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VALUATION OF INTANGIBLE ASSETS IN TECHNOLOGY INTENSIVE INDUSTRIES

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In classical economics, production was limited to three factors, viz. land, labour and capital. However, the concept of technology was included in the neo classical economics as an explanation of productivity growth. During the last three decades, an increasing proportion of a country's gross domestic product is being accounted for by the knowledge-driven activities in which the role of intangible assets is paramount. While we recognise the importance of intangibles, in fact, its ascendancy, we are still groping for tools for its quantification and evaluation.

In the emerging knowledge intensive and globalising economy, there is an increasing trend towards valuation of intangibles along with tangibles to assess intrinsic worth of an organisation more realistically on long term basis, particularly in technology intensive industries. Since the core competence of knowledge based organisations comprises substantially intangible assets, they may have to redefine the way the business to be done across national and international market boundaries.

Intangible assets are becoming an important part of business organisations in knowledge society. They are the assets without physical embodiment, e.g. brand name (product/corporate), workforce (human resource and management quality), customers list, distribution system, proprietary technology and in-process R&D, etc. Many organisations recognise intangible assets as their most significant and value-adding assets. The commercial dominance is also shifting from tangible capitalisation to intangible capitalisation. Intangibles are now being considered as the foundation for the profitability and market share of many companies.

Need for Valuing Intangible Assets

The need for valuing intangible assets could arise from one or more of the following:

- Intellectual Asset Management Companies need to understand where value lies within the organisation so that the valuable assets can be better managed and tapped to generate further revenue.
- Acquisitions/Disposals/Joint Ventures Helps an acquirer or seller in arriving at a benchmark price.
- Licensing/Franchising/Financing Assessment of royalty rates for licensing or franchising a brand/ technology to another user.
- Strategic Planning/Reorganisation Allows corporates to determine appropriate structuring arrangements such as tax optimisation, protection of business interests, for financing reasons, etc.
- Transfer Pricing In fair valuation and allocation of utilisation of pool of intangible assets, by various divisions of corporate, being used by different profit centres.
- Availing Income Tax Benefits Indian Income Tax Act allows acquirers to charge depreciation on certain intangibles assets such as brands and patents.
- Litigation Support For the calculation of infringe-ment of intellectual properties and to assess compensation for the termination of right of use.
- **Reporting** As additional information to shareholders.

Intangible assets like R&D, patents & IPR, human resource, technological capabilities and levels of technologies, etc. are also regarded as significant contributors to the true value of a modern business organisation and value drivers. Their impact can be seen in the valuation of shares, mergers & acquisitions, divestments, etc. taking place across a wide spectrum of industries. With the growing importance of intangible assets, it is vital to study and understand the valuation, creation and building up, monitoring and collateralisation of various intangible assets.

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Approaches for Valuation of Intangible Assets

The valuation of intangible assets has become important from the point of view of determining their values so as to manage them better and to tap them to generate further revenue and for providing additional information to shareholders.

To arrive at a "fair" value of a specific intangible, the methodologies that have evolved from experience of valuation experts and academicians are classified under the following three categories:

(A) Cost Approach

This approach provides a useful benchmark where the intangible is easily replicable and values intangible assets by accumulating costs that would currently be required to replace the asset. The cost approach, though effective for some easily replicable assets is often not a useful indication of value as it tends to look backwards in time, which is not the way most buyers and sellers view assets or transactions and also may have a value significantly different than its cost.

Further, not all costs are wisely, efficiently, or successfully incurred. Application of only the cost approach to such intangible assets would produce a meaningless result. However, because the cost of an item is an indication of what an investor could be willing to invest for creation of an asset, the Cost Approach is not without merit.

(B) Market Approach

Market Approach values intangible assets by using prices paid in actual transactions. The transaction price, as a ratio of an asset attribute, such as revenues, is used to derive a market multiple. The market multiple is applied to the attributes of the subject intangible asset to indicate the value of the subject intangible asset.

In this method, the Valuer needs to select the appropriate range of multiples by first understanding the individual transactions and then benchmarking the subject intangible in terms of its competitive positioning (for instance, for a brand - market size and market share, brand attributes and qualitative edge) and future earning potential, i.e. market growth and profitability of the brand.

(C) Income Approach

Income Approach is fundamentally the most accurate approach as it is based on future economic returns to be gained by using the particular intangible asset. The incremental impact on cash flows on account of using a particular intangible in conjugation with the other assets is restated at present value to arrive at the present value of that asset. The assessment of the marginal earnings attributable to a particular intangible asset requires threadbare analysis of the financials of the business, its structure and process flow of operations, identification of value drivers and a quantification of their impact.

There are three methods under this Approach for valuation of intangible assets:

(i) Excess Value Approach – Excess Value Approach entails assessment of Enterprise Value. Fair value of tangible assets is then determined and deducted from the Enterprise Value of the company to assess the value of intangible assets. The excess of Fair Value of the tangible assets over the Enterprise Value is considered to be a measure of the value of intangible assets created by the company. The cumulative value of intangible assets so determined could then be allocated to a particular intangible asset (for example, a patent) and other intangibles based on the assessment of the contribution of various intangibles in the company.

