coastline, where wind power and wave power resources are abundantly available but underutilised. Geothermal power has the potential to provide considerable amounts of energy in many eastern African nations,” he said.

Renewable energy can play a cost-effective role in the strategy to eliminate power poverty in Africa and to attain Millennium Development Goals by 2015, he said.

Talking about Indian power scenario, he said at present India accounts for 4% of global power generation, and has the fifth largest generation capacity in the world. “India has been playing a huge role in the power sector development of various countries, including countries in Africa in terms of technology transfer, project exports, and infrastructure building across power generation and transmission streams,” he said adding that India-Africa partnerships are already contributing to power generation across Africa. However, the number of people benefiting remains too small to effect systemic change.

Explaining the power sector situation in Republic of Cape Verde, Mr Humberto Brito, Minister of Tourism for Industry and Energy, Republic of Cape Verde, said his country has attained 95% electrification in 2010. The economy is growing so the country would require 300MW of electricity by 2020 and “for that we need 500 million euros”. “To meet the future requirements we have to have private sector investments in the power sector,” he said inviting the Indian companies to his country for developing power infrastructure.

Talking about sustainable power generation, the minister said that renewable energy stands at 25% of total power generation. “The country wants to increase the percentage of renewable energy,” he said.

Explaining the various projects executed by his company in Africa, Mr Anupam Mishra, Additional General Manager (Hydro), WAPSCOS, said mid-course corrections and post-project evaluation have helped the company in improving the execution and completion

of projects efficiently. “Utilising the local manpower is part of our execution plan,” he said.

Talking about the objective of WAPSCOS, he said the organisation continues to transfer know-how to other developing nations. “We specialise and sustain international standards in surveys, investigations, designs, cost estimates, project planning including environmental studies and project management services for cost-effective and integrated development of power,” he said.

Apart from India, WAPCOS is currently engaged in providing consultancy services in African countries like Central African Republic, DR Congo, Ethiopia, Kenya, Mozambique, Nigeria, Rwanda, Senegal, Sierra Leone Tanzania and Zimbabwe, he said.

Mr Sanjay Sainani, CEO, Sterling & Wilson International, said that Africa has abundant resources which can fulfill the power requirements of the continent. “According to the specific requirements of various regions in Africa Indian companies are capable of providing efficient technologies for exploiting the power resources,” he said adding that like any developing nation African countries need investments.

Africa has been termed as a dark continent in the past, and is clearly the most under-developed regions in terms of basic infrastructure, he said. “In the recent years, many African nations have initiated investments in basic infrastructure of power generation, transmission, distribution,” he said. Sterling and Wilson has completed multiple electrification projects in Africa.

Giving his global perspective on power demand, Dr Arul Shanmugasundram, Vice President, Solar Tata International, said by 2030 the world will be requiring 4500Gw of power and challenge is to address the growing demand of power. “That means every 2 days a nuclear plant has to produce 1Gw for 20 years continuously,” he said adding that the figure shows the magnitude of the requirements.

He said that oil and coal reserves globally are depleting. “We have to use the conventional power resources judiciously,” he said. Renewable power generation should be given more emphasis in the power generation mix for sustainable growth and development. He also emphasised on the speedy execution of power projects.

The increasing need for clean energy through the greater use of hydropower is today a socio-political necessity. Besides conserving our fossil fuel reserves it is non-polluting, abundantly available and self-renewable. Hydropower is not only environment friendly but also cost effective and has the highest operating efficiency of all known generation systems.

Giving various details of power requirements in South Africa, Ms Saffia Patel, Partner, Webber Wentzel, South Africa, said, “The country is planning to spend \$36 billion for producing 9,600MW of nuclear power.” Solar Park of \$26 billion, coal station costing \$12 billion, renewal IPP procurement for 20,000MW and various small hydro plants are the projects and schemes to be executed by the country, she said.

Energy is the backbone of the economy. Stating this Mr AK Gupta, Vice President, Angelique International Ltd, said, in Africa there is huge gap between power production and actual demand. However, he said the continent has huge potential to generate hydro power and renewable energy. “Solar power generation is best situated for Africa continent, as many African nations have poor grid transmission facilities,” he said adding that Angelique International Limited has undertaken complete power and rural electrification projects in various parts of Africa.

Building energy security and shoring up power generation will form the fulcrum of India-Africa economic cooperation.

