

PW-ABO-763  
2000

Consultancy Report

## **Mezomag Comprehensive Business Study**

**Agricultural Input Marketing Support - Hungary**  
**USAID Grant No. EUR-0024-G-00-1066-00**

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September 1993

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## Mezomag Business Study

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**Mezomag Kft**

**I. Overview**

Vetomag Vallalat (VV) was the government monopoly which provided seeds and other inputs to state and collective farms. VV's network of regional subcenters was restructured into eleven limited stock companies (Kft) and a jointly owned Vetomag Trading Company (VT). Eight of these limited stock companies (Kft), including Mezomag, became independent seed production and distribution companies. The eight companies are called the seed group. VV is bankrupt and is being liquidated. Due to substantial debt obligations the survival of Mezomag is in doubt.

**a. Ownership and Legal Status**

The current ownership and capitalization of the company is about 108.7 million HUF (Appendix). The largest shareholder is OKHB, the state bank. VV previously owned the largest equity interest but took out a loan on its equity interest. VV found itself in a position of being unable to pay back its credit obligations to OKHB. The mortgaged shares subsequently reverted back to the bank. Other large shareholders are local cooperatives and state farms.

**b. Production and Marketing**

Mezomag (Kft), founded on November 23, 1990 is a limited stock company and a member of the seed group. The company's production and marketing operation covers one very productive Hungarian county. Mezomag is involved in seed production, purchasing, processing and sales of the following crops:

**Fodder Seeds** - green fodder crops, vegetable and flower seeds;

**Industrial Seeds** - winter rape, fodder rape, mustard, and various peas.

Mezomag's primary activities are in the retail and wholesale trade, production, and processing of seed. In Hungary, their customers include a small network of shops and stores, private farmers, and numerous limited joint stock companies (former state farms). Mezomag also exports various products to the European Community.

## **II. Production And Technology**

### **a. Description of the Plant and Equipment**

Mezomag Seed company cleans seed in two plants, Lepseny and Nagykaracsony. The operating equipment in Lepseny is housed in a six story, forty year old, concrete building. The cleaning plant at Nagykaracsony is three years old. The production facility at Lepseny houses three departments:

- o seed cleaning;
- o seed testing laboratory; and,
- o administration offices.

#### **The Lepseny Production Facility**

During the seed cleaning season, which lasts over a 10 month period, the plant runs one 10 hour shift per day staffed by ninety-three persons per shift, including personnel working in off-site warehouses. During alfalfa cleaning in late summer, the plant operates two shifts. The Lepseny plant cleaned eight major crops during the 1992 cleaning season.

The physical layout of the Lepseny production facility imposes limits on efficient seed processing. Cleaning is carried out on six cleaning lines. Four of the six cleaning lines can be paired to clean large quantities of major crops such as pea seed. One line cleans specialty crops such as alfalfa. The clean seed from the combined lines merge at two common sack off points. There is one two-year old line that has been dismantled and removed from a warehouse. The building has been leased to Sluis and Groot, a Dutch seed company.

The cleaning equipment is of European (German, French) origin. Basic equipment and accessory items are adequate to clean the seed crops in a timely and efficient manner and is well maintained. An extensive list of Mezomag's cleaning equipment can be found in the Appendix.

#### **The Nagykaracsony Production Facility**

- The cleaning plant at Nagykaracsony is designed horizontally rather than vertically. Seed is handled in bulk trucks, big bags, or in large cardboard containers. The cleaning equipment consists of a screen machine, an indent cylinder, a gravity table, and a sewing machine. The facility is a joint venture

operation between Mezomag and a local cooperative. Mezomag owns the equipment, the co-op owns the buildings and the real estate. The co-op also staffs the plant. The facility cleans mainly small grains, peas, and mustard seed. Seed samples drawn from this facility are tested at the Lepseny lab.

**b. Production Flow**

Production flow starts at the farm level. Seed crops are combined and then either dried with cool air or taken directly to the plant. Seed that is combined in excess of 12-13 percent moisture must be dried to 12-13 percent moisture to prevent heating which destroys germination.

When seed is ready for cleaning it is brought to Mezomag in bulk by truck, in "big bags", bulk bins, or in sacks. It is sampled upon arrival. Seed is stored under cover in either bulk or bag form to await cleaning. All seeds are then transferred into metal bins prior to cleaning. A lot number is assigned to the seed. Prior to cleaning, some seed stored in bags is transferred to metal bins.

Seed lots to be cleaned are transported by forklift from storage to the plant. The cleaning lines in the plant are equipped with a separate pit and bucket elevator. From the pit, seed is elevated to the sixth floor by bucket elevator. Aspirators are used to remove dust, chaff, light seed and inert matter. Screen machines, gravity tables, indent barrels, velvet rolls and magnetic machines are used during the cleaning process.

**c. Quality Control System**

Mezomag personnel sample the seed several times during the seed cleaning process. Seed lot uniformity is critical to the seed cleaning business. Only once, at the initial receiving point, is the lot hand sampled. Sampling throughout the plant is done either by probe or automatic sampler. Sampling by probe is preferable in that the sample drawn is more representative of the lot. Most lots are sampled after the bag have been sewn shut. An exception is alfalfa seed which is sampled with the bag open and then sewn shut. After each lot is sampled, tested, and certified by the State, the bags are tagged, sealed, and ready for shipment.

The seed testing lab is the primary point of quality control. On the basis of the purity test results, changes are made in machine settings and screen size. Germination tests are run twice: as the seed enters the plant from the field; and, upon completion of the cleaning.

**d. Production Resource Staffing**

The Lepseny production facility has 93 staff members. Staff members can be found in the wire diagram of company personnel in the appendix. The cleaning plant staff consists of one foreman, his deputy and 18 production workers and cleaning staff. The seed lab staff consists of a department head and four analysts. The staff is well trained and thoroughly professional.

**e. Supply Contracts**

- o Acreage is contracted at planting time with farmers to supply Mezomag with seed to satisfy current and potential sales contract.
- o Kilograms of seed is contracted rather than hectares.
- o Mezomag pays the certification fees for seed produced.
- o Seed produced for industrial use (oil, birdfeed) is not certified.
- o The grower contract explicitly details price, quality specifications, and payment terms. Payment by installment after the crop is cleaned is common.
- o Harvested seed is stored at the plant or with the grower until called for by Mezomag. Transportation costs to the plant are paid according to contract. In most contracts, transportation costs are paid by the buyer.
- o Mezomag coordinates delivery from the farm to company warehouses.

**f. Maintenance**

The maintenance department solves all of the operational and maintenance problems. Matters which require special knowledge are solved by outside companies and services. Maintenance staff has been reduced over the past two years. The equipment is very well maintained.

**g. Strengths and Weaknesses**

**1. Strengths**

- o The company is located in an area with climate conditions conducive to raising seed crops of high quality and quantity.
- o Farmers in the area are qualified seed farmers.
- o Field production staff are aware of and utilize up to date technology.
- o There is an effective quality control program in place.

**2. Weaknesses**

- o The physical layout of the Lepseny plant is inefficient. Seed is handled too often by hand. Too often the seed crop and its by products are stored throughout the plant awaiting disposal or recleaning.
- o There is no program in place that provides data to determine the true cost of production that includes field work.
- o Uncertain production costs exist due to inefficient cost accounting system.
- o The cleaning plant of Lepseny is overstaffed in a number of areas. The company should create companywide job descriptions and evaluate the task of each employee to determine exact staffing requirements.

