

CONSULTANCY

V · I · S · I · O · N



QUARTERLY NEWSLETTER
OF CONSULTANCY
DEVELOPMENT CENTRE

Vol. 9 No. 3
New Delhi March, 2005

CONTENTS

- Articles
- Events Conducted
- Forthcoming Events
- New Members
- Book Review
- Members' News
- Readers Speak about...

Editorial Advisor & Publisher :
Somenath Ghosh

Editor :
J. Suriyanarayanan

OUR MISSION

**"To be the National nodal point
for the development and
promotion of Consultancy"**

OUR OBJECTIVE

**"To strengthen consultancy
capabilities and promote
services, enhance consultant-
client interaction and act as a
policy facilitator"**

CONSULTANCY VISION

is a Quarterly Newsletter of
Consultancy Development Centre (CDC),
Zone-IV(B), East Court, 2nd Floor
India Habitat Centre, Lodhi Road
New Delhi – 110 003
E-mail : newsletter@cdc.org.in
www.cdc.org.in

Statements and opinions advanced by the
contributors in this Newsletter do not
necessarily reflect those of CDC.

Printed by :

Alpha Lithographics Inc.
Naraina, New Delhi

From DG's Desk

"Knowledge has always been the prime mover for prosperity. A knowledge society is one of the basic foundations for the development of any nation. "

- H.E. Dr. A.P.J. Abdul Kalam, President of India

Well friends !! I am proud to recall the day when we had our beloved President H.E. Dr. A.P.J. Abdul Kalam with us to inaugurate the TCDPAP International Conference held on 11-13 October, 2004 in New Delhi. He also presented "National Awards for Excellence in Consultancy Services" during the event. While congratulating the award winners, I would like to record my sincere thanks to all the sponsors/ co-sponsors/ corporate participants and also the delegates for the event. On 13th October, 2004 Hon'ble Minister of State for Science & Technology and Ocean Development Shri Kapil Sibal gave the valedictory address to the delegates. He also presented Best Student Award for the MS course in Consultancy Management being conducted by CDC with BITS, Pilani.

In the past six months, CDC has organized a number of events throughout the country, jointly with its local chapters, as detailed in this issue.

We are also streamlining the process of disseminating tender information through e-Newsletter namely "Consultancy Business Opportunities", which is a privileged services to CDC members.

I would like to invite the consulting fraternity to join us in the forthcoming events. In particular, we invite you to participate in the ensuing ADB Seminar on "Development of Domestic Consulting Services" being organized jointly by CDC and ADB, Manila on 2-3 May, 2005 in Hyderabad and 5-6 May, 2005 in Chennai.

Somenath Ghosh

Creating Shareholders Value Through Corporate Social Responsibility

By *S.K. Gupta, FCA; ISA; DCD*
Member, CDC

INTRODUCTION

The real meaning of social responsibility with reference to business enterprises has to be understood firstly to see the correction of business with social responsibility. Business is an economic activity to earn with profit for the owner and social responsibility is serving community without any expectation. Now the question arises as to why there is a need for a business to serve the community? Business is expected to crier wealth, create market, generate employment, innovate and produce a sufficient surplus to sustain its activities

Corporate social responsibility is again in lime-light world over with the emergence of 'corporate governance'. In a country like India, the subject of social responsibility is of special significance. The possibility of creating shareholders value through corporate social responsibility is explored here.

and improve its competitiveness. Society is expected to provide an environment in which business can develop and prosper, allowing investors to earn returns. Business depends for its survival and long-term prosperity on society providing the resources – people, raw materials, services, and infrastructure. To convert raw materials into profitable goods/services, it needs these inputs from the society.

While Society provides the Means of Exchange, Trained Manpower, Legal & Banking Systems; Social Infrastructure like Road, Schools, Hospitals etc., Business provided Products & Services, Direct & Indirect Employment, Income Generations in terms of Wages, Dividends, Taxes, interest etc.

The long-term sustainability of any business requires business-society connect. In addition to the above, with the advent of joint stock company, society grants to business two special rights to assist business in performing its role. The first is "potential immorality" and the second is "limited liability".

In return for these special privileges being granted to business, it does have a responsibility to fulfill to the society/community at large. Acharya Vinoba Bhave said, "Business was considered to be next to the King. The King known as Shahenshah while the business was known as Shah as common word, first Shah has a duty towards

public as King i.e. Government and the other Shah has also a duty towards society being part of Shahenshah. In the age of globalization, corporations and business enterprises have crossed the national boundaries to become international. Business enterprises have been using natural resources in a big way for maximization of their profits. Business enterprises intervene in so many areas of social life; hence their responsibility towards society and environment has emerged. In India and elsewhere there is a growing realization that business enterprises are, after all, created by society and must therefore serve it and not merely profit from it. Thus the role of business in society has been emerged under "Corporate Social Responsibility". By the term CSR what is generally understood is that business has an obligation to the society that extends beyond its narrow obligation to its owners or shareholders. Through CSR as a concept is appreciated by corporate and civic world there is no universally accepted definition of CSR. Most definition of CSR focus towards company's overall impact on the society and stakeholders.

According to the London Benchmarking Group Model "Business Basics, in the context of CSR, relates as to how the company does its business and whether it is sensitive about the impact of its business on society and the plane – i.e. Societal and environmental returns apart from financial returns-the so-called 'triple bottom line' reporting."

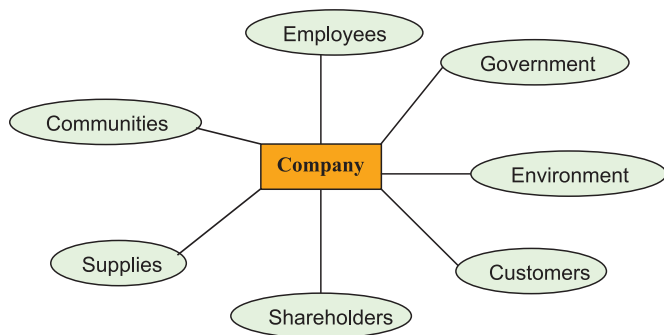
Philanthropy: Intermittent support; wide Range of cause; in response to needs and appeals of charitable and community organization; in partnership with companies, customers and suppliers.

Social investment: Long-term and strategic involvement in community partnerships; limited range of social issues chosen by the company; to protect long-term corporate interest and enhance its reputation.

Commercial: Compliance with law; ethical business practices; concern for the environment and consideration of the interest of various stakeholders such as customers, supply chain, employees and the community at large. According to him, CSR is a culture and it should be integrated with all the phases of a corporation.

If one goes into the depth of the above definition, under CSR culture, the business has to be run not only for economic profits i.e. financial returns for shareholders but also considering the actual and potential impact on the Community where it operates and on Society as a whole to have long term sustainable development of the business. So the company has to consider the varied interest of other stakeholders.

Company's Stakeholders



Source : Partners in Change, India

Now the next question that arises is what the need of running business for all the stakeholders instead of shareholders who only invested the money and took the risk of investing? Is it possible to run the business profitably taking along the stakeholders in this globalization era and competitive environment? And how to interrelate business activities with society and community and what's the ultimate effect on its bottom line adopting CSR issue as a culture in its business?

"Milton Friedman's position that the responsibility of business is exclusively to maximize profit for shareholders, has lost the debate."

Alice Tepper – Marlin, President, Council on Economic Priorities

"If we are the leading corporate citizen-we will attract better employees and the highest caliber of people. They are going to want to come work for a company like Ford."

William Clay Ford, Jr. Ford Motor Company

"The 21st Century company will be different. Many of Britain's best-known companies are recognizing that every customer is the part of the Community and that social responsibility is not an optional extra"

Tony Blair, Prime Minister of United Kingdom

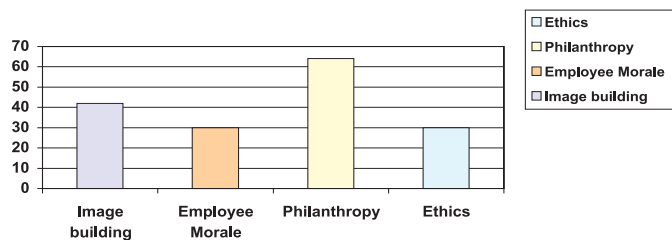
Source: The Conference Board, NYC Public Affairs Management.