### **DAY 3**

#### **Parallel Session X: Emerging Technologies: Identifying new partnerships**

Session Moderator

Mr V B Soni, Chairman, Overseas Infrastructure Alliance

Panel:

Mr Abdi LLbi Achkir, Minister of Trade, Djibouti

Mr Sundeep Singh Chauhan, Head – Global Business Development, VA Tech Wabag

Prof Avinash Singh, Director General, LESDEP (Local Enterprise Skill Development Program)

Mr LH Sharma, Senior Vice President – Export & Technical Services, Jain Irrigation Systems

Mr Arunabha Pradhan, Head, National Research Development Corporation

Mr Jamo Macanze, Manager Special Projects, Ministry of Science and Technology, Mozambique

Mr Rakesh Mohan Joshi, Professor & Chairperson –  
International Projects, Indian Institute of Foreign  
Trade

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As Africa steps up the drive for rapid economic development, the region hopes to leverage India's strengths in emerging technologies. "We want to make use of India's edge in the technology sector. We hope this partnership between the two countries can drive technology transfer and enable capacity building," said Mr Abdi LLbi Achkir, Minister of Trade, Djibouti.

Speaking about the current state of African countries with regard to application of technology, the minister pointed out, "Although it is true that some of our countries are using cost-effective technologies for development and there has been great progress in the telecom sector, it is also true that Africa today has the least number of telephone lines, TVs, radio sets, etc."

The African countries are now looking to India to help them access sophisticated technologies for social and economic development. Mr Achkir emphasised, "The digital divide is the largest and most deep-seated in Africa and we have to close this gap to enable economic development."

The panel members agreed that innovations can contribute to a number of critical areas. "Scientific and technological developments are central to rapid economic development and industrialisation of any country. Technological innovations have a direct effect on human development," said Mr V B Soni, Chairman, Overseas Infrastructure Alliance.

Some examples of effective use of technology can be seen in areas like medicine, agriculture, manufacturing and so on. "Medical breakthroughs are linked to basic health, less expensive medicines and lower mortality rates. Higher agricultural production is linked to better seeds, better water use, and the use of more efficient and less toxic fertilizers. ICT enhances information. Manufacturing technologies drive industrial expansion, employment, and incomes. Technological advances in one field reinforce advances in others," elaborated Mr Soni.

Developing countries in Africa and India have to turn the attention to emerging technologies like nanotechnology, biotechnology & ICT for forging long-term partnership and economic transformation. For instance, nanotechnology can contribute to

developing new tools with which to address sustainable development problems, and it can strengthen the technologies already available and make them more efficient.

The private sector also has an enormous role to play in using technology for development, in advocating for pro-poor growth strategies; integrating private sector development and poverty reduction strategies.

Some of the Indian companies that are working on a large scale across many African countries highlighted their initiatives and explained how technology can be effectively used for socio-economic development of Africa.

“We must understand the fact that water is the scarcest commodity today as only 3% of water on this planet is actually available for use. Therefore, we are using innovative techniques to make efficient use of available water resources,” said Mr Sundeep Singh Chauhan, Head – Global Business Development, VA Tech Wabag. “Our company uses sludge water to produce power which makes us sustainable in terms of our power requirements. In Namibia, we took sewage water and industrial waste water and cleaned it up to use as portable drinking water. We would like to take this to other African countries as well.” Utilising water as an alternative to power can significantly bring down operative costs of manufacturing units. It also has a positive eco impact as it helps reduce emission of green house gases like CO<sub>2</sub>, CH<sub>4</sub> etc.

Prof Avinash Singh, Director General, LESDEP (Local Enterprise Skill Development Program) demonstrated how some of their initiatives in Ghana have made use of innovative techniques to create rural employment and financing options.

Mr LH Sharma, Senior Vice President – Export & Technical Services, Jain Irrigation Systems, showed an integrated hi-tech agriculture development model focused on the farmer. He explained how the model uses innovative technology to conserve water. It makes use of methods like drip and sprinkler irrigation, tissue culture, contract farming, bio fertilizers, green houses etc. and enables saving of 40-50% water. “We not only focus on conserving energy but also help in increasing yield by 30-40% and ensuring uniformity of farm produce,” explained Mr Sharma.

Mr Arunabha Pradhan, Head, National Research Development Corporation, elaborated on some of the key technologies being nurtured and promoted by NRDC and explained how the organisation has been playing a critical role in managing, transferring and commercialising various technologies. NRDC has worked in developing a wide range of bio-pesticides and greenhouse technologies for organic farming. Innovative techniques like dryland agriculture using super absorbent hydro gel have a huge potential in remote regions where water is scarce. The other significant breakthroughs include innovation in

use of coconut fibre for creation of various products, aloe vera cultivation, tissue culture, development of neem-based pesticides and other techniques which can be particularly useful for small and medium business in Africa in the agriculture sector.

