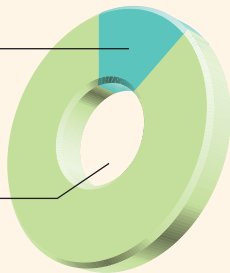
Sales and Gross Profit Analysis

Sales volume (mt)

2003

141,020 (12%)
Lysine *46,736 (4%)*
Modified starch *30,779 (3%)*
Corn sweeteners *63,505 (5%)*

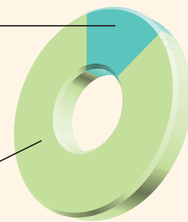
1,051,830 (88%)



2002

121,531 (17%)
Lysine *32,070 (4%)*
Modified starch *34,253 (5%)*
Corn sweeteners *55,208 (8%)*

611,292 (83%)

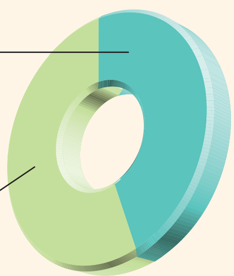


Sales amount (HK$'000)

2003

999,048 (43%)
Lysine *742,545 (32%)*
Modified starch *156,366 (7%)*
Corn sweeteners *100,137 (4%)*

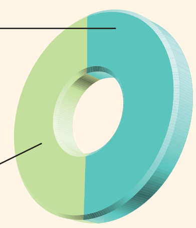
1,330,771 (57%)



2002

839,178 (51%)
Lysine *451,379 (28%)*
Modified starch *283,414 (17%)*
Corn sweeteners *104,385 (6%)*

818,134 (49%)

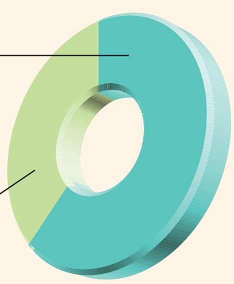


Gross Profit (HK$'000)

2003

548,249 (63%)
Lysine *429,963 (50%)*
Modified starch *74,912 (8%)*
Corn sweeteners *43,374 (5%)*

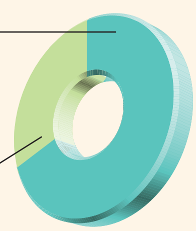
316,709 (37%)



2002

451,044 (69%)
Lysine *248,174 (38%)*
Modified starch *156,044 (24%)*
Corn sweeteners *46,826 (7%)*

199,751 (31%)



Upstream products   Downstream products

Footnote:

mt : metric tonne(s)

% : percentage to the Group's total

Global Bio-chem Technology Group Company Limited (the "Company") and its subsidiaries (collectively the "Group") are engaged in the manufacture and sale of corn refined products and corn based biochemical product. Upstream products include corn starch, gluten meal and other corn refined products. Corn starch is then further refined into a wide range of high value-added downstream products including amino acids, corn sweeteners and modified starch.

BUSINESS ENVIRONMENT

Despite the outbreak of SARS and the bird flu, the economic growth of the People's Republic of China (the "PRC") remained steady, which provided a favourable business environment for the Group. Sales in the PRC, our principal market, accounted for approximately 94% (2002: 93%) of the Group's turnover in 2003 (the "Year"). Owing to keen demand for lysine which is a type of amino acid, its price soared to over RMB46,000 per metric tonne ("mt") in November 2003. Currently, there is no comparable domestic competitor for lysine in the PRC and competition comes principally from imports. However, for both modified starch and corn sweeteners, there was pressure for downward price adjustment owing to domestic competition and low-priced substitutes respectively. Upstream products were also beset with pressure on their selling prices arising from increasing competition from domestic manufactures.

To diversify and extend its client base in overseas markets, the Group extended its sales network to countries in Europe, Africa and America. During the Year, sales to these regions recorded an increase of approximately 153%, with lysine forming the majority of these exports which accounted for approximately 42% (2002: 2%) of total export sales. This served to alleviate domestic competition and maintain higher product prices in the PRC.

FINANCIAL PERFORMANCE

The Group's consolidated turnover of approximately HK$2.3 billion, gross profit of approximately HK$865 million and net profit of approximately HK$521 million for the Year increased by 41%, 33% and 29% respectively, as compared to year 2002. This outstanding performance could be attributed to the Group's success in speeding up the diversification process of downstream products as well as increasing upstream corn processing capacity in 2002. Equally important is the substantial increase in lysine price during the fourth quarter of the Year.