FACT FILES OF INDIA

- India's population is more than 1 billion.
- One third of the populations live in absolute poverty.
- 1 out of 9 children die before they reach their fifth birthday.

- Around 83% percent population is Hindu and the country was Under British Rule for long period.
- 45% of the adults are illiterate.
- 85% of the rural population does not have access to adequate Sanitation.
- Millions of people have suffered from a series of natural Disasters: drought, floods, a cyclone in Orissa in October 1999 and earthquake in Gujrat in January 2001.
- Corruptive practices.

In the above context, the concept of CSR is required to reduce poverty and inequity in order to ensure that all inflows to society do not go to the rich and powerful. We can see the need for CSR while going



through the survey conducted by PIC- IMRB in respect of randomly selected 5928 companies in 2003

Now the second question as to whether it is cost effective do the business with CSR adoption in the present day competitive environment. If the arguments against a socially responsible were widely accepted, nobody would even be talking of CSR. But the arguments have to be considered for assessing the real benefits of CSR. The following are some of the arguments against CSR.

1. Businesses are owned by their shareholders- any money spent on so-called social responsibility is effectively theft from those shareholders. Elaine Sternberg, argues that there is a human right case against CSR, in as much as a stakeholder approach to management deprives shareholders of their property rights. But she agrees that any corporation should expect decency, honesty and fairness.

In the first instance, it seems that through CSR, corporations simply get to "give away" money, which rightfully belongs to other people. But if we see CSR as a process of building relationships with customers, attracting and retaining talented staff, managing risks, and assuring reputation, then we can see the real value of CSR. Market capitalization of a company often far exceeds the "property" value of the company. Moreover, in many knowledge-based industries, "intangibles" account for

a large percentage of capitalization. These intangibles include reputation and no company would like to or should risk the reputation of the company.

2. Leading companies which report on their social responsibility are basket cases- most effective leaders don't waste time with this stuff. Although neither Jack Welech of General Electric, nor Bill Gates and Microsoft, has achieved world-class status playing nicely, Welech is still remembered for the brutal downsizing that he led his business through, and for the environment pollution incidents and prosecutions. Here again the argument is against short-term profit maximization and "building to last" on the agenda is for sustainability of enterprise over a long period.
3. It runs on the surviving at hard times. The argument is that they can't afford to look after this and to have their main focus on core business. So CSR is ok for big businesses having large resources but not for those fighting for survival. How can you spend money on unnecessary frills? When you are laying off staff and morale is rock bottom.
4. CSR at an extra cost is an added burden to be born by the corporation already struggling to be profitable in difficult economic phase. But in some situations, the opportunities improve and the business ethics also offers the company extra ordinary marketing and brand possibilities Companies known for their ethics adopted these values not when they had become big and prosperous, but when they were small outfits. And it is precisely their values that gave them the backing of the public in difficult times, which enabled them to grow their present giant size

Andrew Carnegie, the steel tycoon, writing in the year 1899, stated that the rich had the moral obligation to give away their fortunes and that personal wealth beyond the family's needs should be regarded as trust fund for the benefit of the society. The Trusteeship Concept advocated by Gandhiji in India is similar. He had identified seven best uses to which a millionaire can devote the surplus of which he must regard himself as only the trustee. These were the funding of a University.

- Providing free libraries.
- Founding or extension of hospitals.
- Public parks.
- Providing halls suitable for meetings and concerts of elevating music.
- Public swimming baths.
- One's own church and churches in poor neighborhoods.

IMPROVED FINANCIAL PERFORMANCE

Business and investment communities have long debated whether there is a real connection between socially responsible business practices and positive financial performance. A study by DePaul University (2002) had pointed out-the following:

- ❑ CSR initiatives can reduce costs dramatically.
- ❑ Environmental initiatives— such as reducing emissions of gases or reducing use of agrochemicals also lower costs.
- ❑ Recycling Initiatives-- cut waste disposal costs and generate income by selling recycled materials.
- ❑ Human Resource Arena- Flexible Scheduling and other work life programme result in reduced absenteeism and increased retention of employees, increased productivity and reduction of hiring and training costs. Enhanced Brand Image and Reputation customers often are drawn to brands and companies with good reputation in CSR related areas.

Benefits: Enhance reputation with the community Increasing company's ability to attract capital and trading partners.

Survey: Factors most influencing impressions of companies CSR 49% Brand Quality Reputation (40%); and Business Fundamentals (32%).

Increased Sales and Customers Loyalty: A number of studies have suggested a large and growing market for the products and services of companies perceived to be socially responsible

Customer's Key Buying criteria- Price, Quality, Availability, safety and Convenience.

Growing Customer Desire to Buy or Not—"Sweatshop-Free shop", "Child Free Labor" and "Lower Environmental Impact" etc.

Survey- 79% Americans take corporate citizen into account whether to buy a particular company's products or not.

Firm's Negative Corporate Citizen Practices—

- 91% would consider switching to another company
- 85% would pass the information to family and friends
- 83% would refuse to invest in that company
- 80% would refuse to work at that company
- 76% would boycott that company's products

Increased Productivity and Quality : Improve working conditions, lessen environmental impacts or increased employee involvement in decision making often lead to increased productivity and reduced error rate

Increased Ability to Attract and Retain Employees-

Strong CSR Commitment—

- Easy to retain employees
- Reduction in employee turnover
- Associated recruited and training costs

Survey: The Aspen Institute Initiative for Social Innovation through business between 1999 and 2001 found more than half of MBA students would seek another job if they found that their values conflicted with the business where they Work

Access to Capital: The growth of socially responsible investing means companies with strong CSR performance have increased access to capital that might not otherwise have been available. The socially concerned investors climbed 36% from \$1.49 trillion in 1999 to \$2.03 trillion in 2001.

Evolving Future Agenda

That corporate have social obligations, seems to be a foregone conclusion. The need to have multiple goals is also increasingly being recognized. Instead of a single “bottom line” corporate are required to pay attention to multiple bottom lines- social, environmental, information and ethical bottom lines - all of which are interconnected.

There is a need for Indian corporate to graduate from thinking in terms of just charity, to the concept of responsibility. Both managers at the individual level, and the corporate need to accept that neither office nor position gives immunity from responsibility. There is also an urgent need to integrate CSR with business strategy i. e. to link company’s core business and strengths on the one hand with resources available with the organization internally and needs of the external environment, on the other. CSR activities are known to achieve best results when these activities have natural links with the company’s business. Proactive intervention by selecting some areas and concentrating on them will go a long way.

‘C’ no longer stands for Corporates and Cash alone, it stands for

CARE & COMMUNITY DEVELOPMENT too, as socially responsive companies help in building a better society for the underprivileged too.

References

- The Business of Social Responsibility written by Harsh Shrivastava and Shankar Venkateswaran,
- Article Business Society Connect in The Financial Express on January 15,2004,
- www.bsr.org.
- Corporate Social Responsibility Initiatives of NSE Nifty Companies: Content, Implementation, Strategies and Impact by Dr. Bindi Mehta,
- Article New Hope – Corporate Philanthropy in Business India, January 2004,
- Proceeding of Conference on Corporate Social Responsibility in South Asia,
- Reference Materials by Partners in Change,
- Corporate Social Responsibility Award Business Line Dec. 2003,
- Report of Survey on Corporate Involvement in Social Development in India conducted by Social and Rural Research Institute and Indian Market Research Bureau,
- The State of CSR – Business World Dec. 2003,
- Fighting Poverty Together in India By Action Aid.