Mr Jamo Macanze, Manager Special Projects, Ministry of Science and Technology, Mozambique spoke about the 2025 vision for technology development in Mozambique. He spoke about the Technology Development and Innovation Centre (TDIC) that has been set up by their government as a test project to focus on R&D and incubation. The initiative is part of a much larger project for setting up the 'The Science and Technology Park of Maulana. "There are a number of opportunities where the two countries can work together," said Mr Macanze. He also pointed to the fact that to leverage technology there is a need to address the dire need for skilled personnel and to nurture their entrepreneurial skills.

Mr Rakesh Mohan Joshi, Professor & Chairperson – International Projects, Indian Institute of Foreign Trade, elaborated on some of the initiatives taken by the institute for capacity development. IIFT has initiated a number executive skill development programmes across various African countries including Ethiopia, Egypt, Botswana, Namibia, Angola, South Africa, Rwanda, Sudan and Mauritius. It is also setting up the India-Africa Institute of Foreign Trade and driving a number of other initiatives for development of soft skills, human resource management etc. Mr Joshi emphasised the fact that assimilation of technology is of prime significance to increase productivity and product competitiveness.

India, with its 'Triple A' technology has a lot to offer the African continent, in terms of restructuring and adapting its technologies to suit the local environment and needs of the people.

**Parallel Session XI: Focus Country: Zimbabwe**

Session Moderator: Mr Sanjay Kirloskar, Chairman, Kirloskar Brothers

Panel: Mr. A G O Mutambra, Deputy Prime Minister of Zimbabwe

Mr Jonathan Wutawunashe, Zimbabwe Ambassador to India

Mr Walter Mzembi, Minister of Tourism and Hospitality Industry, Zimbabwe

Mr Nguni Sylvester Robert, Minister of State, Office of the President and Cabinet, Zimbabwe

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Zimbabwe, the focus country which lies in the southern part of African continent, has many potential business investment opportunities for Indian business. Mr Sanjay Kirloskar, Chairman, Kirloskar Brothers, said in his opening remarks that Zimbabwe's 8% GDP growth is a reflection the economic resurgence of Africa. India seeks to strengthen the bilateral trade and investment relations with Zimbabwe. The volume of bilateral trade in 2010-11 was \$125 million which shows considerable increase over 2009-10 figure of \$69.8 million.

The mid-term plan adopted by Zimbabwe government for economic development and sustainable growth makes the country highly attractive for investments. Mining, agriculture, agro-processing, manufacturing, physical infrastructural development, transportation, jewellery, telecom, IT, healthcare, textiles, skill development programs are some areas which open up for good investment opportunities for Indian companies, he suggested.

Mining in particular has great potential for cooperation as Zimbabwe has the world's largest platinum reserves and large reserves of gold, copper, nickel, and iron ore. India's national Institute of Design is providing training to empower rural craftsmen in Zimbabwe as a part of India-Africa Forum Summit Action Plan. Indian government is setting up a technology park and food testing laboratory in Zimbabwe. He said that India's \$5 million financial assistance for machinery and training is an example of the Indian government's commitment to a strong bilateral relationship with Zimbabwe.

Mr Kirloskar stressed upon the need for greater people-to-people contacts between the two countries by way of tourism. He also asked the Indian film industry to explore the scenic locales in Zimbabwe for film shooting.

Mr Jonathan Wutawunashe, Zimbabwe Ambassador to India, appreciated the presence of a strong delegation from Zimbabwe at the Conclave.

Mr Walter Mzembi, Minister of Tourism and Hospitality Industry, Zimbabwe, put forth five reasons why Indian companies must invest in Zimbabwe: (i) good governance (mature democracy with near zero crime rate); (ii) hard working people and sound infrastructure built by settler colonialists; (iii) easy emigration rules (now India is in category C for processing visa; need to move towards category B and A – proposal for right to visa on entry); (iv) tourism (Victoria Falls and lush forests); and (v) excellent locales for film shoots.

Mr Nguni Sylvester Robert, Minister of State, Office of the President and Cabinet, Zimbabwe, prioritised the investment sectors as (i) energy; (ii) water and sanitation; (iii) transport (roads, railways, air transport, airport handling facilities); (iv) telecom; (v) health; and (vii) education. He also asked for more Indian partnerships for skill development in sectors like agriculture (increase in productivity and cultivable area), manufacturing, mining and tourism.