DOWNSTREAM PRODUCT SEGMENT

For the downstream product segment, the sales, the gross profit and their respective growth rates were approximately HK$1 billion, HK$548 million, 19% and 22% respectively. The average gross profit percentage of approximately 55% (2002: 54%) remained stable as compared to 2002.

Among downstream products, lysine recorded an excellent performance. The turnover of lysine of approximately HK$743 million and its gross profit of approximately HK$430 million achieved substantial increases of 65% and 73% respectively. This excellent sales performance was the result of a combination of three factors, namely, (i) the impact of a full year's operation of the expansion in production by 25,000 mt completed in the second quarter of 2002, (ii) the increase in average selling price by 13%, and (iii) sales of protein lysine generated from the trial run before commencement of formal production in January 2004.

When the bird flu became rampant in the second half of the Year, the supply of poultry products decreased. Demand for other meat such as beef and pork increased and drove up the demand for pig and cattle feed. Since the volume of lysine added in pig and cattle feed far exceeds the volume added in poultry feed, the impact on lysine turned out to be a positive one.

However, the market condition of other downstream products, i.e. modified starch and corn sweeteners, were less favourable in comparison. Competition from small local suppliers of food-grade modified starch triggered a drop in prices. Moreover, in order to accelerate the market penetration of paper-grade modified starch to be produced by new facilities with an annual capacity of 100,000 mt, approximately 40% capacity of the existing production facilities for food-grade modified starch were reallocated to produce paper-grade modified starch. In addition, some of the modified starch was consumed internally for the production of protein lysine. As a result, the turnover and gross profit of modified starch decreased by 45% and 52% respectively.

The continuous depression in the price of cane sugar, which is a substitute product for corn sweeteners, caused a drop in the selling price of corn sweeteners. Hence, the turnover and gross profit of sweeteners decreased by 4% and 7% respectively. In view of the rebound of cane sugar price since late 2003, it is expected that the performance of sweeteners will improve in the coming years.

UPSTREAM PRODUCT SEGMENT

The second corn refinery in Changchun commenced commercial production in late 2002, which then doubled the Group's annual corn processing capacity from 0.6 million mt to 1.2 million mt. In line with the Group's strategy to expand corn processing capacity for supporting downstream production, the Group acquired 70% equity interest in a joint venture enterprise which operates a corn refinery in Jinzhou, Liaoning Province, the PRC ("Jinzhou Plant") in 2003, which will further expand its annual corn processing capacity to 1.8 million mt upon commencement of operation in the second quarter of 2004.

Because of the capacity expansion, the sales and gross profit of upstream products were approximately HK$1.3 billion and HK$317 million, representing increases of approximately 63% and 59% respectively as compared to those of 2002. Owing to the product nature of the upstream industry, the drop in raw material cost of approximately 6% and keen competition caused the selling price of upstream products to drop by approximately 5%. With the effort of the Group, the drop in selling price was partially offset by the economies of scale when processing capacity was augmented. Therefore, the gross profit margin remained stable at approximately 24% (2002: 24%). There has been a rebound of approximately 15% in both the selling price of upstream products and the cost of raw materials since the last quarter of the Year but the impact on the gross profit margin was neutral.

CHANGE IN SALES MIX AND GROSS PROFIT MIX BETWEEN UPSTREAM AND DOWNSTREAM SEGMENTS

Because corn starch produced from the doubling of corn processing capacity could not be fully consumed internally in the Year, turnover and gross profit from upstream products increased and accounted for approximately 57% (2002: 49%) and 37% (2002: 31%) of the Group's total respectively. Although the gross profit margin of both upstream and downstream products remained at a similar level as compared to last year, the overall gross profit margin dropped by approximately 2% to 37%, among to such a change in sales mix.

OPERATING EXPENSES, FINANCE COSTS, LOSS ON JOINTLY-CONTROLLED ENTITY, TAX AND PROFIT SHARED BY MINORITY INTEREST

Owing to the increase in overseas sales and transportation cost, the percentage of selling and distribution expenses over turnover increased by approximately 1.3% to 4.1% (2002: 2.8%). Excluding the double-fold increase in transportation cost, the percentage of operating expenses over turnover reduced by approximately 1.1%, which was achieved through stringent control over other operating expenses, enhancement in operating efficiency arising from capacity expansion and increase in other income. Included in other operating expenses were research and development expenditure amounting to approximately HK$20 million, which remained at a similar level as compared to previous years. Furthermore, goodwill amounting to approximately HK$14 million arose as a result of the acquisition of the Jinzhou Plant. Such goodwill will be amortised and charged to other operating expenses over a period of 20 years on a straight line basis.