**f. Recommendations and Conclusions**

Some recommendations for cost reductions and plant efficiency improvement are outlined below. These recommendations include:

- o Construct or renovate loading areas to receive raw seed in bulk form. This would speed up handling and reduce the number of times that seed is handled. Specialty seed and small lots should remain in storage bins or bags.

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- o Move seed from bulk storage to cleaning by air rather than by fork lift. This reduces the number of times that seed is handled.
- o Set up the line removed from the Sluis and Groot building in a horizontal fashion. Clean as much seed as possible in this line. Do away with cleaning in the old vertical line plant as soon as it is feasible.
- o Clean as much seed as possible in Nagykaracsony.
- o Any unusable or contaminated seed separated from the main lot should be piped to the main floor and disposed of immediately rather than being allowed to remain in open bags and then disposed.
- o More attention should be given to overall plant cleanliness. Sweep floors and rebag seed currently lying around in broken bags.
- o Field personnel should fill out a log of their daily work related activities. From this log, costs of field work as a function of the total cost of production can be derived. An example of such a log is shown in Appendix.
- o Greater emphasis should be made to understanding and calculating the actual cost of production. An example
$$\text{Cost of seed} + \text{fieldman's time/crop} + \text{cleaning cost} + \text{seed lab costs} + \text{certification costs} + \text{shipping cost} = \text{cost of production.}$$
- o Remove the full time marketing person from the production department and develop a separate marketing and sales department.
- o The thirteen employees that are leaving the Mezomag portion of the Lepseny plant and reallocated according to the Sluis and Groot cleaning contract should not be replaced.
- o Formal production group and job descriptions should be developed.
- o At least one, if not both, of the agronomists in the production department should be terminated. Their jobs are redundant.

### **III. Financial and Accounting**

Mezomag is experiencing a substantial decline in sales. The decline in revenue will affect its ability to service debt during the second half of 1993. The company derives about 98% of its revenue from the sale of seed and grains. About 2% of its revenue comes from its retail and warehouse operation. Although Mezomag has taken steps to reduce interest costs and debt loads, it is currently borrowing to pay interest costs. Further reduction of debt to reduce interest payments is necessary if Mezomag is to survive.

#### **a. Income Statement Analysis**

The table below illustrates comparative income statements for June, 1992, December, 1992 and June, 1993. For the first half of 1993, sales of 493 MHUF<sup>1</sup> included export sales of 42 MHUF. Total revenue is 32% less when compared to June 1992. Sales dropped 22.8% in 1992 to 1,231.3 MHUF from 1,594.5 MHUF in 1991. A times interest earned ratio (TIE), calculated by dividing earnings before interest and taxes (EBIT) by interest paid (65.9 MHUF/88.0 MHUF), was only 0.75 in 1992. This means Mezomag is not generating sufficient revenue to cover interest payments and as a result, cannot cover its fixed costs. Generally, bankers will not lend to a company with a TIE ratio below one unless there is an additional guarantor or collateral. The company experienced a loss of 22.1 MHUF in 1992 despite a profit of 22.3 million forints at June 30, 1992.

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<sup>1</sup> Million Hungarian Forints

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|                          | 1992<br>(MHUF) | 1992*<br>(MHUF) | 1993*<br>(MHUF) | % Change<br>6/92-6/93 |
|--------------------------|----------------|-----------------|-----------------|-----------------------|
| Revenue                  | 1,231.3        | 726.8           | 493.3           | -32.8%                |
| Cost of Goods Sold       | 1,106.2        | 584.9           | 394.4           |                       |
| Gross Margin             | 125.1          | 141.9           | 98.9            | -30.3%                |
| Gross Margin (%)         | 10.2%          | 19.5%           | 20.0%           |                       |
| Cost of Sales            | 51.0           | 77.2            | 69.8            |                       |
| Other Costs              | 41.3           | 4.3             | 2.8             |                       |
| Operating Income         | 37.7           | 60.5            | 26.3            |                       |
| Interest Income          | 33.2           | 15.0            | 1.7             |                       |
| <b>EBIT</b>              | 65.9           | 75.5            | 29.0            | -61.6%                |
| Interest Expense         | 88.0           | 52.2            | 16.6            |                       |
| Extraordinary Items      | 0.0            | 0.0             | 0.0             |                       |
| <b>Profit Before Tax</b> | -22.1          | 23.3            | 11.4            |                       |
| Taxes                    | 0.0            | 0.0             | 0.0             |                       |
| <b>Net Profit</b>        | -22.1          | 23.3            | 11.4            |                       |

\* Results through June 30th.

Although the year-on-year TIE ratio has increased, the overall drop of EBIT is of concern. At June, 1992 EBIT was 75.5 MHUF, but for June, 1993 it had declined to 29 MHUF. Mezomag achieved a net profit of 23.3 MHUF for the first half of 1992. In the first half of 1993, the net profit dropped by more than 50 % to 11.4 MHUF. The financial results indicate a continuing deterioration in the performance of the company. If the drop in the company's financial performance is not abated Mezomag will fall into bankruptcy.

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**b. Balance Sheet**

Mezomag is highly leveraged. Results for 1993 have not shown any substantial improvement. As shown below, inventory levels have dropped to 110 MHUF at 6/93 from 302.7 MHUF at the end of 1992. Nevertheless, the change from 6/92 shows a disturbing build up of stocks. The company is holding excessive pea seed stocks for feed. The end use market has collapsed due to the rapid decline in cattle and hog stocks. As in many of the Kfts visited, a receivable could take up to a year to collect if for example the original sale is in March to a farmer for payment-in-kind. The farmer will not be able to sell the seed until August/September. The Kft, however, is not able to sell the seed until the next growing season. By selling on credit, the Kft may be losing a minimum of 21 % to 36 % on their accounts receivables.

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|                                       | 12/92          | 6/92e          | 6/93e          |
|---------------------------------------|----------------|----------------|----------------|
| <b>Current Assets</b>                 |                |                |                |
| Cash                                  | 30.345         | 17.278         | 57.368         |
| Accounts Receivable                   | 175.513        | 150.427        | 103.741        |
| Inventory                             | 302.679        | 37.294         | 110.201        |
| Prepaid Expenses                      | 4.275          | 1.152          | 3.532          |
| <b>Total Current Assets</b>           | <b>512.812</b> | <b>206.151</b> | <b>274.841</b> |
| <b>Fixed Assets (Net)</b>             |                |                |                |
| Land & Building                       | 42.748         | 43.021         | 42.474         |
| Machinery and Equipment               | 32.077         | 35.459         | 29.608         |
| Other                                 | 3.634          | 5.832          | 3.474          |
| Intangibles                           | 0.0            | 0.0            | 0.0            |
| Financial Assets                      | 7.088          | 6.660          | 7.255          |
| <b>Total Fixed Assets</b>             | <b>85.547</b>  | <b>90.972</b>  | <b>82.811</b>  |
| <b>Total Assets</b>                   | <b>598.359</b> | <b>297.123</b> | <b>357.652</b> |
| <b>Current Liabilities</b>            |                |                |                |
| Accounts Payable                      | 85.006         | 29.126         | 122.225        |
| Bills of Exchange                     | 32.968         | 0.0            | 2.0            |
| Short-term Credit                     | 130.500        | 70.0           | 68.502         |
| Other                                 | 218.367        | 58.328         | 22.896         |
| <b>Total Current Liabilities</b>      | <b>466.841</b> | <b>157.454</b> | <b>215.623</b> |
| Accrued Liabilities                   | 3.823          | 0              | 2.936          |
| Long-term Debt                        | 0.0            | 0              | 0              |
| Provisions                            | 33.389         | 0              | 33.389         |
| Other Debt                            | 0.0            | 0              | 0              |
| <b>Total Liabilities</b>              | <b>504.053</b> | <b>157.454</b> | <b>251.948</b> |
| <b>Equity</b>                         |                |                |                |
| Capital                               | 108.730        | 108.730        | 108.730        |
| Retained Earnings                     | 7.661          | 7.666          | -14.428        |
| Current RE                            | -22.085        | 23.273         | 11.402         |
| <b>Total Equity</b>                   | <b>94.306</b>  | <b>139.669</b> | <b>105.704</b> |
| <b>Total Liabilities &amp; Equity</b> | <b>598.359</b> | <b>297.123</b> | <b>357.652</b> |

