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Managers Behaviors Trough Economic Crisis at

Agro-Industries in Turkey: A Case Study in Sanliurfa Province

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Abstract

The statutes of understanding managers to the crisis factor affecting the firms' activities, profits, and continuity and the way they were affected from the economic and political crisis occurred during the period of November 2000-February 2001 in agro industries in Sanliurfa province in Turkey were determined in this study. The study was carried out on a sample consisting 53 agro industries operated. According to the results, most of managers, 83.3%, evaluated the economic uncertainties and fluctuations defined as external crisis factors to their businesses ranked as first degree of importance. It is preferred to do with less stock in response to prevent the external crisis factors. Not perceiving the crisis early and thus not enough handling on crisis management, and the ability of not knowing the internal and external market environment defined as internal crisis factors were observed. A set of provisions such as signboard, motivation and educations personals against the internal crisis factors were determined. In addition, the crisis occurred affecting all businesses and resulting in lowering the ratios of operated capacities were obtained in Sanliurfa.

Keywords: Economic Crisis, Agro-Industries, Sanliurfa -Turkey

1. Introduction

The main purpose of business is producing and marketing various goods and services in order to maximize their benefit at the end of production period under conditions present and to ensure accumulation of equity capital. In other words, the aim of any entrepreneur is to preserve and increase the capital invested to business, in a broader sense, the goods of business (Erkuş et al., 1995).

There are many sources of crisis factors forcing managers to make decision a risky, ever changing environment (Figure 1). In the external environment, technology (internet, computer, nana technology, biotechnology, food technology, and precision technology) is the most important indicator for agribusiness. Also, economy (the range of development between and within countries, natural resources, income per capita, infrastructure, the ratio of currency, and other economic conditions), social and cultural environment (language, social value of the society, population, and demographic indicators), law and policy (punishment, taxes, tariffs, conjuncture, stability of the government, terrorism, and government supports), and the rule of international organization such as World Trade Organization (WTO), European Union (EU) are the other indicators of ago-industries (Peker, 2006).

These factors are the main causes of income fluctuations at firms. There is always existing of predictable risks and unpredictable uncertainties at all economic activities. Although higher risk and uncertainty could be occurred especially in agriculture sector in natural conditions, it is likely to be happened during some period of time that some industrial businesses to meet risk and uncertainty resulted from socio-economic or internal conditions of business. Besides, it is widely accepted that the businesses have a risk function at production activity. The entrepreneurs have to shoulder the responsibility of risks and uncertainties which could be faced against economic activities, so managers have to take some measures at pre-crisis, at-crisis and post-crisis periods in order to prevent possible risks, i.e. economic crisis as

well as various risk factors, and to minimize and decrease the possible losses.

Risk management strategies are developed to provide some protection in situations in which the consequences of a decision are not known when the decision is made. The various risk management strategies have different effects on the business, but none of the responses can provide protection from all types of risk (Patrick, 1998). To reduce effects of risk or survive in the poor conditions for firm activities, it is necessary to use risk strategies. The selection of good risk strategies depends on the firm operator, the financial situation and risk attitudes of the manager (Kay and Edwards, 1994; Hardaker et al., 1997; Musser, 1998).

Societies couldn't keep up the same activity level not only before the industrial revolution occurred in the 17th century but also afterwards. As for producers and sellers, welfare terms and crisis terms were followed each other in some periods (Unay, 1992). The examples include Asian crisis, Argentina crisis and the economic crisis in Turkey were adversely affected all of economic sectors recently. Since last century, economics has been representing a disorder of improvement at global and sector levels resulted from the economical fluctuating and crisis.