(ii) Relief from Royalty Approach – In the relief-from-royalty method, the value of the intangible is estimated by capitalising the royalties saved due to the company's ownership of the intangible asset. In other words, the owner realises a benefit from owning the intangible asset rather than paying a rent or royalty for the use of the asset.

Royalty savings are typically determined based upon the application of an arm's-length royalty rate to the future revenues expected from the sale of the product or service associated with the intangible. An arm's-length royalty rate is the rate, expressed as a percentage of net revenue, at which the use of the owned property is allowed by a willing owner (licensor) to a willing user (licensee), neither being under any compulsion to negotiate, and both having reasonable knowledge of relevant facts.

- (iii) *Earnings Multiple Approach* The Earnings Multiple Approach involves segregating the return on the subject intangible asset from the other tangible and intangible assets and assigning it a definite portion of aggregate business value. The following methodology may be used for valuing brands:
 - Profits not related to the brand are deducted from historical EBIT stream.
 - These profits are restated at present value using inflation compound factor and then aggregated to compute average weighted profit.
 - Remuneration of average capital employed (with reference to generic assets) and tax outflow are then deducted from the weighted average profits to arrive at net brand earnings.
 - A weighting factor is then applied to historical earnings to determine a prudent and conservative level of on-going earnings.
 - Brand value/earning multiple (based on assessment of brand strengths) is then applied to obtain the final brand value.

However, not even one method of valuation could meet the requirements under all situations. A basket of techniques need to be used to arrive at a fairly reliable estimate. The most appropriate strategy so far appears to be to compute the value as per the various methods and realise proceeds based on the "best value", yielding the maximum proceeds, which is very subjective.

Accounting Standards

Valuing intangibles—and specifically valuing knowledge—is a key issue in understanding the business or the organisation. Accounting Standards do not just affect company accounts. Firms make business decisions based upon how these affect their published financial statements. Thus accounting standards directly affect levels of investment and hence regional and national economies. Decisions, which limit current investment in intangibles, may impact severely on future profitability.

Australian GAAP leaves corporate managers wide discretion to capitalise intangible assets irrespective of whether the assets are acquired or generated internally in keeping with the historically liberal attitude of Australian accounting regulators to deviations from the historic cost basis of measurement. These practices have also been prescribed in USA. Similarly, companies trying to value their information assets in the UK are recommended to use FRS-10.

Accounting Standard 26 on Intangible Assets

The objective of a standard on accounting for an asset – whether tangible or intangible – is to lay down rules for its accounting at the three stages as given below:

- At the initial recognition stage, i.e., when an enterprise acquires or constructs an asset—to record the amount to be recorded in the financial statements.
- During the life of the asset to determine as to what should be the accounting treatment in respect of costs, etc., incurred.
- 3. At the time of disposal or the retirement of the asset to determine what accounting treatment should be followed.

Accounting Standard AS 26 on Intangible Assets, recently introduced in India, prescribes accounting treatments in respect of the aforesaid stages. It defines an "intangible asset" as an identifiable non-monetary asset, without physical substance, held for use in the production of supply of goods or services, for rental to others or for administrative purposes. According to the Standard, an "asset" is defined, *inter alia*, as a resource from which economic resources are expected to flow to the enterprise.

The standard is likely to change the face of corporate reporting in India in respect of deferred revenue expenditure. The deferred revenue expenditure is the type of expenditure which does not usually result into acquisition of an asset even though it may give rise to future economic benefits, e.g. advertisement expenditure incurred on the launch of a new product. This expenditure is presently treated as deferred revenue expenditure, because it is expected that this expenditure would provide future economic benefit and accordingly, it is written off over a reasonable period. Similarly, expenditure incurred on voluntary retirement is presently being treated as deferred revenue expenditure because of the saving which will accrue to the enterprise over a number of years in future and accordingly it may be amortised over a period of 4 to 5 years.

However, both voluntary retirement expenditure and advertisement expenditure do not meet the criteria of the definition of an asset and also cannot be construed as a resource which is controlled by the enterprise. Since, such expenditures do not fulfill the tests of the definition of the term "asset"; the major impact which is going to be on the corporates is that there will not be any item called the deferred revenue expenditure on their balance sheets in future.

Rules for Accounting at the Initial Stage

The accounting standard provides, on the premise that at present we are operating within the framework of historical cost basis of accounting, that an intangible asset should be recorded at the cost of acquisition, i.e., when a brand is purchased or when goodwill is purchased or a patent is purchased, it should be recorded at the cost of purchase. Of course there are certain other costs which are required to be included as the cost of acquisition, viz. the costs which are directly attributable to the cost of acquisition like the legal fees paid to the lawyer who assisted in the acquisition of the asset.

Similarly, self-generated intangible assets or internally generated intangible assets like internally generated goodwill; internally generated brands; internally generated customer lists and the publishing titles, etc., should also not be recognised on the balance sheet since the expenditure on such items cannot be distinguished from the cost of developing the business as a whole. Thus, such expenditures do not fulfill the criteria of the definition of the intangible asset, viz. that the expenditure is not identifiable. It is also not easily separable, i.e., it is not clear whether the enterprise is incurring expenditure specifically on goodwill or whether it is incurring expenditure specifically on brands. These intangibles are usually developed over a period of time in a business.