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A comparison of debt, liquidity and efficiency ratios for the end of 1992 and 6/93 shows varied improvement:

|                      | 12/92 | 6/93 |
|----------------------|-------|------|
| Current Ratio        | 1.09  | 1.24 |
| Quick Ratio          | 0.44  | 0.74 |
| Receivables Turnover | 5.6   | 3.9  |
| Inventory Turnover   | 2.7   | 5.4  |

The current ratio, which is current assets divided by current liabilities, illustrates Mezomag's ability to repay its short-term debt in a hurry. The quick ratio is a narrower definition of liquidity than the current ratio. It is calculated by dividing cash and receivables by current liabilities. Mezomag has low liquidity, especially when considering the quick ratio. The implication of these ratios is that Mezomag is not in a position to repay its loans.

Inventory turnover, which is cost of goods sold divided by inventory, indicates how quickly a company is able to rotate its stocks. A low number may indicate that the company is not selling its products fast enough and, as a result, has its cash tied up in its goods. Inventory turnover as of 6/93 has greatly improved. Seasonal conditions may substantially affect the inventory turnover ratio (and any inferred meaning) because the company is supposed to purchase seed in August and September. Year end 1992 inventory is almost 70 MHUF greater than June of 1992.

The receivables turnover ratio, which is sales divided by receivables, shows that Mezomag has reduced its efficiency at converting receivables into cash. Special accounting procedures show accounts receivables as of June, 1992 lower than actual. Based on data supplied by Mezomag officials, accounts receivable are about 193 MHUF. Of this, 70 MHUF is unlikely to be collected. An additional 40 MHUF is to be paid with grain or seed and 43 MHUF should be collected. The likelihood of collecting from Vetomag Vallallat is doubtful. Vetomag Vallallat is in the process of liquidating its assets. The estimated true value of accounts receivable is about 65 MHUF. The combination of a substantial percentage of bad accounts combined with overvalued inventories means the company will have even greater difficulties in covering short term obligations than might be readily apparent by looking at their balance sheets.

**c. Management Information System**

the company's internal information system is good. The company has carried out partial internal reorganizations. At present the information system produces the following output:

- o volume of incoming material;
- o stock levels;
- o equipment lists (purchase date, current and book values);
- o production statistics by crop cleaned;
- o staff numbers;
- o company's revenues and expenses;
- o general data for the company; and,
- o staffing and wages.

There is no routine quarterly income or balance sheet information available. Production statistics are developed on a monthly basis.

**d. Financial Operations and Recommendations**

Although Mezomag has a cash budgeting procedure, it does not track its cash flow on a regular basis and it does not compare actual with budgeted results. The cash budget is a valuable tool to anticipate cash short falls and surpluses. A recommendation is to take the budgeting procedure one step further and compare actual results with the forecast on a monthly basis.

The cash flow example illustrated below is hypothetical and assumes a loan interest payments only. By matching cash collections with cash payments a better idea of how much money is available to retire debt is available. In this example, the company will have to borrow money in January because there will be a cash short fall of 5 at the end of January.

The sales column shows how much the company may expect to sell. Collections on the sales are estimates because some are for credit. In January, sales were 100, but the company may only expect to collect 50 in January, 30

in February and 20 in March. The same procedure follows in February. Although sales are 200, one can expect to collect only 100 in February, 50 in March and 50 in April. The same procedure is followed for every month. This example can easily be extended to December.

Starting in January the expected collections for the month are totaled to obtain monthly cash income. In January, the company has 50. That is the total sum it can expect to collect. Expenses follow the same pattern. For each month, calculate the anticipated cash payments for materials, rent, and salaries. Then total each column to obtain total cash expenditures for the month. For example, January, materials were 20, purchases 15, rent 5, salaries 10 and interest on credit 15. These items total 65.

Subtracting expenses from cash collected, indicates whether the company had either a net inflow or outflow of money. In January, net cash is total collected minus total payments equalling a minus 15). The starting balance represents cash the company has on hand. Add this to the net cash figure to determine the company's ending balance. In January, the starting cash balance is 10. Adding this to net cash of -15 means the ending balance is -5. If the ending balance is negative, the company will have to borrow money to make up the short fall. In January, the company may have to borrow 5 to compensate for the deficit. The final balance is money borrowed plus the ending balance. Sometimes, a company will borrow sooner than it needs to because it anticipates interest rates may be rising soon. Borrowing decisions are made either for current or anticipated short term needs. Such decisions may be influenced by anticipated movements of short term interest rates. The ending balance for January then becomes the starting cash balance for February. This process is repeated for each succeeding month.

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| Month                        | Sales | Jan. | Feb. | Mar. | Apr. | May | June |
|------------------------------|-------|------|------|------|------|-----|------|
| January                      | 100   | 50   | 30   | 20   |      |     |      |
| February                     | 200   |      | 100  | 50   | 50   |     |      |
| March                        | 150   |      |      | 70   | 40   | 30  | 10   |
| April                        | 150   |      |      |      | 100  | 30  | 20   |
| May                          | 125   |      |      |      |      | 75  | 25   |
| June                         | 125   |      |      |      |      |     | 50   |
| <b>Total Collected</b>       |       | 50   | 130  | 140  | 190  | 135 | 105  |
| Expenses:                    |       |      |      |      |      |     |      |
| Materials                    |       | 20   | 30   | 50   | 40   | 40  | 20   |
| Purchases                    |       | 15   | 25   | 35   | 5    | 5   | 5    |
| Rent                         |       | 5    | 5    | 5    | 5    | 5   | 5    |
| Salaries                     |       | 10   | 10   | 10   | 10   | 10  | 10   |
| Interest                     |       | 15   | 15   | 15   | 15   | 15  | 15   |
| <b>Total Payments</b>        |       | 65   | 85   | 115  | 75   | 75  | 55   |
| Net Cash In Flow             |       | -15  | 45   | 25   | 115  | 60  | 60   |
| <b>Starting Cash Balance</b> |       | 10   | 0    | 40   | 65   | 180 | 240  |
| Cash Deficit/Surplus         |       | -5   | 45   | 65   | 180  | 240 | 300  |
| Credit Repaid                |       | 0    | -5   | 0    | 0    | 0   | 0    |
| Credit Received              |       | 5    | 0    | 0    | 0    | 0   | 0    |
| <b>Final Cash Balance</b>    |       | 0    | 40   | 65   | 180  | 240 | 300  |

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An important issue regarding Mezomag is the company's cost accounting system. Mezomag allocates general overhead to each product based on gross margin contributed. This does not reflect the true use of resources used because crop prices vary year-to-year. A more logical method would be to allocate overhead by volume sold because the greater the volume, the greater the use of plant and equipment.