Within the second half of November 2000 in Turkey, the troubles especially suffered in banking fraction such as increased short term rate of interest, decreased prices of draft, bond and share, and inclusion of private banks to SDIF (Savings Deposits Insurance Bank) gave rise to economical crisis. A set of provisions were carried out in the period of November-December 2000 in order to the crises not to be deeply rooted. Resulted from the provisions against the crisis of November 2000 and agreement with International Monetary Fond, financial fluctuation couldn't be settled even though it has partially been overcome. The political crisis occurred in February 19, 2001 adversely affected financial markets (e.g. interests rose extremely and stock exchange was decreased) and fluctuation rate of foreign exchange was carried out by rates of foreign exchange in February 22, 2001.

Agro-industries as well as all sectors were adversely affected by those two crises occurred in November 2000 and February 2001 in Turkey. This negative interaction was expressed as both troubles unable to find credit due to crisis in financial markets and reflection of increased rates of interests and exchange fluctuation to cost. These factors were reflected in prices of goods purchase and amounts of production. Businesses are in such an obligation to determine a set of strategically decisions in order to survive against negativity resulted from economical conditions of the country. Those decisions and behaviors through them result from the attempt of adaptation to external environment. Some of decisions are consciously and strategically made leading towards adaptation to crisis conditions while some may be the behaviors as a result of market coercion.

Some research works have been conducted on the economic crisis exposure and crisis coping strategies of firms (Deming, 1996; Anonymous, 1998; Erçel, 1998; Katırcıoğlu, 1999; Tutar, 2000; Çelebi, 2000; Malatyalı, 2000; Yücel, 2001; Gerçek, 2002, Ayaz and Asma, 2002), On the other hand, it was appeared that not there was study associated with the being affected levels of agro-industries from the economic crisis, while there were existed some studies on risks and uncertainties in agriculture (Ceyhan, 1996; Nelson, 1997; Martin and McLeay, 1998; Musser, 1998; Coble et al., 1999; Harwood et al, 1999; Keith, 1999; Babcock et al, 2000; Akcaoz, 2001; Akcaoz and Özkan, 2002, Akcaoz et al, 2006).

In this study the behaviors of managers during the crises and the effect of crises in November-December 2000 and February 2001 was determined on agro-industries in Sanliurfa province, Turkey. The most of agro-industries operated in Sanliurfa province has been established, especially after irrigation and other infrastructural works established under the South-east Anatolia Project (SAP) exist in 1995. For example, the number of industries in the province reached to 277 (which of 158 agro industries) in 1995-2001, while there were only 37 industrial business in 1990 (Anonymous, 2002). Consequently most of managers in the province do not have enough experience on principles of management and the factors affecting the firms.

2. A Case Study in Sanliurfa Province

The main material of the study consists of primer data obtained by survey that applied by researchers from 53 agro-industries at the center of municipality of Sanliurfa in Turkey. Additionally, the results of some various researches on this task and records of related governmental and private organizations were used. The survey forms were prepared as to examine some various literatures and obtain required data by researchers. The questionnaires were filled in by means of conversation to the managers of agro-industries in December 2002.

The data were analyzed by taken into consideration internal and external environment of agro-industries as it explained figure 1. Internal and external crises factors were determinate by understanding of agro-industries manager' priorities.

2.1 Approach of mangers to crisis factor in examined agro-industries

Although industrial expectations are mostly to benefit under free competition conditions, activity is realized in respect of adverse factors resulted from domestic structure or external market. The successes of businesses are mostly depending on their sensitivity against possible crisis factors, and foresight and precautions associated with this period.

When it was asked to the managers in order to examine whether they considered facing any crisis factor while they were establishing industry, almost all of the managers informed that they were likely to face various crisis factors after activity term started. When it was asked to the managers about which of crisis factors against their businesses might be efficient, i.e. internal crisis factors, external crisis factors, the majority (83.4%) were accept both internal and external crises factor, while the rest (16.6%) were only external factors could be adversely efficient for their businesses. None of the managers was state only internal factors an importance as a crisis factor.