However, there are certain internally generated intangible assets which can be recognised in case they fulfill the criteria for recognition thereof prescribed in the Standard. The Standard recognises that in respect of such intangible assets the

expenditure is incurred in two phases, viz. the research phase and the development phase. During the research phase an enterprise cannot demonstrate that an intangible asset exists from which an economic resource is probable. The expenditure incurred is only for an investigation or for gaining of scientific and other technical knowledge. The gaining of scientific and other technical knowledge does not give rise to a resource as such. An economic resource can come into existence in the situation when an enterprise starts incurring the development expenditure after successful research phase, i.e., when enterprise starts developing a prototype of a product which gives rise to an asset. The Standard lays down certain conditions to be fulfilled, before the development stage expenditure is recognised as an asset. The conditions aim to ensure that the development stage expenditure will give rise to an asset.

Accounting Treatment during the Life of the Intangible Asset

With regard to accounting during the life of the intangible asset before it is retired or sold, the issues relate to subsequent expenditures on amortisation and impairment. With regard to the subsequent expenditure (as also prescribed in AS 10, "Accounting for Fixed Assets"), AS 26 prescribes that only that expenditure should be included in the cost which increases the previously assessed standard of performance. Other expenditures should be expensed. With regard to the amortisation of an intangible asset, according to the AS 26, the intangible asset should be amortised over its useful life. The Standard also provides that there is a rebuttable presumption that the useful life will not be more than 10 years. Thus, normally, the life of an intangible asset would be 10 years but if it can be demonstrated that its life is more or less than 10 years then it should be amortised for the useful life of the intangible asset.

In respect of the impairment of the intangible assets the standard provides that it should be determined whether the asset is impaired in accordance with AS 28. In case of intangible assets the requirements are more stringent compared to the tangible assets in certain cases. For example, according to AS 28, the first step is to determine whether there is an indication that an asset has been impaired and for this purpose it provides various indicators. Once there is an indication, then the exercise for determining the impairment loss is carried out, i.e., the recoverable amount of the asset is determined, which is compared with the carrying amount to find out the impairment loss. However, in case of intangible assets, in two situations, the first stage is eliminated all together. The first situation is where an intangible asset has been acquired but is not put to use, for example, a business has acquired a brand but it is not used for the purpose of selling its own products. In such a

case, on each balance sheet date the enterprise should find out its recoverable value, compare it with the carrying amount and then find out whether there is impairment. The enterprise does not have to determine whether there is an indication of impairment. The enterprise has to straightaway go to the next stage, i.e., it has to determine the recoverable value. The other situation in which the enterprise does not have to look for the indication is where an enterprise decides that the amortisation period should be more than 10 years, and then on each balance sheet date, it should determine the recoverable value of that intangible asset.

The corresponding International Accounting Standard, viz. IAS 38, provides 20 years for useful life of an intangible asset as compared to 10 years in AS 26. The IASB has recently taken up an improvement project where it is proposing to do away with the amortisation concept. If this proposal is carried through, the intangible assets will only be tested for impairment

Another interesting feature of intangible assets compared to tangible assets, as per our Accounting Standard 10, is that the latter permits revaluation, i.e., fixed assets can be up-valued, viz. land and buildings can be up-valued and the difference is to be transferred to the Revaluation Reserve but AS 26 does not deal with revaluation. It means that the intangible assets cannot be up-valued and only down-valuation as "impairment" is required as per AS 28.

Accounting of the Intangible Asset at the Time of Disposal/Retirement

With regard to the last stage, i.e., when the asset is retired and disposed of, the accounting treatment is the same for recognition of gains and losses as in AS 10, except that in respect of retired intangible assets, as per AS 26, are to be carried at the carrying amount and tested for impairment as against recognising them at the lower of their net book value and net realisable value as prescribed in AS 10.

Applicability of AS 26

AS 26 comes into operation, in respect of listed enterprises and enterprises whose annual turnover exceeds Rs 50 crore, from 1 April 2003, in respect of intangible items incurred after this particular date. The Standard lays down "Transitional Provisions" in cases where the expenditure on intangible items has already been incurred but is appearing in the balance sheet on the date in which the Standard comes into operation.

The useful life of the intangible asset should be determined in accordance with the requirements of Para 63 of the Standard with regard to the useful life. Supposing an enterprise is not amortising an intangible item; it is just

keeping it on the balance sheet. When this Standard comes into operation then the life of that particular item is determined as per paragraph 63. In a situation where life has already expired for an item and it continues to be there on balance sheet today, if the enterprise comes to the conclusion that its life has already expired, then the entire carrying amount of that particular item which is appearing on the balance sheet date should be adjusted against the opening balance of revenue reserves so that it is now eliminated from the balance sheet. Similarly, if the enterprise was following the policy of amortising the item over a period which is longer than the period which is permitted under the accounting standard and that permitted period has also expired, then also it has to adjust it against the opening balance of revenue reserve. In case of those items in respect of which the period has not expired, i.e., the period stipulated under para 63 of the Standard has not expired but the enterprise is following a practice of amortising over a shorter period, then the shorter period should be used for the purpose of amortisation. These are some of the situations covered in para 99 of AS 26 which deals with transitional provisions. The broad principle is that the life of the intangible items should not exceed the life which is stipulated in para 63 of the Standard.