Mezomag prepares balance sheets only for the year end reports. Income statements are available semi-annually. Both financial statements should be prepared on a quarterly basis to enable faster decision making based on financial results. A monthly budgeted income statement should be prepared immediately. Actual results should be compared with the expected results. This includes a comparison of profitability by product line throughout the year to understand which items are profitable. An attempt to allocate direct labor costs to the product line should be undertaken during the processing period.

Overhead at both the plant and headquarters can be applied based on volume sold. One method would be to use the previous year's overhead, adjust it for inflation, layoffs and other factors and then make an estimate to apply it to the current year's goods sold. These reports allows management to act appropriately to changes in the economic and business environment. It enables Mezomag to work with its bankers more effectively by informing them of financial troubles before they occur.

Mezomag's policy of selling seed to farmers on credit, paid for by product in-kind, is inappropriate. Although an interest charge is calculated, real cash losses may occur because less cash comes in to service the credit line. The company should sell its products for cash only, except under special circumstances. All credit sales should be against some form of collateral that is easily and quickly convertible to cash, such as an automobile or other product in high demand. Prompt cash payment keeps revolving credit at a minimum and reduces interest payments. Furthermore, all delinquent accounts over thirty days should be contacted immediately, with a follow up visit 10-15 days later if no result is obtained. The company may want to send delinquent payments to court for collection just to show it is serious about collecting its accounts receivables. All receivables over a year old are likely to be uncollectible. They should be written off immediately.

Mezomag has a 90 MHUF line of credit from Vetomag Kereskedohaz that is collateralized against inventory. Due to a clause in the loan agreement that requires Mezomag to pay interest at a 19% rate plus devaluation of the forint, it is recommended that surplus pea seed inventory be used to pay down the loan. Part of the peas seed must be retained to cover the regional pea seed demand.

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Mezomag's international trade has been very poor. Agents that the company works with, do not guarantee the collection of accounts. Due to the inherent risk associated with commodities in general and international commodity sales in particular, all transactions should be made with a letter of credit irrespective of any longstanding business relationship.

#### **IV. Marketing and Trade**

Mezomag plays a major role in supplying and distributing seed for cereals, corn hybrids, and industrial feed crops in Fejer County. Its production, distribution and sales area covers more than 326,000 hectares. Mezomag customers include agricultural companies (coops, state farms), small scale producers and different trade companies. The company has direct relations with 170 customers and 40 suppliers (See Appendix). The principal suppliers and customers of the company have been the same for many years. Some customers own shares in Mezomag Kft. (37 agricultural cooperatives, 6 state farms, 2 state companies, 2 production systems /KSZE, IKR/, 1 research institute, 132 individuals /employees of Mezomag kft/, 1 Swedish citizen).

##### **a. Sales Revenue**

Mezomag Kft deals primarily in the production, processing and trade of grains, industrial and feed crops, and potato seed. The company's 1992 gross revenue was 700 MHUF. Grains, industrial seed and feed crops represent 69% and 24% of total production volume, respectively. Corn revenues alone are 43.5% of total company revenues. Over the last few years corn revenues have declined.

Mezomag Kft is the only Hungarian company that produces elite potato seed. The share of gross revenue from the Potato Department is 7%. An increase in the market share of potato seed is not expected because of the relatively high price of the product. In Hungary elite potato is produced on only 30% of the sown area. All other elite potato seeds are sown with multiplied second generation or less expensive quality potato.

Retail trade of seed, gardening materials and chemical products is carried out by the company's seed shop and the discount store. Annual turnover of retail trade activity is approximately 30 MHUF (4% of total revenues). Although a small scale increase of retail turnover is expected over the near term, retail sales will not be a dominant factor in increasing the company's gross revenue.

##### **b. The Competition**

The company's competitors are the production systems, especially KSZE and

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IKR. Mezomag could increase its market share by aggressively marketing its products to the clients of other seed companies which have closed or are undergoing restructuring under Hungarian bankruptcy proceedings.

**c. Price Policy**

The company does not have a well-documented procedure for establishing its product price list. Prices are determined by the marketing and production department managers. Market fundamentals are however, taken into consideration when the company develops its product price list. The price recommendations of Vetomag Kereskedôház RT is the primary external price information resource. The company works with a low price margin (16-17%). Mezomag needs to get its cost accounting in order to assist it in determining its true product contribution margins and pricing strategy.

**d. Marketing Strategy and Relationships**

The business activity of the company is routed in personal relationships. The company often makes tacit agreements with some of their competitors concerning price and market shares. However, these tacit price and market share agreements are less important and more infrequent. For example, Mezomag is currently selling seed tonnage into Semen's market area. A gentlemen's agreement not to intrude on Semen's market has been voided.

**e. Strengths and Weaknesses**

**1. Strengths**

- o The company has its own retail seed shop and wholesale store which enables it to obtain direct market information about future seed possibilities and to satisfy the needs of smaller customers for seed, garden tools and pesticides and get consumers' feedback and signals.
- o In order to increase sales the company attends major domestic and foreign exhibitions and fairs.
- o The company uses high level technology to process pea seed. They have signed a contract with the Dutch company Sluis & Groot thereby ensuring the long term production and processing of pea seed.

**2. Weaknesses**

- o Since 1991 no market survey has been performed. The marketing department is not able to perform systematical seed market research. A constructive relation has not developed between the marketing and production departments.
- o Seed purchases are limited by the company's limited financial resources.
- o Due to its current product mix the company has limited its markets to Fejér county. The company must develop a more dynamic marketing strategy targeting alternative domestic and foreign markets.

**3. Threats**

- o Competitors, primarily KSZE and IKR, may increase their market shares because of their ability to provide more complete extension services and purchase products at higher prices.
- o Mezômag Kft's product prices may become uncompetitive because of lower production costs and more widespread market service relations of their primary competitors.

**4. Opportunities**

- o The utilization of present cleaning capacity may be increased by expanding the company's activity to process not only quality (high margin) proprietary variety seeds but bird seed and feed.
- o Better utilization of foreign external business relations, production contracts and direct export sales is necessary.
- o Establishment of agreements with seed companies and trade companies with mutual interests.

**f. Recommendations and Conclusions**

Some marketing recommendations are outlined below. These recommendations include:

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- o A training course on marketing should be organized for the employees of every department dealing with production in order to improve their cooperation and familiarization with marketing tools and the marketing specialists.
- o Since the production and organization structure of the company is simple and the number of employees is low, the General Manager should directly supervise marketing policy and objectives.
- o In order to reduce production, sales and marketing costs, it is essential to conduct a survey on the contribution margin of each product.
- o The demand for other lower quality products such as bird seed or industrial crops (sunflower, rape, oilflax, mustard) will increase in foreign markets. The company should accelerate efforts to take advantage of these foreign opportunities by making direct contact with foreign importers and producers of these seed varieties.
- o Demand for pea seed is projected to increase. It will be useful to promote common market and production development programs with food processing companies (deep freezing, canning) in order to increase turnover.
- o It is important to re-examine the nature and extent of cooperation with Sluis & Groot. Sluis & Groot should be offered investment possibilities in the company after ownership issues are resolved.