2.2 The external crisis factors considered as causing a crisis in agro-industries

The external environment of business is a combination of economical, technological, socio-cultural, legal-political and natural environment factors. The managers have to analyze external environment of the business in order to determine the associations between external factors and the business activities. Especially in the business operating as open system, i.e. the ones gathering inputs from environment and producing outputs through markets, this analysis become great importance. The efficiency and productivity are provided by precise relationship between input-output in business. If the interaction of input-output was non systematic, there seems to have some crisis symptoms at the beginning, thereafter it will start to occur the crisis (Tutar, 2000).

When it was asked to the managers about external crises factors which mostly affect the examined agro-industries, it was stated by 83.3 % of managers that generally-economical uncertainty and fluctuations had primarily importance, and as for 16.7 % of managers they ranked as second degree of importance. Political crises factors were accepted by 75.0 % of the managers as secondary important factors, while primary and third were 8.3 %, 8.3 % respectively. The obsolete of technologies was accepted by 33.3 % of the managers as fourth important factors, while 45.9 % of the managers were not accepting as a crises factor (Table 1).

On the other hand, strong competition and natural forces were not considered as external crisis factors by the managers. Indeed 79.2 % of managers didn't consider the strong competition as important, while 87.5 % didn't consider the natural forces as important factor (Table 3.1). What the effective on this result is the considerations that their strength against competition or their influence level was higher compared to the other factors and that the natural forces were valid for anyone.

In examined agro-industries, general economical uncertainties and fluctuations were considered by most of managers to have influence on crisis at first level of importance. They also were started to cause losing the price balance of input-output, decreased demands resulted from economical and psychological reasons, export-import imbalance and decreased exportation, decreased investments and decreased profitability. 70.8 % of managers considered the effect of overall economical uncertainties and fluctuations on input-output price imbalance ranked as first degree of importance while 25.0 % deemed as second degree (Table 2).

Again, 70.8 % of managers considered the effect on import-export balance ranked as totally first, second and third degree of importance for general economical uncertainties and fluctuations. On the other hand, 29.2 % of the managers stated that the effect on export-import balance was negligible or ignorable. 84.3 % of managers considered the effect on decreased profitability and decreased investments realized by business important ranked as totally second, third, fourth and fifth degrees, while 16.7 % considered as negligible. 63.5% of managers stated that the factor addressed as generally-economical uncertainty and fluctuations affecting business due to the lack of credit and source was of importance ranked as first, second, third and fourth degrees. 37.5 % stated that this factor was negligible.

There were existing wide varieties of precautions against external crisis factors at examined agro-industries. 41.7 % of managers took some measures following a more flexible production policy towards external crisis factors, while 41.8 % realized it by implementing Research and Development (R&D). 75.0 % of managers were prefer to make business with a smaller amount of stock, 50.0 % preferred to reinforce their prestige, 8.3 % preferred to organize some special sales campaign, 41.7 % preferred to decrease the number of employee and to cut expenses, 16.8 % preferred insurance, and 8.3 % preferred to work with experienced staff (Table 3).

Consequently, most of the managers preferred to make business with less stock, however it seemed that 40-50% of managers preferred to take strategically precautions such as implementing R&D studies and adopting a more flexible production policy. A very small number of managers stated that arranging special sales campaigns and working with experienced staff is a strategically method. Regarding to working with experienced staff, some managers stated that they had experienced staff; while some stated that they didn't have experienced staff so new staff would be paid to higher wages.

Following a more flexible production policy against to external crises factors were accepted precaution by 70.0 % of managers as a first important degree, while 20.0 % considered it important as second and 10.0 % considered as fifth degrees. At the same time, 50.0 % of managers preferred to implement R&D studies important as fourth degree and the rest 50 % as fifth degree (Table 4).

44.4 % of managers who preferred to work with less stock considered this factor an important solution ranked as first

degree, while 38.9 %, 11.1 % and 5.6 % considered as second, third and fourth degree important, respectively.