Bank borrowings rose substantially to approximately HK$1.13 billion as at 31 December 2003 (31 December 2002: HK$476 million) as a result of the rapid expansion of the Group. After netting-off interest capitalised as construction in progress of approximately HK$12 million (2002: HK$11 million), finance costs increased to approximately HK$24 million (2002: HK$15 million), which represented 1% (2002: 1%) of turnover.

The high fructose corn syrup ("HFCS") joint venture ("HFCS JV") still recorded an operating loss in the Year. The loss shared by the Group amounted to approximately HK$2.2 million. In view of the rebound of the cane sugar price recently, it is expected that HFCS JV can improve its performance in the near future.

Most of the Group's companies operate either within economic technological development zones or in open costal areas in the PRC, and hence are enjoying income tax relief in accordance with relevant income tax laws and regulations. Since there was no substantial change in the tax relief status in the Year, the effective tax rate of the Group, as a whole, remained at approximately 7% (2002: 7%).

There has been no material change in the shareholding percentage held by minority shareholder in subsidiaries within the Group, and the profit shared by minority shareholder accounted for approximately 12% (2002: 12%) of the profit after tax.

INCREASE IN NET PROFIT ATTRIBUTABLE TO SHAREHOLDERS

Taking into account the overall effects of capacity expansion, increase in lysine price and stringent control over operating expenses and finance costs, net profit attributable to shareholders increased substantially by approximately 29% to HK$521 million.

FINANCIAL RESOURCES AND LIQUIDITY

Net cash position

As at 31 December 2003, cash and cash equivalents of the Group amounted to approximately HK$736 million (31 December 2002: HK$433 million). With the increase in bank borrowings of approximately HK$657 million, the net borrowing position rose by approximately HK$354 million. In spite of the remarkable profit generated from operation of approximately HK$521 million, the increase in net borrowing was warranted in view of (i) the huge capital expenditure incurred during the Year of approximately HK$721 million and (ii) additional working capital tied up after the Group doubled its annual corn refining capacity to 1.2 million mt in late 2002. During the period under review, syndicated loan facilities of US$100 million was raised to enhance the cash position. As at 31 December 2003, half of these facilities had been utilised.

Capital expenditure

In view of the promising demand for the Group's products, the Group accelerated the process of expansion and product diversification. During the Year, capital expenditure on non-current assets amounted to HK$721 million, which were mainly used for (i) construction work for the production of protein lysine and paper-grade modified starch, (ii) acquisition of and additional construction work in the Jinzhou Plant and (iii) foundation work on a new production base in Changchun. The expenditure for these projects amounted to approximately HK$440 million, HK$150 million and HK$130 million respectively. Commercial production of paper-grade modified starch and protein lysine have commenced in December 2003 and January 2004 respectively.

In view of the Group's rapid expansion and product diversification in high value-added downstream products, including various types of amino acids, the Directors are of the opinion that existing production bases are reaching optimal production capacity. Consequently the Group has decided to develop a new production base in Changchun to mitigate the risk of over-concentration and over-utilisation of existing production facilities. Preparation work, site exploration and surveying have commenced before the end of the Year.

Property Revaluation

As at 31 December 2003, the Group's leasehold land and buildings in the PRC and in Hong Kong were revalued on a depreciated replacement cost basis and an open market basis, respectively, by an independent firm of professionally qualified valuers, at approximately HK$649 million. Surplus on revaluation and deferred tax liability of approximately HK$109 million (2002: Nil) and HK$16 million (2002: Nil) respectively arising from the above valuation has been reflected in the revaluation reserve.

Turnover days, liquidity ratios and gearing ratios

As in the previous year, the Group adopted the strategy of keeping a high level of corn kernels, a major raw material, since the harvest season (i.e. fourth quarter) in order to avoid the anticipated upward price movement of corn in the second half of 2004. As a result, inventory turnover days remained at approximately 91 days (31 December 2002: 94 days). With the same convention that all corn kernels were acquired from farmers on a cash basis, trade creditors turnover days remained at approximately 23 days (31 December 2002: 22 days). Trade receivables turnover days shortened to approximately 72 days (31 December 2002: 84 days) with consistent stringent control over credit policy.

The current ratio and the quick ratio as at 31 December 2003 remained stable and were approximately 2.1 (31 December 2002: 2.1) and 1.7 (31 December 2002: 1.6) respectively.