## **V. Organization and Human Resources**

The organizational structure of Mezomag is shown in the diagram on the following page. Current staffing requirements include 133 full time workers and up to 6 part time workers. Of the current full time work force, 18 have a college education and 63 have high school or Trade School. The work force is highly educated and generally well-trained. The reduction in staff has been carried out deliberately, in accordance with changes in production tasks and poor financial performance.

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**a. Organization**

Mezomag is divided into five main staff departments:

- o The engineering or production group. This group has five subdepartments including the Grain and Corn Department, the Other Crop (rapeseed, fodder etc.) Department; the Potato Department; the Export Department; and, the Cleaning Department.
- o The finance department. This group is separated into four smaller sub departments including, the Financial Department; Accountancy Department; Administration; General Planning and Statistics.
- o The Marketing Department. This groups is composed of a general manager and two subdepartments including the retail and wholesale outlets.
- o General Administration Department; and,
- o A Legal Department.

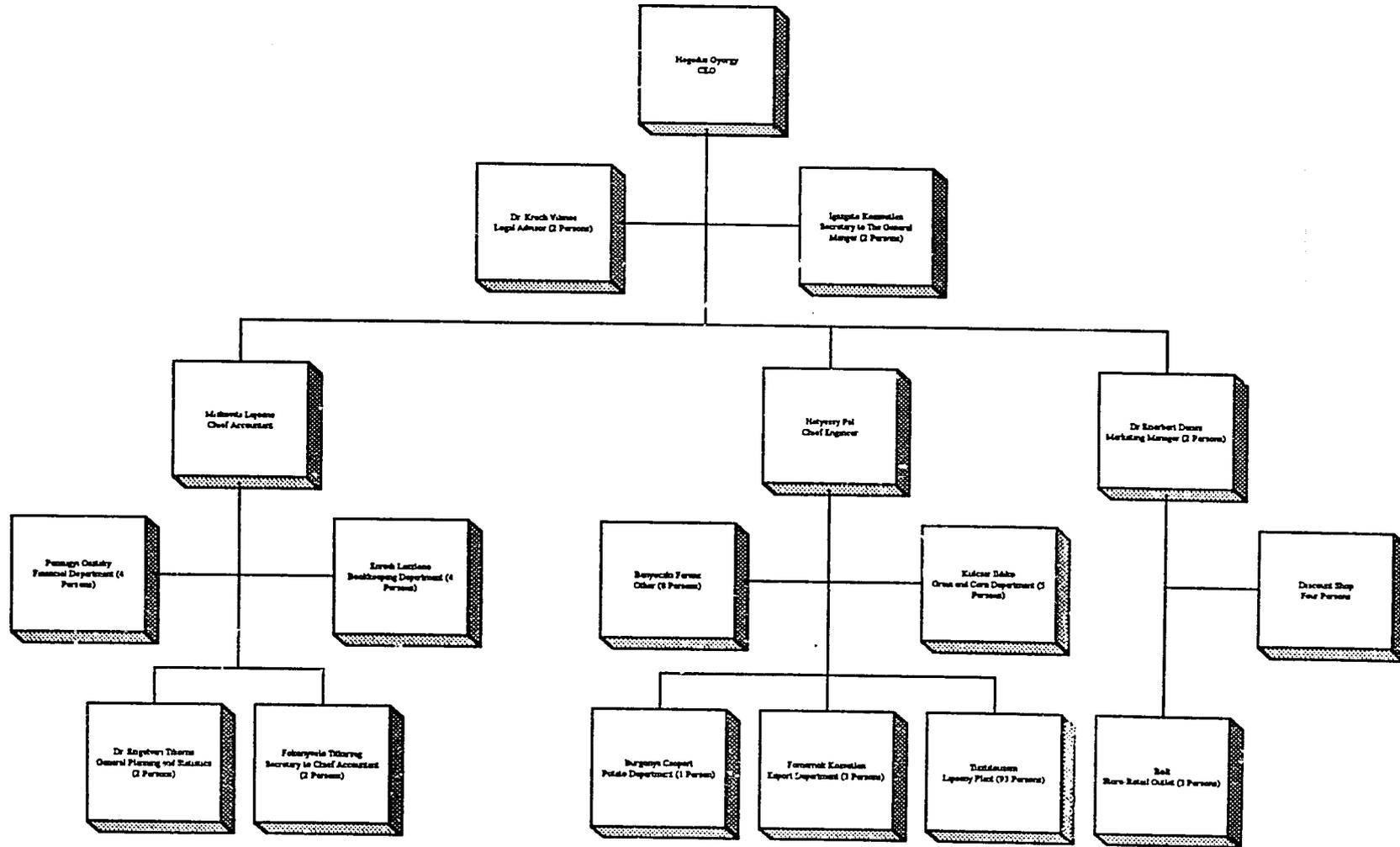
**b. Organization of Policy Making Group**

In terms of power distribution and voting rights, the power distribution is as follows:

- o Company shareholders manage and vote on the general operation of the company.
- o The Supervisory Board controls the general management of the company. and,
- o The General Manager organizes and manages the daily operation and finances of the company.

Informational meetings are not held on a regularly scheduled basis, but on an as needed basis only. Managers and department heads generally hold meetings with their staff on a semi-informal basis.

# Mezomag Kft Organizational Chart



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**c. Employee Evaluations**

The company has no formal employee evaluation system. Reviews are made by the individual department head. Pay increases are reviewed by the general manager. Because of Mezomag's poor financial position wages and salaries are frozen for the indeterminate future. The company does have formal job descriptions for its employees.

**d. Comparison of Wage Level**

The wage level of the company reflects the regional average and is in line with other comparable companies. Wages are composed of a flat rate with bonuses awarded on performance. Bonuses can reach as high as 40 % of the current wage.

**e. Strengths**

- o A well-trained and dedicated workforce.
- o A formal (separate) marketing and sales department.

**f. Weaknesses**

- o No formal employee evaluation system.
- o A marketing department that is unfocused and lacks clear and well understood marketing and sales goals.
- o No formal or ongoing employee training program.
- o Middle and higher level management lack expertise and competence in marketing functions.

**g. Opportunities**

- o Developing a focused marketing department with the objective of increasing sales and marketing efficiency.
- o Developing time sheets creating more efficient product cost analysis and increasing employee productivity..

## **VI. Conclusions and Recommendations**

In the present situation, Mezomag is facing declining raw material seed supply and demand for its products. The company must forcefully increase its sales volume on the domestic market to survive. Any financial strategy for Mezomag will require restructuring of debt to reduce interest payments. A revolving credit line must be maintained in order to finance the purchases of crops, supplies and other materials.

### **Human Resources and Organization**

- o Personnel changes may be needed in several areas to introduce a more innovative and ambitious management group.
- o Sales market training courses should be made mandatory for the sales staff.

### **Production**

- o Mezomag should use the production line that was removed from the Sluis and Groot building. The line should be set up horizontally at Lepseny or another building.
- o With a more efficient production line in place, Mezomag could reduce its cleaning costs by 25 % to 35 %. A more strategically located horizontal production line would:
  - reduce transportation costs;
  - decrease electric energy use;
  - increase labor productivity and efficiency; and,
  - utilize current surplus equipment.
- o Over the short term Mezomag should begin to organize a Research and Development Department. The company should:
  1. Select their five most profitable crops. These crops should be selected on the basis of their robust contribution margins.
  2. Obtain exclusive marketing and production rights to varieties of those crops. Make sure that these varieties are on the Hungarian national list.