Out of managers who preferred to reinforce their prestige in markets by means of making payments at time, 16.7 % considered this factor important ranked as first degree, while 25.0%, 41.7 and 16.6 % considered as second, third and fourth degrees, respectively. All the managers who preferred to arrange special sales campaigns esteemed this factor important ranked as fourth degree.

50.0 % of the managers who preferred to decrease both the number of staff and other expenses considered this factor important ranked as first degree, while 30.0 %, 10.0 %, and 10.0 % considered as second, third and fourth degree important, respectively. 25.0% of managers who preferred to have business insurance considered this factor important ranked as first degree, while 50.0% and 25.0 % deemed as second and fifth degree important, respectively. 50.0 % of managers who preferred to work with experienced staff considered this factor important ranked as first degree, while other 50.0 % considered as third degree important.

2.3 The internal crisis factors considered as causing a crisis in agro-industries

One of the most important factors leading to give rise a crisis in examined agro-industries is "internal insufficiency and problems". Actually, although the external environment which is not possible to be managed to control entirely, even if it seem crises occur from external factor, business could be effected by internal factors.

When internal crises factors in the agro-industries were asked to the managers, general internal crises factor were remarked by managers as follow;

Internal crises factors were accepted by 45.8 % of managers as inability of perceiving foreign and domestic markets and the managerial insufficiency, while 54.2 % stated that this factor didn't constitute a crisis factor for their agro-industries (Table 5). With respect to inability of realizing crisis terms early and insufficiency of crisis management, 91.7 % of managers considered this factor important leading to crisis, while 8.3 % didn't define it as an important factor.

As to inability of adaptation to developments induced by managerial norms and behaviors, 16.7 % of the agro-industries considered as an internal crisis factor, while 83.3 % didn't consider so. The factor which includes failure in planning income-expenses equilibrium and in savings was considered as a crisis reason by 20.8 % of the agro-industries while 79.2 % didn't consider it as a crisis factor.

As to the lack of field experience in which agro-industries operate, 20.8 of managers considered this factor as domestic crisis factor while 79.2 % didn't stated so. Lack of managers experience in the market were accepted as on other internal crises factor by 20.8% of the managers, while 79.2%. As to the factor including fault, neglect and inexperience of staff, 8.3 % of managers considered as domestic crisis factor while 91.7 % didn't think so.

When the managers, who considered internal crisis factors important for their agro-industries were asked to classify those factors, they explained; the most important factors was the inability of perceiving both inability of realizing crisis terms early and insufficiency of crisis management. That was followed by inability of adjusting income-expenses balance and inexperience of managers at the business they operated. On the other hand, all of whom considered the inability of adapting through developments due to managerial norms and manners as a crisis factor found this factor important as second and third degrees (Table 6).

Among the precautions taken against internal crisis factors, the highest rate as 83.3 % of manager was keeping records and works systematically, that followed by presence of warning signboards at place of employment, motivation of staff, and education of personnel, respectively.

2.4 The affectability of examined agro-industries from 2000-2001 crises in Turkey

Economical and political crises were occurred in November 2000 and February 2001 in Turkey. These crises affected all over the country as well as agro-industries operating in Sanliurfa. Indeed, when asked to managers of the agro-industries whether they were affected from November 2000 and February 2001 crises, all the managers stated that they were adversely affected.

The crises factors which mention above were affected agro-industry by the force of different factors. When the managers were asked of which factors they were affected from those crises, the answers included failure to perceive the developments at time (31.7 %), inadequate finance (20.6%), inability of taking precautions (17.5 %), wrong decisions and activities after precautions (12.7), inadequate and inappropriate sources (6.3 %), inflexible organizational structure and failure in perceiving changes at time (4.8%), and other factors such as fluctuation of exchanges and uncertainty (1.6%) (Table 7).