In the agricultural sector there is huge potential for production of maize, wheat, sugar and cotton. Investment potentials in expansion of cultivable area and productivity are there, he said. The new vistas of contract farming or entering into contract with government to avail thousands of hectares for farming could be explored by the investors. Credit financing is another area of investment to explore. Horticulture is also a luring area for investment.

Zimbabwe has almost every mineral in its huge reserves, he said. So the opportunities in mining sector is attractive, Mr Robert suggested.

The five year plan initiated by Zimbabwe government is expected to address the issues of poverty alleviation and sustainable economical development, Mr. Samuel Undenge, Deputy Minister for Economic Planning and Investment Promotion, Zimbabwe, said.

An economy based on export of raw materials and import of manufacture goods can't sustain for long. That is why Zimbabwe needs huge Indian investment in skill development, agricultural productivity, manufacturing, mining and tourism. Mr Undenge said that Zimbabwe needs huge capital inflow in energy sector. Modernising Zimbabwe's economy with modern technology is the need of hour, he emphasised. For using technology for rural development he asked for India's help which emanates from its experience. Zimbabwe is following an ambitious plan to make every child in the country a computer literate. While praising India's role as a leading IT skill provider to the entire world he asked for India's contribution to make Zimbabwe's IT plan successful.

He emphasised the need for infrastructural development, especially in power generation. Right now the industry is facing load-shedding. He invited investment in existing power projects and for independent new ones.

Mr. A G O Mutambra, Deputy Prime Minister of Zimbabwe, reminded the Indian investors about the vast collective African union market. He pointed out that other than traditional mining attractions, future of Africa lies is in information and communication technology services. He concluded with note that "we don't want to sell raw materials, but use and manufacture it in Africa", for generating jobs for local people and to benefit Africa.

The gathering of industry leaders and businessmen clarified their doubts and asked some questions regarding business environment in Zimbabwe. Many among the audience who had various types of assignments in Zimbabwe praised the people of that country and administration for their punctuality and friendliness.

### **Parallel Session XII: Mining : Setting the agenda on collaborative growth**

Session Moderator:	Mr M P Gupta, President & Joint MD, Angelique International Ltd
Panel:	Mr Arun Kumar, Joint Secretary, Ministry of Mines, Government of India  Mr Jean Bertin Quedraogo, Minister for Infrastructure, Burkina Faso  Mr Somdeb Banerjee, Executive-in-Charge (South Africa), Tata Steel  Mr Robert Appelbaum, Webber Wentzel, South Africa

### **Proceedings**

More than half of countries in Africa regard mining as an important economic activity and are producing minerals for international markets outside Africa. Stating this, Mr M P Gupta, President & Joint MD, Angelique International Ltd, said, Africa's unique resource endowment creates a window of opportunity for African states to catalyse growth and poverty alleviation across the continent.

Mr Gupta said Africa's dire need to industrialise is universally acknowledged. The structural transformation of the African economies must be an essential component of Africa's growth strategy to ensure the achievement of MDGs and for sustainable growth and development across the continent.

He said growing investments in Africa's mining industry and the rising demand for Africa's minerals should be seen as an opportunity. "Physical infrastructure support is another key factor in building the African economy. Africa needs a wider network of roads, rail and ports," he added.

Talking about the bilateral engagements, he said India has enjoyed visible presence in the African mining sector over the years and there is a felt-need to step up the bilateral and multilateral engagements in this sector. "The fast-growing Indian economy is looking to secure a large and reliable source of metals and minerals to power its

manufacturing sector. Africa looks to be the most promising source of these natural resources,” he maintained.

Explaining the increasing demand for energy and raw materials in India, he said India is the largest consumer of energy in the world, accounting for about 3.8% of global consumption. “With rapid economic growth and industrialisation, it is expected to double its energy consumption by 2030, overtaking Japan and Russia to become the world’s third-largest consumer,” he said.

Talking about the Indian companies he said, “Our mining companies have found improved ways to protect and remediate the environment and are constantly innovating to find better alternatives to existing technologies for mineral extraction, mineral processing and environmental reclamation.”

Green mining is a high priority in India to reduce carbon footprints. Innovation in waste management, ecosystem risk management, mine closure and rehabilitation are also important areas to be focused upon, he remarked.

Outlining India’s achievements in the mining sector, Mr Arun Kumar, Joint Secretary, Ministry of Mines, Government of India, said the recently introduced Mining Bill ensures environmental and social protection. “The Bill mandates sharing of net profits by the company with the people affected by the mining projects. It also addresses the legal, regulatory, transferability and royalty aspects of mining,” he said.