Suggestions for Future Work

- A comparative study of valuation and reporting practices
 of intangibles in important countries should be made visa-vis the Indian standards to examine how best they can
 be harmonised with the international trends, for use and
 dissemination to Indian industry.
- A survey should be carried out among select companies in nationally important areas like banking, biotechnology and pharmaceuticals, etc. to understand the difficulties, if any and possible further improvements be carried out in implementing AS 26.
- 3. Some of the provisions such as those relating to R&D in progress may need a relook.
- 4. We need to develop comprehensive methodologies for valuation of human capital in select R&D estab-lishments for effective utilisation of our large scientific human resource in order to promote international business and exports.
- 5. Availability of industry specific database involving tangibles and intangibles is essential for valuation of assets. Catalogued across industries and methods should be suggested to enhance the availability and use of such data for better valuation of tangible and intangible assets.

Technology Trade Pavilion 2003 at India International Trade Fair 2003

THE Technology Trade Pavilion was set up jointly by Department of Scientific and Industrial Research (DSIR) and India Trade Promotion Organisation (ITPO) for the seventh time in succession since 1997. The objective of setting up a Technology Trade Pavilion is to promote display and dissemination of information related to technological capabilities, high value added products and technologies of companies and organisations including R&D laboratories, academic institutions, product design institutions, consultants etc.

Around 50 organisations, both from public and private sectors including national R&D laboratories participated in the Technology Trade Pavilion. These included Council of Scientific and Industrial Research, Central Electronics Limited, HEG Limited, National Research Development Corporation, Nuclear Power Corporation, IBP Co. Ltd., Sahajanand Laser Technology, Mecpro Heavy Engineering Ltd., Technology Export Development Organisation, Coral Telecom Ltd., Septu India Pvt. Ltd., Exide Industries Ltd., TISCO, Semiconductor Complex Ltd., United Telecoms Ltd., etc. The participating organisations in the Pavilion displayed their technological capabilities through models, prototypes, interactive computer based displays, charts, machinery/products samples, etc. Awards for Best Display and Technology Innovation were given.

A novel feature of Technology Trade Pavilion this year was organisation of short seminars by select exhibitors. These seminars related to: Innovative Technologies in Solvent Extraction by Mecpro Heavy Engineering Limited; New Developments in Industrial Explosives by IBP Co. Limited; Carbon Dioxide Gas Plants from Bio-mass and Flue Gases by S S Foundry Chemical Industries Pvt. Ltd; Appropriate and Cost Effective Telecommunication Technologies by Coral Telecom Limited; Applications of Laser Technology in processing of Diamonds by Sahajanand Laser Technology; Technology Commercia-lisation through laboratory/ institute and industry linkage by National Chemical Laboratory; Renewable Energy Solutions by Exide Industries Limited; and India's Nuclear Power Programme by Nuclear Power Corporation. The seminars provided an opportunity for deeper understanding of technical details of products/ machinery displayed in the Pavilion.

The Technology Trade Pavilion helped in promoting one-to-one interactions and business negotiations between the participating organisations displaying their technology intensive products, technologies, machinery, services, etc. and potential customers of Indian technology and services. These interactions, including interaction between R&D system and industry, generated many business enquires, besides creating awareness about our technological capabilities. It is understood that export orders and enquires worth Rs 86 crore were received by the exhibitors in Technology Trade Pavilion.

TECHNOLOGY EXPORT RELATED DEVELOPMENTS

AUTO SECTOR

(i) Bharat Forge Bags Orders from Ford, DaimlerChrysler

Bharat Forge Ltd. (BFL) has been selected by Ford USA for supply of components to be used in its next generation V-6 engines to be manufatured at its upcoming \$335 million factory in Ohio, USA. The factory is slated to go into production in 2005.

BFL has bagged major export orders from Ford and DaimlerChrysler for supplying components for their global car programmes. The shipments are expected to commence from mid-2004.

The company has also won an export order to supply control arm forgings to a global passenger car company in Australia and a new order to supply steering knuckle forgings to Dana in USA. The contract for passenger car components is a major breakthrough for BFL and a large new market segment has opened up to grow its business.

BFL is setting up a plant for crankshaft machining in Pune and is planning to have this new capacity ready for production in phases, starting by the fourth quarter of fiscal year 2005. The company was also setting up a full-fledged world-class product validation and testing facility that would enable it offer an end-to-end solution to its customers.

(ii) Car Drives Auto Exports Up by 68 per cent

A strong demand for "made-in-India" cars and twowheelers in overseas markets drove automobile exports up by a whopping 68.2 per cent during the first five months of this fiscal.

A total of 183,685 units were shipped during April-August 2003 over 109,193 units in the same period last year, according to data compiled by the Society of Indian Automobile Manufacturers (Siam). Car exports went up by a robust 69.7 per cent to 43,988 units, with bulk of it coming from Maruti which posted a 147 per cent growth at 20,100 units. Hyundai Motor India clocked a 344.4 per cent jump to 10,084 units but Ford India suffered a 18.1 per cent drop to 12,111 units during the period under review.

Tata Motors, which exports the compact car "Indica", posted a 150 per cent rise to 1,675 units.

In the commercial vehicle segment, exports grew by 13.2 per cent to 5,001 units.