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3. Produce, promote and market Mezomag proprietary variety seeds.
- o Over a longer period of time, Mezomag should:
    1. Hire a plant breeder(s).
    2. Breed and develop varieties of crops that can be produced in and around the positive Mezomag growing environment.
    3. Mezomag should then market these proprietary seeds under their own brand label.

### **Financial Recommendations**

- o The TIE ratio indicates to the bank the ability to repay interest. If this ratio is less than one, a company's debt servicing ability is greatly impaired. Mezomag should seek to establish a TIE ratio of 1.4 a minimum acceptable level.
- o Mezomag should develop better cash flow forecasts. At the beginning of each year, take the previous year's total production overhead and increase this by a projected inflation factor and allocate production overhead across each product based on volume processed. The same allocation procedure should be used with respect to sales and marketing functions.
- o Because debt financing (and, subsequently, interest payments) are used to finance inventory, Mezomag should use interest payments in its direct product cost calculations. The interest costs should be allocated by sales contribution.
- o Mezomag should also develop joint cleaning ventures with co-ops and other farms.
- o Mezomag should establish an internal information system with more frequent outputs on a monthly and weekly basis.

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**Appendix**

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Mezomag Equipment Inventory  
Lepseny Plant

| Number of Items | Type and Make                | Origin       | Year of Purchase | Purchase Price      | Current Value       |
|-----------------|------------------------------|--------------|------------------|---------------------|---------------------|
| 1.              | Separator GA-200             | Austria      | 1992             | 359,000             | 329,078             |
| 1.              | " " "                        | "            | "                | 302,000             | 246,000             |
| 3.              | Petrus Magnetic Machine      | East Germany | 1990             | 36,000 Per Machine  | 14,250 Per Machine  |
| 1.              | Seed Cleaner                 | Hungary      | 1990             | 48,000              | 16,500              |
| 1.              | Analytic Scale               |              |                  | 48,500              | 19,200              |
| 1               | Scale "Sartorius"            |              |                  | 45,000              | 17,815              |
| 2               | Needle Cylinder "Cravnic"    | Germany      | 1990             | 120,000 Per Machine | 75,000 Per Machine  |
| 1               | Treater Gomber-80            | England      | 1990             | 480,000             | 384,000             |
| 4.              | Screen Machines Kamas U-1250 | Sweden       | 1990             | 288,000 Per Machine | 180,000 Per Machine |
| 1               | Sewing Machine Newlong       | Germany      | 1990             | 200,000             | 160,000             |
| 1               | Indent Cylinder K-231/A      | Germany      | 1990             | 60,000              | 37,500              |
| 2               | Separator Kvarnaskiner       | Sweden       | 1990             | 120,000 Per Machine | 75,000 Per Machine  |
| 1               | Automatic Scale 16-06        | Czech.       | 1990             | 60,000              | 48,000              |
| 1               | "                            | "            | "                | "                   | 47,100              |
| 1               | Kipp-Kely Separator SY300    | Germany      | 1990             | 120,000             | 75,000              |
| 1               | Forklift DVHM                | Bulgaria     | 1990             | 144,000             | 111,600             |
| 2               | Forklift EV717-33-72         | Bulgaria     | 1990             | 84,000 Per Machine  | 65,100 Per Machine  |
| 1               | Automatic Scale Scule        | Hungary      | 1990             | 96,000              | 76,800              |
| 1               | Forklift EV717-33-72         | Bulgaria     | 1990             | 245,000             | 167,818             |
| 2               | Screen Machine K-523 B       | East Germany | 1990             | 112,000 Per Machine | 70,000 Per Machine  |
| 1               | Forklift Toyota 42-5FG25     | Japan        | 1989             | 1,665,000           | 1,589,326           |
| 1               | Pea Crusher 25/600 DH-111    | Hungary      | 1990             | 96,000              | 60,000              |
| 1               | Forklift EV 687-22/10        | Bulgaria     | 1990             | 294,000             | 201,390             |
| 1               | Forklift DV786323            | Bulgaria     | 1990             | 412,000             | 357,460             |
| 1               | " DV5                        | Bulgaria     | 1990             | 296,000             | 246,680             |

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|   |                        |          |      |                     |                     |
|---|------------------------|----------|------|---------------------|---------------------|
| 2 | Heid Separator GA-81   | Austria  | 1990 | 800,000 Per Machine | 500,000 Per Machine |
| 1 | " " GA-41              | Austria  | 1990 | 320,000             | 200,000             |
| 2 | Forklift DFG 2002/3M   | Bulgaria | 1990 | 294,000 Per Machine | 201,390 Per Machine |
| 1 | Separator Kvarnaskiner | Sweden   | 1990 | 120,000             | 75,000              |
| 1 | Treater WN-12          | Germany  | 1991 | 1.320 MHUF          | 1.023 MHUF          |
| 1 | Treater WN-7           | "        | "    | 956,000             | 762,648             |
| 1 | Screen Machine Damas   | Danish   | 1991 | 3.470 MHUF          | 2.689 MHUF          |

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**Mezomag Equipment Inventory Nagykarcosny Plant**

| <b>Number of Items</b> | <b>Type and Make</b>     | <b>Origin</b> | <b>Year of Purchase</b> | <b>Purchase Price</b>        | <b>Current Value</b>      |
|------------------------|--------------------------|---------------|-------------------------|------------------------------|---------------------------|
| 2.                     | Forklift 42-5FG-20       | Bulgaria      | 1990                    | 1.508 MHUF<br>Per<br>Machine | 1.168 MHUF<br>Per Machine |
| 1                      | Screen Machine Delta 116 | Denmark       | 1990                    | 1.259 MHUF                   | 786,870                   |
| 1.                     | Seed Separator GA-81     | Austria       | 1990                    | 6.246 MHUF<br>Per Machine    | 3.903 MHUF                |
| 1.                     | Indent Cylinder KE-231   | Germany       | 1990                    | 236,000                      | 147,500                   |
| 1.                     | Sewing Machine Newlong   | Swedish       | 1990                    | 1.737 MHUF                   | 416,000                   |
| 1                      | Vibrator Pit             | Hungarian     | 1990                    | 1.236 MHUF                   | 959,248                   |

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**Mezomag Ownership List**

| <b>Owners</b>               | <b>Book Value of Shares (in<br/>1,000 HUF)</b> | <b>Share of Ownership</b> |
|-----------------------------|--|---------------------------|
| Vetomag Vallalat            | 59,000   | 54.3 %                    |
| Cooperatives In Fejer       | 17,230   | 15.9                      |
| State Farms in Fejer County | 25,720   | 23.6                      |
| Other Companies             | 2,100  | 1.9                       |
| Foreign Private             | 2,100  | 1.9                       |
| Employees                   | 2,580  | 2.4                       |



Mezomags Customers Base (1992)

1. Pea Varieties

Total 22 customers

Customers who Purchased 5-10 million HUF

|  |                                 |
|--|---------------------------------|
|  | 1. Budapesti Mirelite Külker Rt |
|--|---------------------------------|

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|  |                              |
|--|------------------------------|
| Customers who Purchase 1-5 million HUF | 1. Agárd Gárdonyi G. Mg Szöv |
|  | 2. Enying ÁG                 |