2.5 The effect of economical crisis in agro-industries

The effect on capacity usage; the ratio of operated capacity was determinate by raw material amount (ton/year, piece/year) divided to per present capacity of business (t/year, piece/year). In order to determine any change at capacity usage ratios resulted from crisis in examined agro-industries, they were investigated regarding to their present capacity,

capacity at normal terms (mean value before 2000) and capacity during crisis. There has been observed a decreased ratio of operated capacity in all agro-industries due to the crisis. Indeed, the ratio of operated capacity at normal term in flour industry decreased from 45.9 % to 35.7 %, in cotton gin industry 71.6% to 62.1 %, in crops oil industry 77.2 % to 55.2 %, in cotton mill industry 100% to 97.8 %, and in ready-to-wear industry 44.2 % to 24.6% (Table 9).

In a study carried out in Sanliurfa in 1998, the ratios of operated capacity were determined in flour, crops oil, cotton gin-pressing, cotton mill and confection (textile) industries as 66.7 %, 24.0%, 70.6 %, 100 % and 18.8 %, respectively (Karlı et al, 1999). In examined agro-industries during crisis terms, the managers stated that financial inadequacy, crisis in domestic market and decreased exportation possibilities had influence on decreased capacity.

In order to determine any change at the number of staff in the industries, the managers were asked whether they fired any worker or not. Most of agro-industries stated not to fire any worker (70.8%), while 29.2 % of industries stated that they had ever fired workers. It was determined that industries never fired any worker before didn't increase the wages, but in crops oil and cotton gin industries operating seasonally, they made the workers employed in a short time.

Due to crisis occurred in Turkey, the increased inflation, increased rate of exchange, uncertainty and inadequate increase at wages not only deteriorated agro-industries but also consumer's purchasing strength. Consequently a demand crisis was occurred as a result of decreased purchasing power of consumers as well as increased prices of product producing at a higher input prices.

In order to determine how this situation affected on domestic sales, producers were asked about any change at domestic sales. All of the managers stated that there had been no increase at domestic sales due to the crisis, while 69.6 % stated that there occurred a decrease at domestic sales and 30.4% quoted no change was happened.

Increased exchange prices due to crisis favor to exportation. However, fluctuations at exchange rates including crisis period indicates the state of uncertainty in Turkey. Considering those conditions as well, the managers were asked about how changes happened at external sales in such a term. 58.3 % of managers stated that there was no sale to foreign countries both pre-crisis and during crisis, while 8.3 % stated an increase at export, 16.7 % stated a decrease at export, and other 16.7 % stated no exportation has changed.

The managers of agro-industries were asked about any change in exporting raw materials and other services during crisis, 75.0 % of managers stated that they had no importation at pre-crisis and during crises. 12.5 % of the manager stated that there was an increase at export, 4.1 % a decrease at export and 8.3 % reported no change at exportation.

The managers were asked whether they had ever looked for an alternative market in order to decrease the influence of crisis, 62.5 % of managers stated that they had looked for a new market. It was also reported that before the crisis, marketing activities were carried out towards the province and other provinces around, while after crisis it was managed to follow all of the alternatives, especially marketing to western of Turkey's provinces. 37.5 % of managers stated that they couldn't afford to enter new markets.

When asked to agro-industries managers whether they operated any alternative activity in order to remove the stagnation at their own activity fields due to the crisis; 4.2 % reported that they were making business at other fields such as trade, service purchasing and delivering in order to decrease the adverse effect of crisis. 33.3 % of managers stated that they thought of changing the activity field or working at another fields besides present occupation but they weren't able to realize those considerations. 62.5 % of managers stated that they never thought of working at another activity field.

3. Conclusions

The improvement of industry in Sanliurfa has gained acceleration after the year 1990. The factor which affected this acceleration was the inclusion of Sanliurfa to "rgions with the highest priority in development" in 1992, establishment of organized industry area, the transfer of irrigation from Ataturk Dam to Harran Plain in scope of SAP in 1995 took place therefore increased cotton production contributed to improvement of industry, and encouraged of the industries by the government. There were only 37 industries in the province in 1990, however the number of industries reached up to 277 between 1991 and 2001.