Medium and heavy (M&H) buses and trucks recorded a 18.4 per cent growth to 2,221 units while that of light commercial vehicles (LCVs) went up by 9.4 per cent to 2,780 units.

Exports of M&H trucks rose by 5.85 per cent to 1,030 units while that of M&H buses increased 32 per cent to 1.191 units.

In the LCV category, truck exports rose by nearly one per cent to 2,185 units while that of light buses climbed 58.6 per cent to 595 units.

Two-wheeler exports surged by 67.4 per cent to 1.06 lakh units as motorcycle sales abroad grew by 65.5 per cent to 75.635 units.

(iii) M&M Exports Scorpio

Mahindra & Mahindra (M&M) has firmed up some export orders for the Scorpio. While Nepal is averaging around 50 vehicles a month, the company has sold 90 units in Sri Lanka with another bulk order of 150 units expected shortly. The company is also looking at setting up an assembly line in Indonesia which will cater to the Asean countries.

The company has introduced a new diesel engine for its Scorpio as part of the company's efforts to upgrade the vehicle. The Scorpio, which has already completed one year since launch will now sport a new "SZ 2600 Plus Diesel" engine intended to reduce the noise vibrations of the vehicle. The improvements will include new rear suspension and specially contoured seats.

(iv) Hyundai Commences Exports to Europe

Hyundai Motor India Ltd has scaled up its export target for this year to 30,000 cars from the earlier planned 23,000 cars. The company is planning to increase its exports to 65,000 cars in 2004, going up to 80,000 cars in 2006. In the long run, the company hopes to export one-third of its total production.

Nearly 80 per cent of the exports comprises Santros and the remaining Accents. More than 50 per cent of the exports would be destined to Europe.

The company has started work on increasing its capacity from 120,000 units a year to 250,000. This is expected to be completed by August 2004.

The company has been preparing for exports to Europe for some time. In this connection, it has initiated a programme to help vendors reduce their rejection rate to 100 ppm (parts per million) and nearly half the 52 vendors of critical parts have achieved this level, while the remaining are expected do so by the end of the year.

(v) Diesel Cars to Fuel MUL Growth

Maruti Udyog has asked its parent Suzuki Motor Corporation to design a calibrated strategy for diesel engines. Kinji Saito, director marketing, MUL, said presently the MUL has only 51 per cent of its total production fitted with diesel engines. In India, currently 15 per cent of the passenger cars have diesel engines.

Shinzo Nakasnishi, Chairman, MUL, said he wanted diesel engines as soon as possible. The company is purchasing diesel engines from Peugeot-Citroen.

Since this September, Suzuki's Hungary plant is buying Fiat engines. There has been speculation that the GM-Fiat-Maruti troika will be putting together its combined muscle to build diesel engines at Fiat's Rangangaon facility.

Not only does Suzuki want local facelifting to be done at Gurgaon, but it is also seriously contemplating model development at a full-fledged R&D centre in the future. According to Nakasnishi, by 2007, new model development will take place in India.

Alfa Laval India Bets Big on Food Processing Tech Export

The Indian company of the Swedish multinational, Alfa Laval AB – Alfa Laval India – is all set to compass a higher turnover through export of food processing technology with orders being executed not only in developing countries such as Vietnam and Indonesia but also from countries such as Finland, Belgium and other European countries, besides the USA.

At present, the company is working on two new technologies – one with Kaizen of USA to make ethanol from wheat and corn and the other for making bakery yeast. These two products offer immense export potential.

As Indian alcohol from molasses is not accepted as whisky abroad, alcohol from grains in the name of malt would be exported for which Alfa Laval India is acquiring the process technology. This would be a boom area in the next couple of years.

Alfa Laval India has been engaged in the business of vegetable oil processing, manufacture of milk powder and

alcohol. In the vegetable oil processing, the company is the foremost in the organised sector and has a market share of 75 to 80 per cent .

The company can set up projects ranging from 50 tonnes per day to 2,000 tonnes per day. It has already set up four plants with a capacity of 1,000 tonnes per day. It is setting up another four plants taking the total to 8 plants with 8,000 tonnes per day capacity, mostly located in the coastal areas.

Another area where the company is engaged relates to setting up of small distilleries costing Rs 8 to 20 crore depending on the capacity. By the year-end, the company would be installing and commissioning nine such plants. On the major distillery, the company has obtained 4-5 ethanol orders from Thailand, Indonesia and a repeat order from Thailand and Nepal. The company has already executed a turnkey distillery in Vietnam, which is to be commissioned in February 2004.

Currently, the company is negotiating two big export orders – one in the region of US\$6 million and another amounting to of US\$10 to 11 million.

L&T Oman Bags Rs 42 cr. Order

L&T Oman LLC, the Gulf-based subsidiary of Larsen & Toubro, has bagged a Rs 42-crore order in Oman, for a flyover for the Muscat Municipality of the Sultanate.

The flyover, also known as an interchange or an elevated corridor, is to be built within 16 months. It will be built by L&T Oman with technical support from ECC, the construction division of L&T. Consultancy services will be given by Parsons International & Co, LLC.

When completed, the construction will be a more than 3.2 km long three-lane elevated corridor. This is the second major civic structure the company will be undertaking in Oman.