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|  |                                       |
|--|---------------------------------------|
| Customers who Purchase 0-1 million HUF | 17 other companies and privat traders |
|--|---------------------------------------|

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2. Edible pea

Total 63 customers

Customers who Purchase 5-10 million HUF

|  |                                 |
|--|---------------------------------|
|  | 1. Agrimpex Kereskedelmi RT     |
|  | 2. Fejér megyei ZÖLDÉRT         |
|  | 3. Lovasberény Új Barázda MGTSZ |

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|  |                                  |
|--|----------------------------------|
| Customers who Purchase 1-5 million HUF | 1. Mezőfalva Mg. Kombinát        |
|  | 2. Pálhalma, Célgazdaság         |
|  | 3. Enying, ÁG                    |
|  | 4. Magánvevők                    |
|  | 5. Siófok, Siómente Tsz.         |
|  | 6. Vál, Róna 91' Kft             |
|  | 7. Kálóz, Term. és Szolg. Szöv   |
|  | 8. Mezőszilas, Mezőföld Mg. Tsz. |

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9.Sárosd, Egyetértés Mg.Tsz.

10.Aba, Kajtorvölgye Szöv

11.Gyúró Mg. Szöv.

12.Sióagárd, Sióvölgye Mg.Tsz.

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13.Seregélyes, Alkotás Mg. Szöv.

14.Martonvásár, Új Élet Mg. Szöv

15.Füle, Búzakalász Mg.Szöv.

16.Zichiújfalu, Növáll Kft.

17.Mór, Növ. term.Kft.

18.Agárd, Szelekta Növ.term. Műszaki  
Ker. Szolg. Kft.

19.Seregélyes, Elza major Agrár Kft

20.Budapest, M.A.G. Kft

21.Gyermely, Szövetkezeti RT

22.Székesfehérvár, AGRO-VARIA Kft

23.Kál, Kálimag Kft

24.Győrszentiván, Mg.\szöv.

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Customers who Purchase 0- 36 other companies  
1 million HUF

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|       |  |   |         |
|-------|--|---|---------|
| 3.    | <u>Vegetative Feed Pea</u>                             |   |         |
|       | Total 44 customers                                     |   |         |
|       | Customers Who Purchase                                 | 1.Budapest Külker.Kereskedőház            | Rt      |
|       | 1-5 million HUF  | 2. Dég, Szabadság Mg Szöv.                |         |
|       |  | 3.Mezőszentgyörgy, Alkotmány              | Mg.Tsz  |
|       |  | 4.Budapest,Konstans Agro Kft.             |         |
|       | Customers who purchase 0-                              | 40 other companies                        |         |
|       | 1 million HUF  |   |         |
| <hr/> |  |   |         |
| 4.    | <u>Generative Feed Pea</u>                             |   |         |
|       | All the five customers purchased for less than 1 M HUF |   |         |
| <hr/> |  |   |         |
| 5.    | <u>Hungarian vetch</u>                                 |   |         |
|       | Total 6 customers                                      | 1.Budapest,Agripex Ker.Rt.                |         |
|       | 2 main customers                                       | 2.3 million HUF                           |         |
|       |  | 2.Budapest, Konstans Agro Kft. 960000 HUF |         |
| <hr/> |  |   |         |
| 6.    | <u>Mustard</u>   |   |         |
|       | Total 23 customers                                     | 1.Budapest, Konstans Agro Kft.            |         |
|       | Customers who Purchase 5-                              | 2.Budapest, Mag-Inter Vetőmag             | Nem. és |
|       | 10 million HUF   | Ker. Kft.                                 |         |
|       | Customers who Purchase 1-                              | 1.Budapest,Külker.Kereskedőház            | Rt      |
|       | 5 million HUF  | 2.Budapest, Ambrus Export-Import          |         |
|       |  | 3.Budapest Almos Kft.                     |         |
|       | Customers who Purchase 0-                              | 18 other companies                        |         |
|       | 1 million HUF  |   |         |

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7. Oil flax

Total 5 customers

Customers who purchase 5- 10 million HUF  
1. Budapest, Agrimpex Kert. Kft.

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Customers who purchase 1- 5 million HUF  
1. Budapest, Ambrus Export-Import  
2. Budapest, Mag-Inter Vetőmag Nem. és Ker. Kft.

---

Customers who purchase 0- 1 million HUF  
2 other companies

---

8. Sunflower

Total 26 customers

Customers who purchase 1- 5 million HUF  
1. Zichyújfalu Növáll Kft.  
2. Budapest Külker. Kerekedőház Rt

---

Total 0-1 million HUF  
24 other companies

---

9. Alfalfa

Total of 21 customers purchased for less than 1 M HUF

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10 Cattle Turnip

Total 14 customers

Customers who purchase 1- 5 million HUF  
1. Budapest, Kertimag Kft.

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Customers who purchase 0- 1 million HUF  
13 other companies

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Annex 4

Sales of different grain seeds in 1991, 1992 and in the first half at 1993

| Crop                             | 1991.                |                |                         |                   | 1992                 |                |                         |                    | the first half at 1993. |                |                         |                    |
|----------------------------------|----------------------|----------------|-------------------------|-------------------|----------------------|----------------|-------------------------|--------------------|-------------------------|----------------|-------------------------|--------------------|
|                                  | Sold quantity tonnes | Revenues tHUF  | Cost of production tHUF | Price margin tHUF | Sold quantity tonnes | Revenues tHUF  | Cost of production tHUF | Price margins tHUF | Sold quantity tonnes    | Revenues tHUF  | Cost of production tHUF | Price margins tHUF |
| <u>Domestic sales</u>            |                      |                |                         |                   |                      |                |                         |                    |                         |                |                         |                    |
| Oat                              | 130                  | 1.547          | 1.501                   | 46                | 184                  | 1.713          | 1.466                   | 247                | 82                      | 1.113          | 1.095                   | 18                 |
| Barley                           | 3.235                | 36.734         | 31.333                  | 5.401             | 2.855                | 28.558         | 25.644                  | 2.914              | 2.150                   | 30.182         | 26.622                  | 3.560              |
| Winter wheat                     | 9.564                | 97.769         | 86.177                  | 11.592            | 13.456               | 142.486        | 127.471                 | 15.015             |                         |                |                         |                    |
| Rye                              | 16                   | 138            | 128                     | 10                | 114                  | 1.090          | 953                     | 137                |                         |                |                         |                    |
| Triticale                        | 790                  | 7.700          | 6.768                   | 932               | 427                  | 3.892          | 3.651                   | 241                |                         |                |                         |                    |
| Hybridcorn                       | 2.981                | 492.608        | 445.799                 | 46.809            | 1.675                | 285.372        | 248.261                 | 37.111             |                         | 202.715        | 178.389                 | 24.326             |
| Feed corn                        |                      |                |                         |                   | 2.386                | 15.539         | 15.193                  | 346                |                         |                |                         |                    |
| <b>Domestic sales altogether</b> | <b>16.716</b>        | <b>636.496</b> | <b>571.706</b>          | <b>64.790</b>     | <b>21.097</b>        | <b>478.650</b> | <b>422.639</b>          | <b>56.011</b>      | <b>2.232</b>            | <b>234.010</b> | <b>206.106</b>          | <b>27.904</b>      |
| <u>Export sales</u>              |                      |                |                         |                   |                      |                |                         |                    |                         |                |                         |                    |
| Hybridcorn                       | 23                   | 1.362          | 1.265                   | 97                | 36                   | 4.320          | 4.183                   | 137                |                         |                |                         |                    |
| <b>Total sales</b>               | <b>16.739</b>        | <b>637.858</b> | <b>572.971</b>          | <b>64.887</b>     | <b>21.133</b>        | <b>482.970</b> | <b>426.822</b>          | <b>56.148</b>      | <b>2.32</b>             | <b>234.010</b> | <b>206.106</b>          | <b>27.904</b>      |