Talking about sharing Indian expertise in the sector, he said, the 150-year-old Geological Survey of India (GSI), one of the oldest of such organisations in the world, does surface mapping and resources exploration in India. “It does the G3 level of survey that gives 100% assurance on minerals,” he said adding that the GSI can impart training for African countries that are weak in geological survey and exploration. “It can be done according to the specific requirements of African countries,” he promised.

He said Indian Bureau of Mines can share its experience with African counterparts for developing a comprehensive plan in the field. “Indian Bureau of Mines undertakes the processing and approval of mining plans and schemes of mining. It also imparts training to industry personnel in the preparation of mining plans and also in the other fields,” he said adding this is a good area for collaboration.

Stating that Africa is the continent of the future, Mr Jean Bertin Quedraogo, Minister for Infrastructure, Burkina Faso, said many of the important minerals in the world are found in Africa. “These minerals and natural resources can gift the continent sustainable development,” remarked.

Talking about the investments in the mining sector, he said the emphasis should be given to public-private partnership so that African people can benefit from this.

Inviting Indian investors to Africa and Burkina Faso in particular, Mr Quedraogo said the country has huge reserves of copper, iron, manganese, gold, tin ore, and phosphates. He said, "We have to use these nature resources for the developing physical and social infrastructures."

If the natural resources are not exploited judiciously it could lead to social unrest and environmental degradation. Stating this, Mr Somdeb Banerjee, Executive-in-Charge (South Africa), Tata Steel, said both India and Africa are on the same page and share a symbiotic relations that goes backs to centuries.

Mr Banerjee said sustainability is the key for the growth in mining. "The view point of the local community should be taken into account before we embark on any projects," he said adding that conservation of local ecology is another important aspect of the mining.

Talking about mine closure and restoration of environment, he said greening of the world is not just an option, but a necessity. "We should understand the impact of mining and steps should be taken to mitigate the negative impacts," he said adding that mining enterprises should strike a balance between their social responsibility and shareholder accountability. "The firms should participate in the skill development of the local community," he said. They should be sensitive to the concerns of the local community by involving them in the mining process. "Besides sharing technological expertise, we need to share our experience on these fronts for better growth," he concluded.

Mr Robert Appelbaum, Webber Wentzel, South Africa, said the Indian companies engaged in Africa should take ownership of the requirements of that particular country. "Africa should encourage good governance and transparency for better inflow of FDI into the extraction industry in Africa for sustainable growth and reduction in the poverty," he said.

Answering a question on state protection for investors, Mr Quedraogo said that Burkina Faso has a mining code to protect the interest of overseas investors. "State guarantees protection and facilitate investments in the mining sector for sustainable growth," the minister added.

Mr Gupta summed up the session saying Indian School of Mines (ISM), Dhanbad can participate in the sharing the Indian experience with African countries. "African needs a lot of investments in developing value added products from the natural resources," he concluded.

## **Plenary Session IV: India-Africa: Setting the Agenda for Infrastructure Partnership**

Session Moderator:	Mr S Kuppuswamy, Advisor Group Finance (Special Projects), Shapoorji Pallonji & Co
Panel:	Mr Mustafa Haidi Mkulo, Finance Minister, Republic of Tanzania
	Mr Jean Bertin Quedraogo, Minister for Infrastructure, Burkina Faso
	Mr Mahommed Sidik, Minister of Transport and Public Infrastructure, Malawi
	Mr Aba Al Wahab, Minister, Sudan
	Mr S Roy, Economic Advisor, Tata Services Limited
	Mr J P Haran, Deputy Managing Director, Tata Consulting Engineers

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Infrastructure is a prerequisite for facilitating growth in Africa, and India has to assure a positive role in building this. Stating this, Mr S Kuppuswamy, Advisor Group Finance (Special Projects), Shapoorji Pallonji & Co, said Africa has enormous natural resources and many of the countries are continuously registering high GDP growth. "There is still a shortage of physical infrastructure in Africa as it is reported that the cost of addressing Africa's infrastructure needs is around \$93 billion a year, about one-third of which is for maintenance," he said reminding that infrastructure contributes 1% to GDP growth every year.

Mr Kuppuswamy said that India may not be able to meet the complete financial requirements for developing infrastructures in Africa. But, India will be able to provide appropriate technologies. "We are happy to share our technological know-how and expertise with African countries in the infrastructure development of the continent," he said.