BHEL's Export Order Booking Grew by 82% in 2002-03

Bharat Heavy Electricals Ltd (BHEL), booked a record order valued at Rs 1,455 crore in 2002-03, registering a growth of 82 per cent over the previous year. The company has met its targets by getting orders in new market segments, besides consolidating in its existing products and markets. Spurred by this, the company plans to enhance its export turnover to 15 per cent of its sales turnover by 2006-07 and is evolving strategies for achieving the same.

Enumerating BHEL's milestones in international business, it is understood that a notable achievement of the year was due to receipt of the single largest export order for setting up a 600 MW gas based power station in Libya on turnkey basis.

Details of other export orders received by the company during the year included gas turbines from Oman, the first ever contract from South-East Asia (Indonesia) for a co-generation project and a maiden order for hydro-power equipment from Taiwan. BHEL also bagged orders from Greece, Malta, Italy, Ireland, Netherlands, Australia, Malaysia, Thailand, China, Sri Lanka, Bangladesh, Kazakhstan, Azerbaijan, Oman, Zambia and Ghana.

TPC Bags Bangladesh Power Grid Project

Tata Power Company Ltd (TPC) has bagged the 230 KV Ishurdi-Baghabari transmission line project from Power Grid Company of Bangladesh Ltd (PGCB). The agreement between the two companies will be for the turnkey execution and commissioning of 55 km D/C transmission line in Bangladesh. According to the Tata Power, the project is valued at US\$8.9 million and will be completed over a period of 24 month.

Apart from the Bangladesh contract, the company's power systems division has undertaken overseas project contracts in Thailand, Cyprus, Nepal and, Myanmar valued at over US\$41 million. The scope of work undertaken in these countries include turnkey contracts for design, supply and erection of galvanised steel towers and construction services for survey work.

ICT Bags Projects in Mongolia, Philippines

International Consultant and Technocrats (ICT) has made further inroads abroad, having bagged three more consultancy projects in Mongolia and the Philippines.

The two projects in Mongolia, according to an ICT statement, envisage improvement of water supply and sewerage facilities in the capital city of Ulaanbaatar and supervision of the construction of roads for a total length of 141.6 km.

The Ulaanbaatar project, being funded by the World Bank and the Japanese Grant Fund (JGF), is aimed at improving the quality of life of the urban poor by providing basic services. The second project pertaining to road construction is being funded by the Kuwait Fund for Arab Economic Development (KFAED).

The project in the Philippines pertains to rural development and is being financed by the Asian Development Bank (ADB).

Reliance Sets Up Global Consultancy Company

Reliance Industries is setting up a global engineering consulting company, which will offer the group's expertise to non-Reliance projects across the world. These projects will typically be in the areas of engineering, process engineering and operations. The new consulting company will be called Reliance Global Engineering Consultancy Services and will employ engineers who have so far worked on Reliance projects.

Reliance will lend its know-how for detailed engineering, process engineering and operations. It is even contemplating undertaking operations and maintenance (O&M) contracts in developing countries to run petrochemical plants and refineries.

The new company will be modelled along the lines of Shell Global Solutions which provides business and operational consultancy, technical services, and research & development expertise to the energy industry worldwide. Shell Global was set up with the aim to help its customers improve business performance by combining leading-edge technology with extensive operating experience. Like Shell Global, Reliance Global Engineering Consultancy Services will sit at the interface between technology and business.

Department of Scientific and Industrial Research

PROJECT PROPOSALS INVITED FOR SUPPORT UNDER

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AND

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Project Proposals may be sent to:

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JOINT VENTURES/ ACQUISITIONS/SUBSIDIARIES

MTNL Board Gives Nod for Mauritius Subsidiary

The Board of state-owned Mahanagar Telephone Nigam Ltd. (MTNL) has approved the setting up to its Mauritius arm with an initial equity base of Rs 100 crore. The new company which will be formally registered in a few weeks, will provide basic and international long distance (ILD) services in Mauritius. The Nigam has outlined an investment of Rs 1,000 crore for its overseas operations.

MTNL is in the process of finalising the licensing procedure with Telecommunications Consultants of India Ltd. (TCIL) for the Kenyan market apart from entering the Malawi market.

GR Cables Floats Subsidiary in Sri Lanka

GR Cables Ltd., a Hyderabad-based manufacturer of jelly filled telecom and power cables, floated a whollyowned subsidiary in Sri Lanka.

The new company, Gold Island Cables Pvt. Ltd., would focus on manufacturing both telecom and power cables. The subsidiary would be a 100 % export oriented unit and would focus initially in Indian market segment.

The company has invested close to Rs 5 crore so far on the infrastructure in Sri Lanka and expects to generate around Rs 15 crore of exports in the first year of operations ending March 2004.

Elgi Ties Up with US Co.

Elgi Equipments Ltd, a Coimbatore-based air compressor manufacturer, has entered into a business partnership with a US-based Fortune 500 company. This forms part of Elgi's strategy to expand its operations into international markets in a sustained manner.

The collaborating company is the largest compressor manufacturer in USA for professional category compressors.

Currently, Elgi is focusing on building a strong presence in the US market and this business partnership puts the company squarely on the map as a viable manufacturer. Elgi's international expansion strategy included partnering with original equipment manufacturers

in collaborative manufacturing initiatives. The tie-up with the US-based company is considered as the beginning of several similar arrangements globally.