The ideas and crisis management of the managers in examined agro-industries in crisis term were summarized as follow; as the results of the study, most of managers with the rate of 83.3% considered the generally-economical uncertainty and fluctuations as the most important factor. It was also reported by the managers that this factor caused to an imbalance between product price and input prices, decreased investments and decreased profitability, demand shrinkage and export-import imbalance in the agro-industries. It was determined that managers took a set of precautions such as using less stock, reinforcing prestige in market with the help of timely payments, following a flexible production policy and decreased expenses in extend to external crisis factors.

Agro-industries may be affected by a internal crisis factors which resulted from internally as well as external crisis factors. The precautions taken against internal crisis factors in examined agro-industries include controlling on works

and records in order, using sign boards, providing motivation and education of staff. The economical and political crisis which occurred during 2000-2001 in Turkey affected all the agro-industries operating in the province. The factors were determined such as inability of perceiving the crisis early (31.7%), insufficiency of finance (20.6 %), inability of acting against the crises (17.5%), making wrong decisions after acting (12.7 %), and the other. The ratios of operated capacity were determined to cause decreased in all agro-industries due to the economical and economical and political crisis occurred in 2000-2001 terms. It was also determined that those industries with the rate of 29.2 % fired some workers, while 70.8% didn't fire but didn't increase the wages. It was determined that 69.6 % of agro-industries stated decreased domestic sales, while 30.4 % stated no change was happened at domestic sales. Fluctuations in exchange rates affected the export of agro-industries in crisis. Especially fast fluctuations in exchange rates reflected an uncertainty state as for the managers and this situation expressed out to foreign trade. It was determined that 8.3 % of stated no exportation, and 58.3 % stated that they had no export both pre-crisis and at crisis. Fluctuations in exchange rates affect exportation as well as import. Especially increased rates of exchange also increase the domestic prices of imported products and consequently decrease the demand. In case of decreased rates of exchange, importation starts to rise. 12.3 % of agro-industries increased import, 4.1 % decreased import, 8.3 % stated no change, and 75.0 % stated that they had no import both pre-crisis and during crisis against the fluctuations. The troubles at markets in crisis oriented the entrepreneurs through alternative market search. It was determined that 62.5 % of agro-industries oriented through alternative markets in this period. Additionally 4.2 % of managers occupied in alternative business, 33.3% through of alternatives but didn't realize, and 62.5 % never thought of such an alternative business.

As a conclusion, it was determined that the managers in examined agro industries had no more experiences on crisis management. Therefore the managers are preferred to be educated with seminar or to employ professional managers.

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Table 1. The external crisis factors that evaluated by managers of the agro- industries

Factors	The level of significance crises factors (%)							
	1st	2nd	3rd	4th	5th	6th	7*	Total
Economical uncertainty and fluctuations	83.3	16.7	0	0	0	0	0	100.0
Political crises	8.3	75.0	8.3	4.2	0	0	4.2	100.0
Hard Competition	0	0	8.3	4.2	8.3	0	79.2	100.0
Natural forces (fire, earthquake etc)	0	0	0	4.2	0	8.3	87.5	100.0
The absolution of technology	0	0	12.5	33.3	8.3	0	45.9	100.0

^{*:} ignore level

Table 2. The effects of generally economical uncertainty and fluctuations on examined agro-industries

Factors	The level of significance (%))		
	1st	2nd	3rd	4th	5th	6*	Total
Imbalance at product input prices	70.8	25.0	0	4.2	0	0	100.0
Dampening of demand due to economical and psychological causes	0	16.7	12.5	16.6	12.5	41.7	100.0
Import-export imbalance and decreased exportation		25.0	25.0	0	0	29.2	100.0
Decreased investments and decreased profitability		16.7	25.0	33.3	8.3	16.7	100.0
Deterioration in growth power of agro0industries due to insufficient credit and sources	8.3	16.7	25.0	12.5	0	37.5	100.0