Mr Mustafa Haidi Mkulo, Finance Minister, Republic of Tanzania, stressed that for meaningful investment in infrastructure growth, public-private partnership (PPP) is the way forward. "Tanzania offers a lot of opportunities for India companies for constructing roads, upgrading railway networks and building world class airports," he said.

Energy requirements of Tanzania are also growing exponentially, he said. “There are lots of opportunities for private companies from India to participate in the energy infrastructure development in the country,” he said.

Reiterating the importance of PPP, Mr Jean Bertin Quedraogo, Minister for Infrastructure, Burkina Faso, said the private sector can catalyse the growth in Burkina Faso by investing in strategic infrastructure projects.

Talking about the reform in Burkina Faso, he said since 2004, the country has adopted more than 190 measures to improve its business climate. These reforms help Burkina Faso to rank among the world top 10 reformers. “In 2011, Burkina was ranked 4th among the most consistent reformers globally for the past five years. This demonstrates both the commitment and consistency in implementing reforms aimed at improving the business climate and promoting private investment in Burkina Faso,” the minister remarked.

Elaborating on the economic and legal reforms, he said Burkina Faso has made significant improvements in the legal framework in several areas: (i) effective liberalisation of the economy and opening up of major sectors (telecom, energy, air transportation, mining, banks, insurance etc.); (ii) adoption of policy of openness to FDI; (iii) labour market liberalisation with the adoption of a labour code guaranteeing freedom of hiring, employment and dismissal for fostering better human resource management by the investor, (iv) revision of the overall legislative and regulatory system and strengthening the rights and guarantees granted to investors.

The government is committed to give protection to the investors. “Burkina Faso will touch double digit growth by 2015, so be part of our journey,” he invited Indian companies. “Indian companies have to be part of the growth of Africa,” he insisted.

Mr Mahommed Sidik, Minister of Transport and Public Infrastructure, Malawi, said that infrastructure deficit is hampering Africa’s competitiveness in the world market. “To boost trade, income and generate employment, Africa has to build telecom, power and transport infrastructures,” he said adding that Indian firms can build the requisite infrastructure in Malawi.

He said the focus should be on training, capacity building and knowledge transfer and best environmental practices. “Malawi has embarked on many infrastructure projects, benefited because of country’s partnership with India,” he recounted adding that Malawi has been sustaining average growth of 7% with inflation touching around the same figure.

Mr Sidik said PPPs are becoming an increasingly important part of the comprehensive development framework. The need for these partnerships is usually an indication that the country requires such support to be able to provide its people with efficient, effective and equitable services.

Mr Aba Al Wahab, Minister, Sudan, said that the Sudan's trade and investment rules ease the investing process. "Indian companies can utilise line of credit (LOC) offered by the EXIM Bank of India to Sudan for infrastructure developments," he said adding that the mineral resources can be utilised to its potential if the continent has a strong infrastructure.

Explaining the Encouragement of Investment Act in Sudan, he said receiving private sector investment depends on an investment climate characterised by a good legal framework maintained by constitutional guarantees against expropriation. "Similarly, a favourable investment climate requires good governance in connection with quality of business regulations sustained by institutions competent to implement them," he said inviting Indian companies to be part of development and growth of Sudan.

Giving a perspective on Indian infrastructure requirements, Mr S Roy, Economic Advisor, Tata Services Limited, said the Planning Commission of India has already projected that investment in infrastructure would double to \$1,025 billion in the 12th Plan period, compared to \$514 billion in the 11th Plan. "Funding is not a problem as there are many international funding agencies," he said adding that the India has been contributing in Africa in terms of funding.

Mr S Roy said there is a huge deficit of infrastructure in the power sector in Africa. "India has expertise in building infrastructure across all sectors," he said.

Focusing on green growth, Mr J P Haran, Deputy Managing Director, Tata Consulting Engineers, said the clean energy infrastructure should be given priority. "Most of the African countries are looking at India for developing social and physical infrastructure," he said. The short-term agenda should be focused on maximising the existing infrastructure assets and in the long-term the focus should be on efficient utilisation of the infrastructure capacity, he concluded.

### **Valedictory Session**

Opening Remarks: Mr Chandrajit Banerjee, DG, CII

Highlights of Conclave: Mr Syamal Gupta, Chairman, CII Africa Committee

Address: Mr Jonathan Wutawunashe, Dean, Diplomatic Corps

Special Address: Mr Sunil Kant Munjal, Past President, CII & Chairman, Hero Motor

Address: Mr Sanjay Kirloskar, Chairman, Kirloskar Brothers Ltd

### **Proceedings**

India is firmly committed to realise the new bilateral trade target of \$90 billion by year 2015. The concessional duty tariff extended by the Indian government to the least developed countries in Africa is expected to step up African exports to India. Stating this in his address at the valedictory session, Mr Madhusudan Ganapathi, Secretary-West, Ministry of External Affairs, Government of India, said that capacity building is at the forefront of India's engagements in Africa.