ONGC Plans Rs 6,000 cr. Overseas Acquisitions

Oil and Natural Gas Corporation (ONGC) plans to invest over Rs 6,000 crore annually in acquiring oil properties abroad. It is currently in dialogue for buying out stakes in various oil fields with many Central Asian and Middle East countries including Australia, Indonesia, Russia and South America.

The corporation has budgeted over Rs 6,000 crore annually for acquisitions of oil and gas fields abroad. This figure is likely to go up depending upon the investment requirement for developing a particular field.

ONGC's overseas investment arm ONGC Videsh Ltd., has till date taken participating interests in oil and gas fields in nine countries including Vietnam, Russia, Libya, Syria, Iran, Iraq, Sudan, USA and Myanmar.

Asian Paints Arm Acquires Fijian Co.

Asian Paints (India) Ltd. has acquired the entire stake holding of Taubmans Paints (Fiji) Ltd. through its subsidiary in Fiji, Asian Paints (South Pacific) Ltd. (APSP) for a total cost of \$1.42 million. This will help it to consolidate its leadership position in that country.

APSP will buy the entire stake from both the companies - Akzo Nobel (65% stake) and Fijian Holdings (35%), which were holding stakes in Taubmans Paints.

The entire cost of the acquisition will be funded by APSP, as the company has surplus cash and is currently a zero debt company. The acquisition will also include Taubmans' paint business in the neighbouring Samoa Islands.

Taubmans is the fourth largest paint company in Fiji and its brands are popular in the premium decorative segment. It is a dominant player in the project sales segment, where Asian Paints has a limited presence.

Foreign Acquisitions Set to Cross \$600 mn.

Even as global investors are rushing into India, Indian companies have been on a shopping spree abroad. Since January 2003, Indian companies have announced at least 35 global acquisitions worth around \$450 million. If one adds Tata Motors' plan to buy Daewoo Commercial Vehicle Company in South Korea, the amount committed by Indian

companies for overseas acquisitions could touch \$600 mn

The figure is set to go up with many Indian companies eyeing overseas acquisitions or expansion. For instance, after marketing lubricants in Nepal, the Indian Oil Corporation is planning to set up retail outlets in Sri Lanka.

Videsh Sanchar Nigam Ltd. and Mahanagar Telephone Nigam Ltd. are tapping Nepal and Mauritius aggressively, while Essar Telecom wants a presence in Lebanon.

A few smaller outfits are also setting up bases overseas for manufacturing watches and fans.

Tata Motors declared that it had emerged as the preferred bidder for Daewoo Commercial Vehicle Company in South Korea. Although the group is tight-lipped about the investment involved, sources close to the development pegged it around \$140 million.

The Reliance group has also announced that it had signed an agreement to buy the US-based Flag Telecom's global operations for \$207 million, making it one of the world's largest owners of bandwidth.

Earlier, A.V. Birla firm Hindalco Industries bought two copper mines in Australia for A\$100 million.

In the pharmaceutical sector, Wockhardt bought CP Pharma in the UK for \$10.85 million, Aurobindo Pharma bought a drugs and pharmaceutical unit in China and Cadila Healthcare bought the formulations business of a French company.

Alembic forayed into Netherlands, while Dabur India and Marico Industries bought firms producing ayurvedic skin care products and cosmetics in the UK, UAE and Bangladesh.

United Phosphorus acquired Dow Agroscience's oryzalin herbicide business for \$21.30 million.

Infotech major Wipro acquired US-based infotech consultancy company NerveWire Inc for \$18.70 million, while Tata Consultancy Services set up over half a dozen development centres in Europe, Japan, Australia, South America and USA.

Merchant bankers said the appetite of Indian companies for global acquisitions had been whetted by their domestic success.

Low interest rates and tariffs coupled with easy access to external commercial borrowings mean that companies have more cash for global acquisitions. This is especially true in knowledge-based sectors like pharmaceuticals and information technology.

TECHNOLOGICAL ACHIEVEMENTS IN THE COUNTRY

Ranbaxy, GSK Strike R&D Alliance

In what could signal its elevation to the top league in the global pharma scene, Ranbaxy recently announced a strategic R&D alliance with GlaxoSmithKline (GSK) under which both the companies will collaborate for drug discovery and clinical development of drugs in six therapeutic areas.

While the financial and commercial terms of the collaboration project are under wraps, Ranbaxy will have the marketing rights only for India while GSK will have the global marketing rights for the new drugs developed under this project. The agreement, however, indicates possibility for the two to have co-marketing rights for US and the EU markets. This, however, will be decided on a case to case basis, sources said.

This is the first time an Indian company is entering into such a comprehensive agreement with a multinational company in the field of discovery and clinincal development for a wide range of drugs. The collaboration is widely seen as a win-win formula for both the companies.

Ayurvedic Houses Go Global, Set Up Centres Abroad

In their quest for higher income and growth, the traditional ayurvedic houses are going global. Changing with the times, the traditional ayurvedic houses in Kerala are opening treatment centres and sales outlets in different parts of the world.

S D Pharmacy, a company which started in 1939, has opened a treatment centre in Seychelles. The centre is running profitably for the last one year.