CDM OPPORTUNITIES IN SAGO/STARCH SECTOR

By

A. Ebenezer Rajkumar, Vice President & D. Vaidyanathan, Principal Vice President, ITCOT Ltd, Chennai & Dr. R.Sethumadhavan, Co-ordinator, IES, Anna University, Chennai

INTRODUCTION

Tapioca (*Manihot Esculenta Crantz*) was introduced in India during the later part of the 18th Century. Today, tapioca is grown in more than 3 lakh hectares in India, with a production of 58 to 60 lakhs tonne of tubers. Though, Kerala ranks first in cultivation and production in the country, Tamil Nadu stands first in respect of processing of tapioca into starch and sago and hence, this crop has acquired a status of one of the important commercial crops in the State. Tapioca and its finished products are used as food, animal feed and as raw material for several industrial products. Tapioca is

considered as the cheapest source of Carbohydrates among the cereals, tubers and root crops and is a staple diet in many parts of Africa, South America and Asia. About 500 million people eat tapioca in the World. Nutritionally it contains 98% carbohydrates and appreciable amount of calcium and Vitamin C. India is one of the leading countries in tapioca production.

STATUS OF THE INDUSTRY

Tamil Nadu comprises of over 800 units, who are registered with Sago Serve, which is the cooperative Society formed by the Govt. of Tamil Nadu, India to market the Sago produced by these units. The sector generates a business of over Rs. 200 crores through Sago Serve and employs 5 lakhs people. Currently, Salem district in Tamil Nadu accounts for 95% of the total Sago and Starch production in India, with the remaining 5% from Andhra Pradesh. All the units are proprietary or partnership in nature and barring a few, which are mechanized, rest are highly labour intensive. The crushing capacities of the units vary from 25 tcd to 200 tcd of tuber. The fresh water requirement is enormous, as each tonne of tuber crushing requires around 4-6 tonne of fresh water. The source of water is through bore wells and ground water depletion is very high for the past 5 years and also cost of energy has increased substantially.

Tapioca harvesting period is 6 months (September to February) and off-season period is 6 months (March-August). Hence, the industry typically operates for 5 months as the season period, between November to March. The peak crushing is about three months and the crushing during the rest of the period in the season will be as per the market demand. During the off-season, most of the units use the wet starch stored, to produce starch or Sago, as per the market demand and price. Hence, loading or crushing during non-peak season is a varying factor depending upon the market conditions.

The sector does not maintain any classified information on the actual performance of the units in terms of production, raw material and power consumption, quantity of wastes and such other. The typical values are given in **table 1**.

Table 1. Raw material and utility requirement

Per Tonne of Sago	Unit	Value
Tuber	Tonne	4 @ 23% starch
Water	Tonne	5
Electricity	KWh	40
Thermal- Fire wood	Kg	80

Typically power and fuel constitute 5% of the production cost and 30% of the conversion cost that excludes raw material.

POTENTIAL FOR ENERGY RECOVERY

The industry look forward to energy recovery from the effluent as the key initiative to meet the internal energy requirements due to increasing cost of electricity, thinning profit margins due to increased competition and mounting pressure from pollution control board to treat the effluent to meet the discharge norms. The characteristics of the liquid effluent and solid waste analysis is given below in the **table 2**

Table 2 Characteristics of wastewater

Parameter	Unit	Values
COD	mg/l	5000-6000
BOD	mg/l	1000-2000
PH	mg/l	5- 6
Total Solids	mg/l	2000-5000
Volatile solids	mg/l	500-1500
Sulphides	mg/l	0.4-0.5
Sulphates	mg/l	50-250

SOLID WASTES

The industry also generates solid wastes up to 10% of the tuber processed comprising of 2% as the skin or peels of the tuber and 8% as the process waste called thippi (solid residue).

Typical analysis of the solid waste extract referred from secondary data is given in **table 3**

Table 3 Thippy (solid residue) extract analysis

Parameter	Unit	Values
COD	mg/l	5000-6000
TDS	mg/l	2000
Organic solids	mg/l	500
Suspended solids	mg/l	80000
COD	mg/l	70000
Carbohydrates	%	> 50
Fibre	%	10

The analysis of the thippi extract mentioned above is one such value, which needs further verification from larger samples

TREATMENT SCHEME

The general treatment scheme implemented in few of the industries is given below :

Pre Treatment

Discharge of effluent from the sago industry is intermittent. This gives rise to fluctuation of characteristics of the wastewater. In order to facilitate homogeneity in characteristics and efficient operation of the Effluent Treatment Plant, an equalization tank with capacity to hold at least 12 hours discharge of wastewater is provided. Since the effluent is acidic in nature, the pH is being raised to 8-9 by adding suitable alkali to homogenize raw wastewater. The neutralized effluent is settled in a settling/ sedimentation tank over a period ranging from 2 to 4 hours, so as to remove the settled solids.

Primary Treatment

Effluent from sago industry is easily amenable to biological treatment. Secondary treatment consists of (a) simple holding pond with volume large enough to hold 20 to 30 days' flow of wastewater with a depth of over 2 m. (Anaerobic lagoon) followed by shallow ponds with capacity to accommodate 3 to 5 days' flow of wastewater. Pond treated effluent is being passed through rock filter. These ponds require sufficient land.

In order to obviate the requirement of large extent of land some biological treatments supplemented with simple electrical/mechanical agitation is being practiced. Oxidation of organic matters is being done by introducing air into a body of wastewater. Introduction of air is done by means of agitation of water or diffusing the air into water. They are popularly called Aerated Lagoon/ Oxidation Ditch/ Activated Sludge Process. However, effluent from biological treatment units is to being clarified in secondary settlers. Where land is a constraint, few industries already have gone for anaerobic digester by covering the tank with polythene cover and recover gas followed by aerobic treatment. The recovered gas is predominantly used in the roasting process in sago production to replace the firewood and in few cases to a Diesel engine by providing a blower through a series of filters. Most of these systems are constructed based on the vendors own designs and no scientific

approach has been practiced in the design or operating these system. The inoculums being used during the start up of the season is based on the cow dung slurry. It is observed that that C/N ratio of this sago/ starch effluent is high due to the starch content and no nutrients are being added in these systems to optimize the gas flow. Many units operate the digester much lower of its rated capacity and pH is the only parameter monitored by few units. Also no data is available to verify the quantity of gas generation and the methane content of the gas. The quantity of diesel consumption is being monitored by units using their DG sets for the power generation and will provide the rough indication of biogas being utilized in the engine. Most of the units also do not operate the secondary treatment in the real sense as it consumes additional power

The gas potential exploited and the results of a typical unit implemented the anaerobic digester by simply covering the polythene sheet over the tank is indicated below :

BASED ON THE LIQUID EFFLUENT

The liquid effluent is taken to an equalization tank where pH is adjusted and then fed to the anaerobic treatment. The peel from the tuber and the solid residue thippi is being used as cattle feed. The biogas potential estimated is given below in table 4.

Table 4 Biogas generation from wastewater

	Parameter	Value	
1.	Products	Roasted and Pearl Sago	
2.	Crushing capacity	150 tpd of crushing	
3.	Crushing days: Season	Crushing Days 150	Crushing Rate-tpd 150
4.	Waste water generation	5.0 m ³ / tonne of 750m ³ / crushing = day	
5.	COD Loading	6000	
6.	Calorific Value of biogas with 64% CH ₄	5400 kCal/Nm ³	
7.	Biogas generated m ³ / day	Season 1900	

Note: The values are only indicative based on literature survey

MATCHING HEAT AND ENERGY BALANCE

The energy requirement of the unit is currently met by the DG set and the biogas generated from the digester is being sent to the DG set through a gasholder with a blower passing through series of filters. The electrical and thermal energy replacement and capital and operation cost of Effluent treatment plant with Anaerobic digestion is given below in the **table 5**

Table 5 Matching heat and power

	Season without Anaerobic digestion	Season with Anaerobic digestion
1. Biogas generated m ³ / day	Nil	1900
2. Power required for unit including ETP, kWh/day	4775	4900
3. Power generation through biogas only, kWh/day	Nil	2700
4. Electrical energy replacement - %	Nil	55
5. Thermal energy replacement - %	Nil	Nil

The low electrical energy replacement is due to DG set which could replace only 75% of Diesel and overall efficiency of the system is around 75%). However, few units are operating with only DG sets during season with out buying any power from grid i.e. using Biogas and Diesel. Using state of the art Anaerobic technology and Gas Turbines such as Micro turbines will replace the total electrical energy requirement

TREATMENT OF SOLID WASTE

While peels are dried and sold as cattle or chicken feed, thippi is sold either as wet (over 80% moisture) or sun dried (40%) moisture. The returns are not remunerative and found nuisance to dispose. These wastes also offer a good potential for energy generation, if found economically attractive

It is to be noted that as thippi (solid residue) has yet been exploited for the purpose of biogas generation,. In addition, peels or skin of the tuber, also offers a good raw material for biogas generation. Technologies like High solids Anaerobic digestion (more than 10% TS) and Thermal Gasification also could be explored for exploitation

of the various solid wastes generated after drying and sizing of the material which could generate additional power and also meet the thermal energy requirement of the industry.