India is establishing around 100 capacity building institutions in Africa, in areas ranging from IT, foreign trade and education, planning and administration, to civil aviation, and vocational training. Through interventions like this, African industry will be better placed to promote value-addition in their industrial and business sectors.

Technology collaborations, transfer of technology and greater participation of the youth in India and Africa will bind the drive future India-Africa partnerships, said Mr Ganapathi, and added that the 21<sup>st</sup> century will belong to Africa and the Indian Ocean states.

At the session, separate MoUs were signed between Confederation of Indian Industry (CII) and the Cameroon Chamber of Commerce, Industry, Mines & Crafts (CCIMC), Association of Ghana Industry (AGI), Ghana Chamber of Commerce & Industry, Malawi Confederation of Chambers of Commerce & Industry (MCCI), Sierra Leone Chamber of Commerce, Industry & Agriculture, Seychelles Chamber of Commerce & Industry (SCCI), Gambia Chamber of Commerce & Industry, and Rwanda Private Sector Federation.

39 ministers addressed the Conclave, Over 600 delegates from Africa and over 500 delegates from India participated in the deliberations. 200 projects worth \$30 billion were discussed during the course of the business meetings.

Providing his perspective on the 'Afro-Indian Consensus', Mr Jonathan Wutawunashe, Dean, Diplomatic Corps said India and Africa together are capable of achieving any lofty goal. The annual Conclave has acted as a forum for miracles, setting the tone for greater India-Africa cooperation. "We are pursuing the right goals and our partnership should become more visible to the world," he said.

Mr Sunil Kant Munjal, Past President, CII & Chairman, Hero Motor, said in his special address that India and Africa should jointly stem the protectionist trends emerging from economies that once championed the free market principles.

He said that India has a unique experience of guiding its 1 billion people toward a free market economy. "We have learnt from our experience, and from our mistakes. We will be happy to share our growth experience with Africa," he said.

Mr Munjal underlined India's demographic advantages but said that both India and Africa face challenges with respect to education, healthcare and abject poverty which need to be addressed. He also said that the infrastructure deficit in Africa and other developmental challenges may be seen as opportunities for deeper India-Africa engagements. However, he added, "Our business is not for charity. They need an enabling environment to deliver optimal results. So, let us create a win-win situation."

Mr Sanjay Kirloskar, Chairman, Kirloskar Brothers Ltd, said in his address that food security is one of the biggest challenges for the African societies, especially since the African population is estimated to double in the next 25 years. Innovative financing options for agriculture and irrigation will be crucial for spurring food production growth, he said.

Given Africa's land and water resources, the continent could become the world's bread basket, he said.

Mr Syamal Gupta, Chairman, CII Africa Committee, presented the highlights of the proceeding of the Conclave.

Mr Chandrajit Banerjee, Director General, CII, presented the vote of thanks. **The next edition of the Conclave will be held in New Delhi during March 17-19, 2013.**

## **Key Conclusions & Recommendations**

### **Economic Partnership**

- In the emerging global economic order, a stronger India-Africa partnership will provide the impetus for global economic recovery and act as the engine of global economic growth.

### **Capacity Building**

- Indian government will fast-track the setting up of the proposed specialised capacity building institutions in Africa.
- India is committed to build over a 100 capacity building institutions in Africa over a period of time.
- Indian banks could offer training support to African banks and financial institutions in diverse streams by leveraging their own experience and institutional base.
- Certain African states face acute shortage of faculty, particularly in disciplines like business studies, economics and engineering. Indian professionals could bridge this capability gap.

### **Agriculture & Allied Activities**

- Indian expertise in agriculture and allied activities is of essence to African nations that are focusing on fortifying food security. Indian farm-related entities could play a part in Africa ushering in a Green Revolution.
- Africa needs India's expertise in agriculture R&D, mechanisation, water management, irrigation systems, and post-harvest management.
- The key challenges for Africa's agriculture sector include fragmented land holding, inadequate knowledge of farming technology, inadequate infrastructure, inadequate sources of financial solutions, limited market linkages, low level of mechanisation and poor economic support. The thrust should be on soil and water conservation, procurement systems, storage and transportation, advanced farming processes, mechanised farming, access to retail/modern retail chains

and a free national market. Indian expertise in these areas are highly relevant to African economies.