In view of the increase in bank borrowing including syndicated loan facilities, mainly on a long term basis, for financing expansion projects mentioned in the foregoing, gearing ratios in terms of (i) bank borrowings to total assets, (ii) bank borrowings to equity and (iii) net debts (i.e. net balance between bank borrowings and cash and cash equivalent) to equity increased from approximately 17%, 26% and 2% in 2002 to 27%, 45% and 16% in 2003 respectively. High interest coverage (i.e. profit from operating activities over finance costs) of 28 times (2002: 35 times) indicated that the leverage level of the Group remained healthy. The syndicated loan facilities with repayment terms lasting 3 years helped improve the liquidity of the Group, hence supporting expansion projects.

Structure of interest bearing borrowings

As at 31 December 2003, the Group's bank borrowings amounted to approximately HK$1.13 billion, of which 40% were denominated in Hong Kong dollars or US dollars, with the remaining balance denominated in RMB. The average interest rate during the Year was 4% (2002: 5%).

The percentage of bank borrowings wholly repayable within one year, in the second to fifth years and beyond five years were 40% (2002: 64%), 55% (2002: 33%), and 5% (2002: 3%) respectively. The change of repayment pattern was mainly attributable to the utilisation of half of the syndicated loan facilities of US$100 million obtained during the Year.

As at 31 December 2003, certain borrowings were secured by the Group's fixed assets with a carrying value/aggregate net book value of approximately HK$280 million.

FOREIGN EXCHANGE EXPOSURE

Although most of the operations were carried out in the PRC, in which transactions were denominated in RMB, the Directors consider that there will be sufficient cash resources denominated in Hong Kong Dollars, US dollar and RMB for the repayment of borrowings and future dividends, and there is no unfavourable exposure to foreign exchange fluctuation. During the Year, the Group did not use any financial instrument for the purpose of hedging against foreign exchange fluctuations and the Group did not have any hedging instrument outstanding as at 31 December 2003.

PROSPECT — PRODUCT DIVERSIFICATION IN ACCELERATION

It is the Group's mission to become one of the leading vertically integrated corn based biochemical product manufacturers in the Asian Pacific Region and a significant player in the world. To achieve this objective, the Group will endeavour to enlarge its market share, diversify its product mix, and enhance its competitive edge in developing high value-added downstream products through research and development and through strategic business alliances with other leading international players.

Protein lysine and Compound Amino Acids

Currently, the Group is a world-class lysine manufacturer in terms of production technology, equipment and capacity. In view of strong growth of demand for lysine in the PRC in recent years and since more than 40% of demand in the PRC is currently met by imports, the Group expanded its lysine production capacity in order to capture the soaring demand in the market and enlarge its market share. At the same time, the Group also expanded its export of lysine to countries in Europe, Africa and America for stabilising the selling price in the PRC, as well as mitigating the risk of over-concentration in a single market and attaining worldwide recognition of its products. The Group will strive to become the largest lysine manufacturer in the world in three to five year's time.

In July 2003, the Group entered into agreements with a PRC joint venture partner to establish a joint venture company in Changchun in which the Group will effectively hold 73% equity interest. The scope of the joint venture company's business includes the production and sale of various types of protein lysine and compound amino acids. The expected production capacity of this joint venture company includes 60,000 mt of protein lysine and 20,000 mt of compound amino acids per annum. This project will be implemented in two phases, with total investment amounting to approximately US$45 million to be contributed by the joint venture partners in accordance with their respective equity shareholdings. Trial run of the protein lysine facility has been completed and formal production has commenced in January 2004. Protein lysine will be one of the major sources of income for the Group in coming years.

Upon the completion of the expansion projects on protein lysine and compound amino acids, the Group will become one of the largest lysine manufacturers in the world.

Modified Starch

To capture the emerging market of modified starch used in the paper-making industry, the expansion project on modified starch with an annual capacity of 100,000 mt has been launched in December 2003.

Polyol

In October 2003, the Group entered into an agreement with overseas partners collectively called International Polyol Partners ("IPP") to establish a joint venture company in Changchun. The joint venture company will be principally engaged in the operation of a pilot plant for the research and development of and the commercialisation of polyol chemicals, as well as the manufacturing and sale of polyol chemical products.

IPP are the joint developers and proprietors of polyol technology and have extensive skill, knowledge and experience in the design, construction and operation of pilot plants.

The initial annual production capacity of the pilot plant to be launched in mid-2004 is 10,000 mt and the investment cost amounted to approximately US$2 million. Based on the operating performance, it is expected that the production capacity will increase further by 200,000 mt in two phases for mass commercial production. The Group will hold at least 51% of the effective equity interest in this project.