POWER GENERATION POTENTIAL

The available potential of the sector based on only the liquid effluent and the number of units is as follows is given in **table 6**

Table 6 Power generation potential

Crushing Capacity - tcd	100 to 150	50 to 100	25 to 50
Number of units, nos.	200	300	300
Bio Gas, m ³ /day	2,58,400	1,93,800	96,900
Equivalent, MWh/day	1600	1200	600

Thus, the total available power for the sector from the liquid effluent is 3.4 million units (kWh) per day of gas equivalent.

- It is to be noted that the exploitable power will depend on the efficiency of the engine i.e., exclusive gas engine or dual fuel DG sets. While nearly all the units have DG sets for the back up power, which could use the biogas, exclusive gas engines are yet to be commercialized in India.
- As electricity is the costliest form of energy, biogas generated is proposed to be used in the existing DG sets to generate electricity, with surplus going in for meeting the fuel requirement.

TECHNO ECONOMIC ANALYSIS

The typical investment required for the sector (**Low cost technology**) based on the industry categorization and the realizable power potential from the liquid effluent is summarized as follows in the **table 7**

Table 7. Investment required

Crushing Capacity - tcd	100 to 150	50 to 100	25 to 50
Number of units, nos.	200	300	300
Power potential, MW	13.6	10.2	5.1
Total Investment, Rs Lakhs	5000	4500	3000

Thus, the typical total exploitable power potential of the sector is 29 MW and the total investment required is Rs 125 crores.

FINANCIAL ANALYSIS

Based on the above financials, financial workings were made for the sector and the highlights are given below

The financial analysis indicate the following:

- With Financial Institutions funding alone, plant capacity of 150 tcd and above are economically viable with project IRR above the interest rate. The number of plants with such crushing capacity is very few.
- With the interest subsidy of Ministry of Non conventional Sources (MNES) @ 7.5%, 100 to 150 tcd plants are also viable with low cost technology

Thus, economically viable plants with exploitable power potential based on MNES interest subsidy is of capacities 100 to 150 tcd and could be able to generate 13.6 MW with an investment of Rs 50 crores.

STAGE OF IMPLEMENTATION

Based on the MNES announcement for interest subsidy for such waste to energy projects, the sector developed around 20 detailed project reports with biomethanation technology and was submitted to MNES in 2003. The total power generation potential for such projects is in the tune of around 6.6 MW. However, it was observed that local banks were reluctant to provide the term loan component due to various reasons to these identified projects and hence the projects are yet to be started commercially.

CLEAN DEVELOPMENT MECHANISM

In 1997, the Kyoto protocol established the CDM (Clean Development Mechanism), which enables **Annex 1** countries (developed countries and economies in transition) of UNFCCC (United Nations Frame Work Convention on Climate Change) meet their GHG (greenhouse gas) reduction targets at lower cost through projects in developing countries.

As a result of the Kyoto Protocol, carbon has become a tradable commodity with an associated value. One tonne of CO₂ (Carbon di oxide) reduced through a CDM project, when certified by a designated operational entity, is called known as CER (Certified Emission

Reduction), which can be traded. Revenue from CER can form part of project's annual cash inflow, equity, or debt.

GHG REDUCTION & QUALIFICATION:

Global Warming Potential (GWP) of methane (CH₄) = 21, GWP of Carbon di Oxide (CO₂) = 1. Combustion of one tonne of CH₄ produces 2.75 tonne of CO₂, therefore the capture and combustion of one tonne of otherwise fugitive CH₄ emissions yields a GWP benefit of at least 18.25 tonne of CO₂ equivalent. If the captured CH₄ is used as energy source (on- site or delivered into a pipeline) the full 21 tonnes of GHG reductions can be claimed.

BENEFITS

The liquid effluent and the solid waste generated by the industry contribute to the global warming due to the decomposition of the material. On open decomposition, fugitive methane is generated and escapes in to the atmosphere causing global warming. It is to be noted that methane, CH₄ is very high global warming potential and 21 times that of CO₂. Hence, by implementing a project for the useful of this biomass into energy through the biomethanation route proposed will benefit two scores

- Capture and control of harmful fugitive methane and thus reducing global warming
- Generation of power which is renewable in nature and thus replacing power which would be normally generated using fossil fuels, there by contributing to the reduction of global warming

APPLYING THIS CONCEPT TO SUCH SHORTLISTED 20 PROJECTS OF MNES WHICH COVER BOTH LIQUID AND SOLID WASTE (Total of 6.6 MW) TO A PERIOD OF 10 YEARS AND WITH THE POTENTIAL TRADEABLE CO₂ EMISSION REDUCTION FROM 51,000m³ NET CH₄/ DAY, THE TOTAL EMISSION CREDITS IS AROUND 1,60,000 TONNES OF CO₂ AND THE REVENUE STREAM COULD BE TO THE TUNE OF (5 US \$ PER TONNE OF CO₂ traded) RS. 3.6 CRORES.

CONCLUSION

The sector is undergoing a tough phase in that the selling prices are not competitive and the products are sold at cost prices. Further, the increase in the power tariff has significantly increased the cost of production and made the margins wafer very thin. Any attempt to make the industry to reduce the power bill by cheaper sources and improve the financial healthiness will make the industry more competitive.

WORKSHOPS/ SEMINARS/ TRAINING PROGRAMMES

■ International Conference on “Development of Knowledge Infrastructure : Role of Consultants”

11-13 October, 2004



The International Conference on “Development of Knowledge Infrastructure : Role of Consultants” was organized during 11-13 October, 2004 in New Delhi which was inaugurated by *H.E. the President Dr. A.P.J. Abdul Kalam* and was attended by about 475 delegates. The conference was organized by the Secretariat of Technical Consultancy Development Programme for Asia and the Pacific (TCDPAP) to bring together the leading thinkers and practitioners from across the world to address the issue and give pointers for the road ahead.



During the Conference, CDC’s “National Awards for Excellence in Consultancy Services” was presented by the Chief Guest.

The meeting of the Fourth General Council and the Fifth Executive Committee of TCDPAP was also conducted along with the Conference. The conference highlighted the crucial role of Knowledge Infrastructure in sustaining and promoting the economic and social development of economies of countries in the Asia Pacific Region, particularly in developing countries.



On 13 October 2004, Hon’ble MoS (Independent Charge) for S & T and Ocean Development, Govt. of India Sh. Kapil Sibal gave the valedictory address to the delegates.

■ Internal Audit Course on ISO 9001:2000 QMS

8-9 Nov’04 & 8-9 Feb’05



CDC conducted internal audit course on ISO 9001:2000 QMS on 8-9 November 2004 & 8-9 February 2005 in New Delhi specially for professionals from various zones of Military Engineer Services (MES) The programmes were conducted successfully with 15 delegates each, including consultants.