Seetharam, a Trissur-based company has recently started a treatment division in Germany. The company is on an expansion mode. Apart from opening treatment centres in Vile Parle in Mumbai and a six-bed centre in Bangalore the company has invested Rs 10 crore for a 60-bed hospital in Trissur where specialised treatment in all branches of ayurveda will be offered.

The reputed Arya Vaidyasala of Kottakkal has opened sales outlets for its medicines in Dubai and Baharain. The

Vaidyasala is already having a medicine outlet in Penang (Malaysia). The company had opened a major treatment centre in Delhi some years back.

Three other ayurvedic firms are in the process of launching their treatment divisions abroad. The Alwaye-based Kerala Ayurvedic Products Ltd (KAPL) is considering investments in Malaysia and UK. The company has a chain in Chennai, Mumbai, Hyderabad, Bangalore and Bhubaneshwar.

The Thodupuzha-based Dhanwanthari Vaidyasala and Vaidyarathnam of Ollur are both seriously considering investment options in Malaysia to set up treatment divisions.

Dhanwanthari is already exporting medicines to UAE and Malaysia. The Pankajakasthuri Herbals India Ltd is also exporting medicines to UAE and Malaysia. The company which is running treatment centres in Mumbai and Baroda is presently investing Rs 5 crore for a holistic treatment centre at Malayattoor near here.

BHEL Commissions Gas Turbine in Iraq

Bharat Heavy Electricals Ltd (BHEL) has achieved a major milestone in overseas operations with the synchronisation of a 159-MW highest-rating gas turbine in Iraq.

According to a BHEL statement, this is of significance as it is the largest contract executed by an Indian PSU under challenging circumstances, in addition to being the first power generation unit to be commissioned in postwar Iraq.

The project has been commissioned for the General Company Electrical Projects (GCEP), Govt. of the Republic of Iraq, at its Baiji power plant, located 250 km north of Baghdad. Prior to this, BHEL had commissioned a similar unit at Baiji before the war broke out, and is at present in the process of installing two more units of similar rating at the same power station.

RECENT POLICY INITIATIVES

US Financial Sector Offers Major Break for Indian IT Industry

The US financial services sector has thrown open ample opportunities for the Indian information technology services industry in the area of high-technology cooperation in the recent years, especially after the September 11 terrorist attacks and the subsequent lull in the overall US economy, according to the Chief Technology Officer of the New York Stock Exchange (NYSE), Roger Burkhardt.

Addressing recently a technical session at the weeklong International Conference on Technology, Innovation and Intellectual Property Rights, jointly organised by the Confederation of Indian Industry (CII) and the AP Technology Development Corporation (APTDC), Mr Burkhardt said speed to market and competitive edge were critical components of financial services market.

Mr. Burkhardt cited two reasons for the development. *First*, US securities industry has been going through one of its toughest times. The member firms had already cut down between 10 to 25 per cent of their workforce. The cost pressures were now being felt by the securities services industry. The *second* was Indian IT services industry which has become much more mature and capable.

The collaboration of various industrial sectors with Indian IT services sector has been on the rise. The Indian IT services industry has largely realised that its growth was highly dependent on developing speed to market solutions with competitive advantage and not just on cost-driven applications.

"India Can Be Leader in Global Web Services Market"

According to Dr Sandeep Chatterjee, Chief Technical Consultant for Fortune 100 companies, India has the right skills, the right talent and the creativity to be a leader in the global Web services market. Stating that Web services would be the next revolution in computing, he said that if Indian companies do not adopt Web services, they will be at a disadvantage in the global marketplace. Indian manufacturing product and service companies must therefore make Web services available to customers and partners along their value chain. They must make the

software available as a Web service and develop additional software to support newer generation of Web services", he said.

Citing the example of a sugar manufacturing company that was able to save millions of dollars in operational costs each year by using Web services for tying its ERP systems together with the ERP systems of its soft drink and candy company customers as well as the cane suppliers, he said by invoking these services, the company was able to know about the quantity and type of sugar each customer needed. With this information, the company could source the right type and amount of cane from the suppliers. By matching the demand with the supplies, the manufacturer will be able to reduce the inventory cost and potential wastage while improving customer satisfaction.

FEEDBACK

Dear Readers,

Indian Institute of Foreign Trade (IIFT) in collaboration with Department of Scientific & Industrial Research (DSIR) brings out Quarterly Newsletter, *Technology Exports*.

The Newsletter aims to familiarise trade & industry with the latest happenings and to bring out the policy analysis in the field of technology exports.

We have received encouraging responses from Indian missions abroad, embassies in India and trade & industry. Words of praise, especially coming from various Indian missions have been extremely fulfilling and inspiring for us.

While positive responses are highly encouraging, we believe continued "Readers' Feedback" will be the key factor not only for improving the contents but also for maintaining sustained interest.

Therefore, we at *Technology Exports* welcome Readers' valuable suggestions, inputs and constructive ideas. We would appreciate receiving specific information such as lead articles, exportable technological developments, achievements in technology related exports, etc., for publication in the Newsletter. Such information may be addressed to: Editor, *Technology Exports*, Indian Institute of Foreign Trade, B-21 Qutab Institutional Area, New Delhi-110 016.

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