- Micro-irrigation, solar power development and water harvesting are some of areas where Indian companies could in a major way.

### **Manufacturing**

- Africa has the potential to become the world's leading manufacturing hub by the year 2030. India is ideally placed to support Africa's rapid industrialisation.

### **Information & Communication Technology/ITeS**

- African nations look to replicate India's growth experience in the IT software and ITeS sectors. Indian expertise in these areas will help Africa bridge its digital divide.
  - Indian ICT capabilities are sought in Africa to support education, healthcare, governance initiatives
- Both India and Africa should bring the benefits of IT and telecom to the deprived sections of society.

### **Pharmaceuticals & Healthcare**

- India will counter the campaign from certain quarters that generics are sub-standard. Indian government and industry will work to ensure that the poor in Africa get easy access to generics
- India and Africa need to team up to fuse the advantages of traditional medicines with modern medicine to make medicare affordable in Asia and Africa.
- There is a need to harmonise the regulatory structures in Africa. The large number of countries and their different regulatory systems make it difficult for Indian companies looking at setting up manufacturing units in Africa. Inadequate banking facilities and distribution networks are some of the other key issues that need to be addressed.
- Africa must focus upon improving the distribution challenges. Inefficiency in the distribution structure can multiply the cost of drugs several fold.

- To encourage more Indian pharmaceutical companies to invest in Africa, the host countries should also look to ease the regulations and facilitate business by setting up free trade and economic zones.

### **Physical Infrastructure Development**

- Given that Africa needs an estimated \$93 billion a year for infrastructure development, and faces a large funding gap of about \$45 billion, opportunities are aplenty for Indian infrastructure companies to invest in African states.
  - Infrastructure development in Trans-Kalahari corridor offers India a great opportunity to invest and be part of the Africa growth story.

### **Green Projects**

- Only 5% of India's investments in Africa are in green projects. There is need more investments in green projects in Africa for sustainable development.

### **Renewables**

- The promotion of biomass power generation in India and Africa is constrained by lack of long-term policies. Tariff levels vary widely between regions. Biomass power tariff must be linked with biomass production costs. 99% of biomass power generation is installed in rural areas. What is needed is a realistic assessment of biomass availability and utilisation.
  - Large biomass gasifiers face the problem of getting adequate feedstock, whereas the smaller units are able to manage the inputs more efficiently.

### **Power Generation**

- Most African countries receive on average 325 days per year of bright sunlight. This gives solar power the potential to bring energy to virtually any location in Africa without the need for expensive large scale grid level infrastructure development. Africa has a long coastline, where wind power and wave power resources are abundantly available but underutilised. Geothermal power has the potential to provide considerable amounts of energy in many eastern African nations.
- Renewable power generation should be given more emphasis in the power generation mix for sustainable growth and development.

## **Mining**

- Green mining is a high priority in India to reduce carbon footprints. Innovation in waste management, ecosystem risk management, mine closure and rehabilitation are also important areas to be focused upon.
- Geological Survey of India (GSI) can impart training for African countries that are weak in geological survey and exploration.
- Indian Bureau of Mines undertakes the processing and approval of mining plans and schemes of mining. It also imparts training to industry personnel in the preparation of mining plans and also in the other fields. This is a good area for collaboration.

## **Brand India**

- Even as Indian companies are increasing their footprint in African markets, Indian industry would do well to strengthen the 'Brand India' presence in Africa.
  - Indian exports of machinery items, electrical items and transport equipment to Africa have grown, but their share of Africa's total imports of these items is very small. Indian companies have not focused enough on the African markets. Indian exports account for only 3% of African imports.

## **Central African Republic (Partner Country)**

- Indian companies could play a vital role in tapping Central African Republic's vastly untapped hydro resources, and mineral and agriculture resources. Transportation infrastructure development and telecom are areas where Indian cooperation and partnership could make a difference to Central African Republic. Other potential areas of cooperation are: agriculture, mining, tourism, telecom, energy development, education and sanitation.

## **Zimbabwe (Focus Country)**

- The mid-term plan adopted by Zimbabwe government for economic development and sustainable growth makes the country highly attractive for investments. Mining, agriculture, agro-processing, manufacturing, physical infrastructural development, transportation, jewellery, telecom, IT, healthcare, textiles, skill

development programs are some areas which open up for good investment opportunities for Indian companies.

- Indian film industry could explore the scenic locales in Zimbabwe for film shooting.