■ **Half day Workshop on Status of Composite Technology in Europe & UK and Global Opportunities for India**

24 November, 2004

CDC organized the subject workshop jointly with Composite Center International (CCI), Hyderabad. During the workshop, Mr. David Skertchly, a composite technology professional from UK gave a talk and shared his 25 years of experience in the field with the participants. Mr. David has to his credit, setting up of four composite manufacturing units in UK and offering consultancy services all over the world. He is currently a consultant with large organizations in Europe and UK, who are keen to out source composite products. Mr. David highlighted the opportunities available for sourcing technology and orders from large organisations in Europe and UK. He also discussed the scope for collaborations amongst R&D Centers and academic Institutions. The workshop was held in New Delhi.

■ **Workshop on Economy Through New Construction Technologies and Use of Alternative Materials**

17 December 2004



CDC along with M/s ICT Pvt. Ltd, New Delhi conducted the workshop in order to offer a unique opportunity to engineers, planners, designers, architects, academicians and consultants to share knowledge and experience on a common platform and evolve strategy to address relevant issues faced in this important area. This workshop had a presentation from eminent experts and practitioners in various areas of construction field using cost effective new techniques. The workshop was held in New Delhi.

■ **Workshop on Promoting Technology Development, Utilisation and Transfer at Indore, Madhya Pradesh**

20 January 2005

This workshop was conducted by CDC in collaboration with M/s MPCON, Bhopal, the Technical Consultancy Organisation (TCO) of Madhya Pradesh, to create awareness of the programmes relating to indigenous technology promotion, development utilisation and transfer under the Technology Development Promotion and Utilisation (TDPU) scheme of the Department of Scientific & Industrial Research (DSIR).

■ **Workshop on Promoting Technology Development, Utilisation and Transfer at Coimbatore, TN**

2 February 2005

CDC in collaboration with its Chennai Chapter and PSG College of Technology, Coimbatore conducted the workshop with the objective of creating awareness of the programmes relating to indigenous technology promotion, development, utilisation and transfer under the Technology Development Promotion and Utilisation (TDPU) scheme of DSIR. These workshops were organised with active support from DSIR.

■ **Workshop on Consultancy and Services Sector : Challenges and Prospects - at Chennai**

3 February 2005

CDC jointly with its Chennai Chapter organized the subject workshop to identify the needs of consultancy in various sectors so that effective steps could be taken to develop the consultants in the areas, considering the immense potential due to availability of large skilled and trained manpower and strong S&T facilities.

■ **Workshop on Consultancy and Services Sector : Challenges and Prospects - at Hyderabad**

5 February 2005

CDC in collaboration with its Hyderabad Chapter and M/s APITCO, the Andhra based TCO organized the subject workshop in Hyderabad.

■ **Workshop on Consultancy and Services Sector : Challenges and Prospects - at Kolkata**

23 February 2005

CDC in collaboration with M/s WEBCON Ltd, the TCO of West Bengal organized the subject workshop at Kolkata.

■ **Workshop on Consultancy and Services Sector : Challenges and Prospects - at Mumbai**

25 February 2005

CDC in collaboration with its Mumbai Chapter organized the subject workshop at Mumbai.

TALK SERIES

■ **Water Pollution and Consultancy Services**

26 October 2004

Dr. D.D. Ojha, Scientist Incharge, Ground Water Department and Member, High Level Hindi Advisory Committee, Ministry of Science & Technology and Department of Ocean Development delivered a talk in Hindi on the subject topic.

■ **Identification and Implementation of Materials Related R&D Projects : Role of Consultants**

20 November 2004

Prof. G.S. Upadhyaya, an expert of international repute with specialization in powder metallurgy gave a talk on the topic. He has been in academic positions for last 40 years at IIT, Roorkee and later since 1976 as Professor at IIT, Kanpur, superannuating from there in 2001. Prof. Upadhyaya highlighted the driving forces for R&D, right type of research personnel, and identification of research priorities from the Indian context. The successful timely implementation of R&D projects must be viewed holistically, where the whole lot of cadres are responsible.

■ **Green Engineering : Engineering based on environmentally friendly design**

27 November 2004

CDC's Mumbai Chapter organized the subject talk delivered by Ms. Nilima Sharma, Chief Architect, TCE Consulting Engineering Pvt. Ltd., Mumbai.

The presentation was to create awareness about Green Engineering, which is defined as the design, commercialisation, and the use of processes and products, which are feasible, economical, regenerate naturally and are biodegradable, while minimising generation of pollution at the source and risk to human health and the environment.

■ **CDC-CBRI Special Lecture Series**

A special lecture series was launched in the last quarter of 2004 in joint collaboration with Central Building Research Institute, Roorkee by synergising CDC's vast member base and CBRI's technical knowledge base and R&D in the frontiers of building science and technology. Christened as CDC-CBRI Special Lecture Series and designed as a regular monthly feature at CDC, it was expected to benefit the member consultants of CDC by equipping them with the latest developments on the topics of interest.

The series was inaugurated with a lecture by Dr JM Bhatnagar, Head, Environmental Science & Technology and Clay Products Division, CBRI on "Use of Fly Ash in Construction" on 30th November, 2004. The lecture covered the recent trends and scope of fly ash utilization in the country including manufacture of fly ash based bricks and aggregates as well as studies undertaken at CBRI on reclamation of abandoned ash ponds for human settlements, which have yielded promising results.

The second lecture of the series was delivered by Dr AK Gupta, Head, RPBD, PME and I&OC Divisions, CBRI on "Fire Safety in Buildings" on 28th December 2004. Dr Gupta dealt with the application of fire safety models for evaluation of the fire safety levels of building and explained the application of software namely, SAFE-R and CALFIRE developed at the institute which are based on an analysis of evacuation paths and heat release & extraction rates in enclosed spaces and recommending measures to ensure safety of men and materials during fire.



The third lecture of the series was delivered by Dr Shailesh Kr. Agrawal, Senior Scientist, Structural Engineering Division, CBRI on "Microzonation Studies as Impacted by Recent Earthquakes" on 25th January 2005. Dr Agrawal elaborated on the on-going work of mapping the cities for assessment of seismic vulnerability of existing building and risk evaluation of different wards in a city. Citing the examples of Jabalpur and Delhi, Dr Agrawal explained the basic two approaches developed at CBRI namely, Demand Capacity Ratio and Rapid Screening Procedure for seismic microzonation of the urban areas, which would help engineering, planners and policy makers to evolve appropriate hazard mitigation measures.

These lectures have been highly appreciated by the participants.

■ Use of Glass in Buildings

22 February, 2005

In continuation of the tie up with CBRI, Dr. N.K. Garg, Scientist 'G', CBRI, Roorkee gave the talk on the topic. Dr. Garg has 34 years of experience in building research and teaching with a number of publications and awards including Mother Teresa Excellence Award

for Meritorious Accomplishments in Building Research that immensely contributed for National Progress.

Glass has always been associated with notable advances in building construction. The glass industry in India is although producing world-class glass but in the absence of any guidelines/code/bye-laws in the country, glass in buildings is being used without much consideration of its safety, security, strength and optical performance potential. To facilitate its use as an emerging building material adding excellence in buildings performance, CBRI has developed guidelines for use of glass in building along scientific lines. National & International codes, experiences of the glass industry including the manufacturers, the fabricators and the installers form the basis of these guidelines. The talk was intended to share S&T inputs including the guidelines on use of glass in buildings. It covered salient glass types such as normal glass, tempered glass, laminated glass and insulating glass units, their properties and applications, easy to use tools for arriving at appropriate thickness of glass in a given situation, installation details along with dos and don'ts for use of glass in buildings.

■ Creating a Tobacco Free Organisation

22 February 2005

Dr. (Ms.) Sajeela Maini, President, Tobacco Control Foundation of India and the Managing Partner of Quit Tobacco Consultancy gave a talk on the subject. During the session, she highlighted the need, benefits to the organization and the process involved.