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Annex 5  
Sales of industrial and feed crops in 1992

| Crop (group)                | quantity<br>(t) | proportion<br>% | revenue<br>HUF       | proportion<br>% |
|-----------------------------|-----------------|-----------------|----------------------|-----------------|
| <b>A. Pea products</b>      |                 |                 |                      |                 |
| - pea varieties             | 456,54          | 6,06            | 16.024.117,07        | 9,54            |
| - edible pea                | 3400,88         | 45,11           | 82.820.664,15        | 49,3            |
| - vegetative feed pea       | 434,48          | 5,76            | 12.736.681,91        | 7,58            |
| - generative feed pea       | 36,59           | 0,49            | 1.485.468            | 0,89            |
| - pea total                 | 4328,49         | 57,42           | 113.066.931,13       | 67,31           |
| <b>B. - sunflower</b>       | 598,09          | 7,93            | 9.117.827,46         | 5,43            |
| <b>C. - Hungarian vetch</b> | 197,06          | 2,61            | 3.490.826,99         | 2,08            |
| <b>D. - mustard</b>         | 1359,36         | 18,03           | 20.911.682,37        | 12,45           |
| <b>E. - alfalfa</b>         | 36,99           | 0,49            | 2.928.758,96         | 1,74            |
| <b>F. - cattle turnip</b>   | 47,66           | 0,63            | 2.978.257,75         | 1,77            |
| <b>G. - oilflax</b>         | 578,11          | 7,67            | 10.350.958,5         | 6,16            |
| <b>H. - other</b>           | 393,01          | 5,21            | 5.132.094,74         | 3,06            |
| <b>Total</b>                | <b>7538,77</b>  | <b>100,00</b>   | <b>167.977.337,9</b> | <b>100,00</b>   |

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Sales of grains in 1991-1992.

Annex 6

|  | quantity<br>t | proportion<br>% | 1991.<br>revenue<br>tHUF | proportion<br>% | quantity<br>t | 1992.<br>proportion<br>% | revenue<br>tHUF | proportion<br>% |
|--|---------------|-----------------|--------------------------|-----------------|---------------|--------------------------|-----------------|-----------------|
| <b>A. Cereals</b>                          |               |                 |                          |                 |               |                          |                 |                 |
| - winter wheat                             | 9564          | 57,14           | 97.769                   | 15,33           | 13456         | 63,67                    | 142.486         | 29,5            |
| - shares of big companies of Fejér country |               |                 | 30.225                   | 4,74            |               |                          | 60,180          | 12,46           |
| - barley                                   | 3235          | 19,37           | 36.734                   | 5,76            | 2855          | 13,51                    | 28.5558         | 5,91            |
| - other                                    | 936           | 5,59            | 9.385                    | 1,47            | 725           | 3,43                     | 6.695           | 1,39            |
| - Total                                    | 13735         | 82,1            | 143.888                  | 22,56           | 17036         | 80,61                    | 177.739         | 36,8            |
| <b>B. Corn domestic sales</b>              |               |                 |                          |                 |               |                          |                 |                 |
| - hybridcorn                               | 2981          | 17,81           | 492.608                  | 77,23           | 1675          | 7,93                     | 285.732         | 59,09           |
| - shares of big companies of Fejér country |               |                 |                          |                 |               |                          | 195.020         | 40,38           |
| - feed corn                                |               |                 |                          |                 | 2386          | 11,29                    | 15.539          | 3,22            |
| - total                                    |               |                 |                          |                 | 4061          | 19,22                    | 300.911         | 62,31           |
| - export hybridcorn                        | 23            | 0,09            | 1.362                    | 0,21            | 36            | 0,17                     | 4.320           | 0,89            |
| - corn total                               | 3004          | 17,9            | 493.970                  | 77,44           | 4097          | 19,39                    | 305.231         | 63,2            |
| <b>Grains total</b>                        | <b>16739</b>  | <b>100,00</b>   | <b>637.858</b>           | <b>100,00</b>   | <b>21133</b>  | <b>100,00</b>            | <b>482.950</b>  | <b>100,00</b>   |

Shares of major groups of crops of the total revenue

1992

|                                     | Revenue            | Proportion   |
|-------------------------------------|--------------------|--------------|
|                                     | HUF                | %            |
| A <b>Grains</b>                     | 482.970.000        | 68,9         |
| B. <b>Industrial and feed crops</b> | 167.977.337        | 24,0         |
| - pea                               | 113.066.931        | 16,1         |
| C. <b>Potato seed</b>               | 50.000.000         | 7,1          |
| <b>Total revenue</b>                | <b>700.947.337</b> | <b>100,0</b> |

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Supplier of main grain seeds and hybrid corn seeds

Hybridcorn:

(1993)

|                                  |     |
|----------------------------------|-----|
| PIONEER HI-BRED Magyarország Kft | 52% |
| CIBA GEIGY Magyarország Kft.     | 6%  |
| MTA Kutató Kísérleti Gazdasága   | 39% |
| Martonvásár                      | 2%  |
| Kiskun GT Kiskunhalas            | 3%  |

Winter and spring cereals:

(1992)

|                                      |     |
|--------------------------------------|-----|
| MTA Kutatóintézet Kísérleti Gazdsága |     |
| Martonvásár                          | 10% |
| Mezőfalva RT                         | 39% |
| Enying RT                            | 29% |
| Pálhalmi Célgazdaság Dunaújváros     | 16% |
| Dunaújváros Mg. Szövetkezet          | 2%  |
| Martonvásár Mg. Szövetkezet          | 5%  |

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The main customers of hybrid corn seed in Fejér country (1992-1993)

|                      | 1992.  | 1993.  |
|----------------------|--|--|
| above 10 million HUF | 1. Enying, ÁG  | 1. Enying, ÁG  |
| 5-10 million HUF     | 1. Zichyújfalu, Növáll Kft<br>2. Adony, Márc.15. Mg.<br>Szöv<br>3. Pálhalma, Célgazdaság<br>4. Lajoskomárom,<br>Győzelem Mg. Szöv<br>5. Sárbogárd, Mg. Szöv.<br>6. Előszállás, Mg Szöv<br>7. Alap, Arany J Mg.<br>Szöv.<br>8. Enying, Ivörös Hajnal<br>Mg. Szöv. | 1. Zichyújfalu, Növáll Kft<br>2. Kisláng, Béke Mg.<br>Szöv.<br>3. Pálhalma, Célgazdaság<br>4. Perkáta, Magyar-Kinai<br>Barátság Szöv.<br>5. Bicske, Agrárszöv. |
| 1-5 million HUF      | 48 other big companies   | 46 other big companies   |
| 0-1 million HUF      | 9 other big companies  | 17 other big companies   |

The main customers of hybrid corn seed in Fejér country (1992-1993)

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