The Group will become the first manufacturer in the world using biotechnology and an environment friendly natural resource, corn starch, to produce polyol.

Sorbitol

In February 2004, the Group entered into a joint venture agreement with Mitsui Group to carry out a sorbitol project in the PRC. This project is engaged mainly in the manufacture of sorbitol products in Changchun and the sale of these products in the PRC and other countries. Mitsui Group will act as worldwide distributor except for the PRC market. The Group will hold 51% equity interest of the project and the total investment amounting to approximately US$15 million will be injected by joint venture partners in accordance with their respective equity shareholdings. The construction of the refinery, with initial annual production capacity of 60,000 mt, will commence soon and commercial production is expected to begin by the second quarter of 2005.

Jinzhou Plant

To satisfy the growing demand for corn starch from downstream expansion in terms of volume and variety, the Group entered into an agreement in May 2003 to acquire 70% equity interest of the Jinzhou Plant, with annual corn processing capacity of 600,000 mt. Commercial production will commence in the second quarter of 2004, thereby raising the Group's total corn processing capacity to approximately 1.8 million mt per annum.

The Jinzhou Plant is situated within Jinzhou port, a transportation hub in the northeastern part of the PRC. In addition to an abundant supply of starch for downstream products, the Jinzhou Plant is well located with a geographic advantage which facilitates the Group's expansion into the southern part of the PRC and overseas markets as the cost of shipment from Jinzhou is substantially lower than that of land transportation from Changchun.

The consideration for the acquisition of the Jinzhou Plant amounted to approximately HK$82 million, of which approximately HK$49 million was settled by way of cash and approximately HK$33 million by way of the allotment and issue of approximately 13 million ordinary shares of the Company ("Shares"). Goodwill amounting to approximately HK$14 million arising from the acquisition will be amortised over a period of 20 years on a straight line basis.

Glutamic Acid

With the acquisition of the Jinzhou Plant as the second principal production base of the Group, the foundation work of a glutamic acid plant, with a designed annual capacity of 100,000 mt and adjacent to the Jinzhou Plant, has been launched. The plant not only enjoys the benefit from vertical integration of operations, but also gains easy access to the southern part of the PRC, the largest market for glutamic acid. It is expected that commercial production will commence in the first quarter of 2005.

HFCS

During the Year, HFCS JV entered into contracts with international and local beverage bottling plants to supply HFCS to densely populated cities in the PRC. The amount of HFCS to be supplied by the joint venture under the contracts will take up about half of the production capacity of the HFCS refinery. Although this joint venture project recorded operating losses since its inception due to the depression of the price of cane sugar in the past few years and high transportation costs of long haul delivery, the Directors expect that the operating environment will improve as the price of cane sugar has risen substantially recently. Furthermore, a new HFCS refinery situated adjacent to the Jinzhou Plant is under consideration. If the project materialises, the new refinery will not only relieve heavy transportation costs because it will serve mainly customers nearby, but will also save production cost through vertical integration since starch slurry and not powder form adopted by HFCS JV in Shanghai, will be supplied by the Jinzhou Plant.

SHARE OPTIONS TO OTHER CORPORATIONS

During the Year, 23.8 million Shares were allotted and issued to a wholly owned subsidiary of Cargill, from which approximately HK$38 million were received by the Group pursuant to the exercise of the share option granted thereto. As at 31 December 2003, options granted to that wholly owned subsidiary of Cargill for subscription of 84.2 million Shares remained outstanding, with exercise periods up to April 2005. If these options are fully exercised, an aggregate amount of approximately HK$172 million would be raised, which can enhance the Group's financial position and provide additional resources to the Group for its future business development.

NUMBER AND REMUNERATION OF EMPLOYEES

The Group has approximately 2,000 full time employees in Hong Kong and in the PRC as at 31 December 2003. The Group recognises the importance of human resources as one of its most important assets and its importance to the Group's success. Hence, qualified and experienced personnel are recruited to enhance production capability and to develop new biochemical products. Remuneration is maintained at competitive levels with discretionary bonuses payable on a merit basis and in line with industrial practice. Other staff benefits provided by the Group include mandatory provident fund, insurance schemes and performance related commission.

During the Year, no share options were granted to any staff. As at 31 December 2003, shares options with the right to subscribe for a total of approximately 74,428,800 shares were outstanding with exercisable periods up to August 2011 and an exercise price of HK$1.316 per Share.