Quit Tobacco Consultancy provides services to the community at large, ranging from big corporate houses, government departments, private organizations and multinational companies. The Consultancy also organizes community outreach programmes, camps, workshops, educational and other activities related to cessation of tobacco and other substance abuse disorders. She also runs Tobacco Cessation Programs in Sir Ganga Ram Hospital, New Delhi; and at National Heart Institute and Sama Nursing Home, New Delhi.

EXHIBITION/ TRADE FAIRS

CDC organised an Exhibition for the benefit of its members and other consultants during the TCDPAP International Conference on 11-13 Oct'05. 21 organisations including DSIR participated in the exhibition.

❑ **ADB Seminar on Development of Domestic Consulting Services**

**2-3 May, 2005 (Hyderabad) &
5-6 May, 2005 (Chennai)**

In the present competitive environment, selection of consultants for any specific assignment shall undoubtedly be based on capability and credibility. International institutions who engage consultants for prestigious projects have their own norms for project proposals. The Asian Development Bank (ADB) conducts regular programmes to acquaint consultants with the procedures adopted by them for selection of consultants with the prime objective of rendering participation in bidding for various project assignments funded

by the Bank more transparent and effective.

With the above objective, CDC and ADB, Manila are organising two-day Seminar on “Development of Domestic Consulting Services” during 2-3 May, 2005 in Hyderabad and May 5-6, 2005 in Chennai. The Bank shall distribute valuable documents during the Seminar. It is worthwhile to mention that a separate session is devoted for one to one interactions with the ADB team.

For nominations please contact Deputy Director (TSU), CDC at 011-24603424 or rparpyani@cdc.org.in.

Visit Events section of our website www.cdc.org.in for details.

COMMUNICATION DETAILS

Dear Reader

We would like to know if there are any changes in your **communication details**. Please fill in the relevant details given below:

NO CHANGE

CHANGE

NEW READER

NAME & DESIGNATION:

ORGANISATION:

ADDRESS :

TELEPHONE: Fax:.....

EMAIL/WEBSITE :

Send to:-

J. Suriyanarayanan

Editor, Consultancy Vision,

Consultancy Development Centre (CDC)

Zone-IV(B), 2nd Floor, India Habitat Centre,

Lodhi Road, New Delhi – 110 003

Tel: 2460-2601, 2915, 1533; Fax: 2460-2602

Email: newsletter@cdc.org.in Website : www.cdc.org.in

New Members

Following consultants/ organisations have been admitted as CDC members during the period October 2004-February 2005 :

Corporate

Mr P.N. Sathees Kumar

Credit Analysis & Research Limited
Kalpataru Point, 2nd Floor, Kamani Marg, Sion (East)
Mumbai 400 022 Maharashtra

Mr Gowri Prasad Baikaty

J.P. Mukherji & Associates Private Limited
Jyoti House, 172 Dahanukar Colony, Kothrud
Pune 411 029 Maharashtra

Mr Vijay Bahadur Sarin

KLG Environment & Safety Sciencies Ltd.
Ground Floor, Tower a, Unitech Business Park, F-Block,
South City-I, Sector 41, Gurgaon 122001 Haryana

Mr Kaushal Shah

Saket Projects Ltd.
Saket House, 1, Panchsheel Society, Ushmanpura
Ahmedabad 380 013 Gujarat

Mr Sunil Kumar Singhvi

Secure Meters Limited
301-305, Millennium Plaza, Sector 27
Gurgaon 122 001 Haryana

Mr Pundlik Bhagat

Jawaharlal Darda Institute of Engg. and Technology
Amravati Road
Yavatmal 445 001 Maharashtra

Prof Manmohan Bakaya

Lal Bahadur Shastri Institute of Management
Consultancy Cell
Sector III, R.K. Puram, New Delhi 110 022

Mr D. D. Agarwal

Howe (India) Pvt. Ltd.
Howe(India)House, 81, Nehru Place
New Delhi 110 019

Mr Navin Krishen

Kanwar Krishen Associates Pvt. Ltd.
D-139, Saket
New Delhi 110 017

Dr Shyam Sunder Aggarwal

S.S. Foundry Chemical Industries Pvt. Ltd.
A-6/3, Jhilmil Indl. Area, G.T. Road
Delhi 110 095

Mr Arun Saxena

Saxena & Saxena Chartered Accountants
301-303, CA Chambers
18/12, WEA, Karol Bagh,
New Delhi 110 005

Mr Mathukumilli Sri Lakshman Rao

VBC Ferro Alloys Limited
6-2-913/914, 3rd Floor, Progressive Towers,
Khairatabad, Hyderabad 500 004
Andhra Pradesh

Institutional

Dr C.N.V. Satyanarayana Reddy

Kakatiya Institute of Technology & Science
Opp. Yerragattu Hillock
Warangal 506015 Andhra Pradesh

Mrs. Geeta Shrikant Lathkar

M.G.M.College of Engineering, Nanded
Near Airport, Hingoli Road
Nanded 431605 Maharashtra

Mr Arvind Kumar

Non-Conventional Energy Development Agency, UP
Vibhuti Khand, Gomti Nagar
Lucknow 226010 Uttar Pradesh

Mr Madhur Mohan Goyal

220, Sector 21-A
Faridabad 121001 Haryana

Mr Sham Saroop Gupta

27/4, Trikuta Nagar, Jammu
Jammu 180012 J & K

Mr Shantanu Chowdhury

Srima Sales & Services, Shri Om Ganesh Society, 8/126, D.N.
Nagar, Andheri (West)
Mumbai 400 053 Maharashtra

Mr Anil Oberai

B-14, Defence Colony
New Delhi 110024

Mr Ramesh B. Shah

K-1, Prathamesh Co.Op. Housing Society, Twin Towers Lane,
Prabhadevi
Mumbai 400 025 Maharashtra

Mr Pranav Ghai

Oasis Trading Inc., T-540, Malviya Nagar, Panchsheela
Rendezvous Complex, New Delhi 110 017

Individuals**Dr K. Ethirajulu**

Pondicherry Engineering College
Pondicherry 605014

Mr Nihar I Doctor

208, G-tower shankeshwar complex,
above girish group of hospitals, sagrampura
surat 395002 Gujarat

Mr P. Narasimha Murthy

No. 13, 3rd Main, 4th Cross, Vijayanagar 2nd Stage
Bangalore 560 040 Karnataka

Mr Arvind Surange

ACR Project Consultants, Vijay Apartments, 39/35,
Erandwana, Pune 411004 Maharashtra

Mr Ramesh Lakshman

58-B, Gurudev, R.C. Marg, Chembur Naka
Mumbai 400 071 Maharashtra

Mr Satya Narain Sharma

C/o S.N. Sharma & Associates, 17- Udyog Nagar,
Nuaroo Road, Jhotwara
Jaipur 302012 Rajasthan

Mr Hemal Desai

806, SHILP, C.G. Road, Navrangpura
Ahmedabad 380 009 Gujarat

Mr Shubhendu Singh

EPDP, 464, Plot 19, Sector 4, Dwarka 1
New Delhi 110 045

Mr Ashok Hira

7363, Sector-B-10, Vasant Kunj
New Delhi 110 070

Mr Shree Kant Sharma

House No. 58, Sector 29 (HUDA Plots)
Faridabad 121008 Haryana

Mr Prakash Manwar

Ayurvigyan Nagar, Flat No. 363, Type-3,
Khel Gaon Road
New Delhi 110 049

Mr Harshad Joshi

Ravi Park-15, Kalavad Road, Greater Rajkot
Rajkot 360 005 Gujarat

Mr Naipal Singh

Composite Centre International
6/157, Sector II, Rajender Nagar,
Sahibabad, Ghaziabad
Sahibabad 201005 Uttar Pradesh

Mr Krishna Kant Sharma

EIH Ltd. (Oberoi Group of Hotels and Resorts)
Principal Advisor, E.I.H. Limited,
Corporate Affairs Division,
7, Sham Nath Marg, Delhi 110 054

Mr Vanita Ahuja

204, Sector-A, Pocket-C, Vasant Kunj
New Delhi 110 070

Mr Surendra Singh

C-4, East of Kailash
New Delhi 110 065

Mr N. K. Sharma

B-84, Hillview Apartments, Vasant Vihar
New Delhi 110 057

Mr Haresh Kumar C. Gandhi

C/o Gandhi Rice & Agro Industries
At/PO/Ta.
Chamorshi 442603 Maharashtra

Dr Pradyumnaraj Agrahari

1299, Maruti Vihar, M.G. Road
Gurgaon 122002 Haryana

Mr Sunil Mahajan

Construction Industry Development Council
B1-13, Azad Apartments, Sri Aurobindo Marg
New Delhi 110 016

Mr Manoj Maheshwari

Hindustan National Glass & Industries Limited
2, Red Cross Place, 2nd Floor
Kolkata 700 001 West Bengal

Mr Vipin Mahajan

HUDCO
J-12/14, Rajouri Garden
New Delhi 110 027

Dr Santh Kiran Yellavajhala

M/s. Amrutha Krishna Strategic Solutions Pvt. Ltd.
45-127/1, Prasant Nagar behind Railway Quarters,
Moula-Ali, Hyderabad 500040
Andhra Pradesh

Mr M. V. Balakrishnan

Maker Group
222, Hauz Khas Apartments (SFS-DDA), II Floor
New Delhi 110 016

Mr Ninad Desai

Optinext Technologies Pvt. Ltd.
604, Marva Queen 2
Near Jurassic Park, Kharoodi,
Malad (West), Mumbai 400095
Maharashtra

Mr Mohideen Mohamed Ashrof

SSM Academy of Management
L 81 Annanagar East
Chennai 600 102 Tamil Nadu

Mr Swapan Kumar Ghosh

Steel Authority of India Ltd. (SAIL)
E/202, Ispatika Apartment, Sector IV, Plot No. 29,
Dwarka Phase 1
New Delhi 110075

Mr K.R. Ramana Subramanian

Lloyds Finance Ltd.
5/9, Patel Street, Anandha Nagar, East Tambaram
Chennai 600059 Tamil Nadu

Mr Anup Goswami

Mahavir Spinning Mills Ltd.
Phase-Viii, Focal Point, Chandigarh Road
Ludhiana 141123 Punjab

Mr Mohan Karan

Mathura-Vrindavan Development Authority
Plot No. 59, 1st Floor,
Ashok Enclave I, Sector 37
Faridabad 121 003 Haryana

Mr K.C. Showkath Ali

Qatar Petrochemical Company
Peekey House, (PO) Pattikad
Santhapuram 679325 Kerala

Mr Bhima Prasad Maiti

State Bank of India
Udayachal Apartments, Flat B2, 1st Floor, 119,
Canal Street, Sreebhumi
Kolkata 700 048 West Bengal

Mr Nimai Sen

Konaseema EPS Oakwell Power Limited
2nd Floor, Progressive Towers, 6-2-913/914,
Khairatabad, Hyderabad 500004
Andhra Pradesh

BOOK REVIEW

Status of Consultancy Services in India

By Consultancy Development Centre, New Delhi.

Over the past 25 years, Indian Consulting capabilities in terms of nature and range of services offered, have developed to levels comparable to that of consultancy firms of developed countries. Today there are more than 5000 consultancy firms operating in the country ranging from a one person organization to large companies employing more than 1000 professionals. These firms offer comprehensive services in the areas of industry, natural resources, urban development, public utilities, transport planning, construction and process industries, and have the capabilities for setting up small to large projects using simple to state-of-the-art technologies.

So far the bulk of the domestic market has comprised small and medium sized firms. These firms have emerged over the years to cater to the dominant medium-sized businesses in the economy. Most of the medium-sized businesses were not only unaware of consultancy services but also could not afford the services of consultants. This trend has changed with the emergence of large corporate houses and with business turnovers having increased across all sectors in the economy.

India has significant capabilities in the areas of small-scale industries, petrochemicals, fertilizers, petroleum and natural gas, power and metallurgy. Indian companies have been associated with setting up several large scale plants in these industries. India has a wage-based cost advantage in engineering services and project related services. Apart from these strengths, Indian consultants have experience that is directly relevant to developing countries. With

a skilled human resources base, India is adequately endowed to emerge as a key player in professional services. However, it is being increasingly realized that apart from regular up-gradation of skills and training of human resources, the development of human resources from raw to skilled levels depends on the exposure of firms to large projects and in international markets.

Investment requirements in various sectors of the domestic economy are much more than projected availability of public spending. Increased private sector participation is to be sought in line with the liberalization of the economy. Such private sector participation, especially in the core sectors, would open many consulting opportunities where the public sector is currently operating. Indian markets present large opportunities for consultants. As per the investment requirements for the economy the consultancy market in India is conservatively estimated at about Rs.220,000 Crores. Manufacturing, Agriculture, Power, Construction and Transport are estimated to be the largest sectors for the consultancy business.

This book may be useful to consultants, clients/users of consultancy services and also to policy makers, policy analysts and economic and industrial planners as well as concerned government departments to formulate policies and evolve measures to strengthen and promote consultancy capabilities to bring India to the forefront as a giant trading partner in this emerging world of knowledge in the next millennium.

Presentation of Rashtriya Gaurav Award and Certificate of Excellence to Shri Mohinder Choudhary

India International Friendship Society has selected and honoured men and women who have excelled in their field of professional activity. One of our members Shri Mohinder Chaudhary is practising in the field of Plant & Machinery Valuation since 1985. He was one of the youngest Plant & Machinery Valuers to be registered with CBDT in December, 1985 in India. At the young age of 26, he entered the field of Valuation and built up a lucrative practice in Delhi. This award is in recognition to his outstanding services in the field of valuation.



Shri Adesh Jain takes over as first non-European President of IPMA, Switzerland

Shri Adesh Jain, Hony. President of Project Management Associates (PMA) has taken over as President of International Project Management Association (IPMA) wef January 01, 2005. Shri Jain's position as President of a global organization will significantly add to enhancing maturity in managing projects in India.

IPMA is the apex body of project management professionals comprising 36 countries. India and China are the two key member nations from Asia. IPMA as a nodal body for the project management profession is setting standards for best project management practices, training, and certification.

Shri Jain, a visionary shaping the project management profession globally has in the past played a key role in establishing the IT industry in India in the 70s and 80s and is now promoting the project management movement globally. Due to his initiative in winning the bid against stiff competition, the 19th IPMA World Congress is being held in New Delhi from 13-16 November 2005 – a flagship Project Management event organized outside Europe for the first time in 40 years.

Entrepreneurship Development Programmes of EDII, Gandhinagar.

Entrepreneurship Development Institute of India (EDII) is an International Resource Institute engaged in entrepreneurship education, training and research. To spearhead entrepreneurship at national and international levels, the Institute has evolved a variety of programmes of various target groups around strategic thrust areas.

Two such important one-year programmes are the :

- a) Post-Graduate Diploma in Business Entrepreneurship and Management (PGDBEM)
- b) Post-Graduate Diploma in Management of NGOs (PGDMN)

For further details please visit <http://www.ediindia.org>

CONSULTANCY BUSINESS OPPORTUNITIES – AN e-NEWSLETTER OF CDC

CDC is forwarding tender information on consulting assignments by way of e-Newsletter titled "Consultancy Business Opportunities" (CBO) to its members. Contents of these emails are being stored in CDC website, which are accessible through individual username and password provided to all CDC members already. Please note that this username and password is different from the one we have issued for updating their membership profile on our website.

All CDC members are therefore, requested to kindly update their email address on our website, whenever they change the same, in order to enable us forward them email alerts regularly.

For details, logon to our website : <http://www.cdc.org.in>

“CONSULTANCY VISION” - Readers Speak about.....

- “Consultancy Vision” provides birds eye view of the world of Consultancy. It is informative and is useful for consultants.

*-Ranjit Basu, Technical Consultant,
United Consultants (I) Pvt. Ltd., Kolkata*

Invitation for Membership

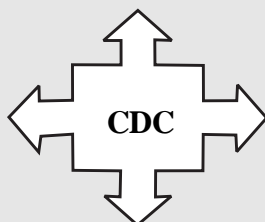
CONSULTANCY DEVELOPMENT CENTRE (CDC)

(Sponsored by DSIR, Govt of India)

Leverage CDC’s initiatives to grow your Consultancy :

PROFESSIONAL DEVELOPMENT
(MS DEGREE) CONSULTANCY MANAGEMENT

ASSISTANCE IN BUSINESS
PROMOTION AND JOINT
VENTURE FORMATIONS



CONSULTANT DATABASE
AND
REFERRAL SERVICES

INTERNATIONAL LINKAGE (TECHNICAL
CONSULTANCY DEVELOPMENT
PROGRAMME FOR ASIA AND THE PACIFIC)

For further details, contact :

Mr. S.K. Lalwani, Director, CDC, Zone-IV(B), 2nd Floor, India Habitat Centre,
Lodhi Road, New Delhi – 110 003 Tel: 011-24653316 (Direct)
011-2460-2601, 2915, 1533 (PBX); Telefax : 91-011-2460-2602 ;
Email: sklalwani@cdc.org.in ; Website : www.cdc.org.in

Readers are requested to contribute generously for the forthcoming issues of this Newsletter by forwarding valuable articles of interest to consultancy profession. Please also give your valuable comments and suggestions to make this newsletter a Success.

-Editor

A world of information at your fingertips!



VIRTUAL INFORMATION CENTRE

is a daily e-mail service giving you the latest news updates
on issues related to

- Coal
- Renewable energy
- Other infrastructure sectors
- Power
- Industry & energy
- Pollution & waste management
- Oil & Gas
- Environment
- Economy

Benefits received from VIC

Today's news

An interactive daily news bulletin scanned from online newspaper sites

Contents list of global journals

A monthly feature and an e-library at your desktop

Cyber highlights

A monthly update on sectors mentioned above from cyberspace

Domestic and global calendar of events

Organizer for important events and conference dates

TERRAGREEN

A fortnightly electronic newsmagazine on trade, energy, and environment

Exclusive information request service

The beneficiaries

Corporate visionaries and infrastructure / energy professionals

For more
information,
contact



The Energy and Resources Institute
Information Dissemination Services
Darbari Seth Block, Habitat Place
Lodhi Road, New Delhi - 110 003

Fax +91 11 2468 2144 / 2468 2145
E-mail outreach@teri.res.in
Tel. +91 11 2468 2100 / 2468 2111
Web www.teriin.org



“Good Counsellors Lack no Clients”
Shakespeare

Empower yourself with a higher degree in consultancy management

- ✓ Enhance your consultancy skills
- ✓ Enhance your project management skills
- ✓ Enhance your skills for comprehensive problem solving

Birla Institute of Technology & Science (BITS), Pilani in collaboration with **Consultancy Development Centre (CDC)**, offers working professionals a unique opportunity to attain higher degree in **M.S. Consultancy Management**. This four semester degree caters to the requirements of consulting professionals and aims to help them tap the immense market potential in consulting business.

The programme is designed for **working professional** in business and organizations who:

- Provide consulting services to a client organization on a contract or project basis.
- Are individual entrepreneurial consultants
- Aspire to work as internal consultants.

The programme will be conducted at New Delhi by **BITS, Pilani** in collaboration with **CDC**. Regular contact classes will be held every Saturday and Sunday at CDC premises (**located at India Habitat Centre, New Delhi**), which has excellent library and computer facilities. Some contact classes may also be conducted at **BITS, Pilani**.

All candidates will be enrolled as students of **BITS** and successful students will be awarded the **M.S. (Consultancy Management)** degree.

This is perhaps the only program of its kind in the country. It is expected to be of great benefit to practicing consultants/managers as it helps to impart analytical approach for problem solving, better communication skills and interactive methods.

ELIGIBILITY

Working professionals located in and around Delhi, having an Integrated First Degree of BITS or its equivalent like BE, MSc, MBA, MCA, MCom, CA etc. Candidates sponsored by their organizations will be given preference.

For more information, please contact

Suresh Kumar
Programme Coordinator
Consultancy Development Centre
2nd Floor, Zone IV-B, India Habitat Centre,
Lodhi Road, New Delhi – 110 003

Phone: 011-24682055 (D), 9811367775,
24602601, 24601533, 24602915

Fax: 011-24602602

E-mail : ms@cdc.org.in

Website : www.cdc.org.in

CDC is an organization supported by Department of Scientific and Industrial Research, Ministry of Science and Technology, Government of India. This degree is being offered Under the off-Campus Collaborative Programmes of BITS.

Seminar
on
“Development of Domestic Consulting Services”

VENUE & DATE
May 2-3, 2005 in Hyderabad
May 5-6, 2005 in Chennai

Jointly Organised by



Consultancy Development Centre (CDC)

and



Asian Development Bank (ADB), Manila

For further details please contact :

Deputy Director (TSU)

Consultancy Development Centre

Zone-IV(B), 2nd Floor, India Habitat Centre, Lodhi Road, New Delhi – 110 003

Tel: 011-24603424, 24601533 Fax : 011-24602602 ;

Email: rparpyani@cdc.org.in or cdc.tsu@indiatimes.com

Website : www.cdc.org.in

Seminar details also available at CDC Website www.cdc.org.in under events section.

You may also register online at CDC Website.



CONSULTANCY DEVELOPMENT CENTRE (CDC)

FACILITATION IN ISO 9000 QMS CERTIFICATION

Consolidating its strengths over the years, Consultancy Development Centre (CDC) is facilitating organizations in the services sector desirous of obtaining ISO certification. CDC provides the following specialized services :

- In-house training on Awareness-cum-Implementation, Documentation and Internal Audit. Status Audit to identify documentation needs for the Quality System to be developed and documented.
- Assistance and guidance in system development and documentation
- Assistance in conducting Internal Audits and Management Review.
- Conduct of external/mock audit to give the Management a status report on the readiness of the organization for certification audit.
- Advice for selection of suitable certification agency and assistance in finalizing action on audit observations and non-conformity reports.

CDC is one of the very few organizations empanelled by Ministry of SSI & Agro-Rural Industry, Govt. of India for providing ISO 9000 Consultancy.

Some our clients are –

1. M/s National Building Construction Corporation Limited (NBCC), Consultancy and Project Management Divisions
2. M/s Gammon India Ltd., Mumbai including all their Regional Offices, Regional Workshops and all their Project Sites all over the country.
3. M/s Singhanian & Partners (Solicitors & Advocates)
4. M/s Intercontinental Consultants and Technocrats Pvt Ltd., New Delhi
5. M/s Central Road Research Institute (CRRI), New Delhi
6. M/s International Print-O-Pac Limited, New Delhi (A leading Packaging and Printing Company)
7. M/s National Institute for Training of Highway Engineers (NITHE), New Delhi
8. M/s U. P. Industrial Consultants Ltd., Kanpur
9. M/s U.P. State Bridge Corporation, Lucknow, Uttar Pradesh
10. Delhi Development Authority (DDA) (Palam Drainage Project)
11. All India Management Association (AIMA), New Delhi
12. Indian Institute of Petroleum, Dehradun
13. Institute of Himalayan Bio-resource Technology, Palampur
14. Municipal Corporation of Delhi (Moti Nagar Fly over Project)
15. Regional Research Laboratory, Trivandrum
16. National Environmental Engineering Research Institute (NEERI), Nagpur
17. Bangladesh Consultants Limited, Dhaka, Bangladesh
18. Central Building Research Institute, Roorkee
19. Indian Agriculture Research Institute (Pesticides Referral Laboratory), New Delhi

*For further details, please contact Mr. S.K. Sharma, Deputy Director, CDC
over 011-24603425 or through email : sksharma@cdc.org.in
or Mr. J. Suriyanarayanan at surya@cdc.org.in*