^{*:} ignore level

Table 3. The precautions taken against external crisis factors by managers

Factors	As to rela	Total	
	The ones who took precautions (%)	The ones who didn't take precautions (%)	(%)
Following a more flexible production policy	41.7	58.3	100.0
Implementing R&D studies	41.8	58.4	100.0
Working with a less stock	75.0	25.0	100.0
Reinforcing the prestige with the help of timely payments	50.0	50.0	100.0
Arranging special sales campaign	8.3	91.7	100.0
Decreasing the number of staff and other expenses	41.7	58.3	100.0
Making insurance	16.8	83.2	100.0
Working with experienced staff	8.3	91.7	100.0

Table 4. The importance degrees of precautions taken against external crisis factors by managers

Factors	The level of significance (%)				%)	
	1st	2nd	3rd	4th	5th	Total
Following a more flexible production policy	70.0	20.0	0	0	10.0	100.0
Implementing R&D studies	0	0	50.0	50.0	0	100.0
Working with a less stock	44.4	38.9	11.1	5.6	0	100.0
Reinforcing the prestige with the help of timely payments	16.7	25.0	41.7	16.6	0	100.0
Arranging special sales campaign	0	0	0	100.	0	100.0
Decreasing the number of staff and other expenses	50.0	30.0	10.0	10.0	0	100.0
Making insurance	25.0	50.0	0	0	25.0	100.0
Working with experienced staff	50.0	0	50.0	0	0	100.0

Table 5. Understandability of internal crisis factors in the agro-industries

Internal crisis factors	Considered as a internal crisis factor (%)	Not considered as a internal crisis factor (%)	Total (%)
Managers inability of perceiving both domestic and foreign markets, and management failure	45.8	54.2	100.0
Inability of perceiving crisis early and crisis management failure	91.7	8.3	100.0
Inability of adapting to developments due to managerial norms and manners	16.7	83.3	100.0
Inability of planning well the income-expenses balance and inadequate savings	20.8	79.2	100.0
Inexperience at the business	20.8	79.2	100.0
Mistakes, ignorance and inexperience's of workers	8.3	91.7	100.0

Table 6. Internal crisis factors in the agro-industries

	Level of significance (%)						
Factors	1st	2nd	3rd	4th	5th	6th	Total
Inability of knowing both domestic and foreign markets, and managerial failures	72.7	18.2	9.1	0	0	0	100.0
Inability of perceiving crisis early and crisis management failure	54.5	45.5	0	0	0	0	100.0
Inability of adapting to developments due to managerial norms and manners	0	50.0	50.0	0	0	0	100.0
Inability of planning the income-expenses balance and inadequate savings	20.0	20.0	20.0	40.0	0	0	100.0
Inexperience at the field	20.0	20.0	40.0	0	20.0		100.0
Mistakes, ignorance and inexperience's of workers	0	0	50.0	0	0	50.0	100.0

Table 7. The effective crises factors in agro-industries

Factors	(%)
Inability of perceiving developments leading to crises at time	31.7
Financial inadequacy	20.6
Managers inability of acting	17.5
Managers wrong decisions and activities after acting	12.7
Insufficient sources and inappropriate liquidity	6.3
Inelastic structure of agro-industries	4.8
Inability of perceiving changes in business at time	4.8
Other (Fluctuation at foreign exchange and uncertainty	1.6
Total	100.0

Table 8. The changes at industrial capacity operation in crisis terms

Industries	Established Capacity (piece/year)	Normal Capacity (piece/year)	Rate of capacity utilization (%)	Capacity at crisis (piece/year)	Rate of capacity utilization at crisis (%)
Flour	27 350	12 550	45.9	9 765	35.7
Cotton gin	16 964	12 142	71.6	10 535	62.1
Crops oil	22 440	17 330	77.2	12 390	55.2
Cotton mill	3 750	3 750	100.0	3 670	97.8
Confection	1 042 270	460 570	44.2	256 340	24.6

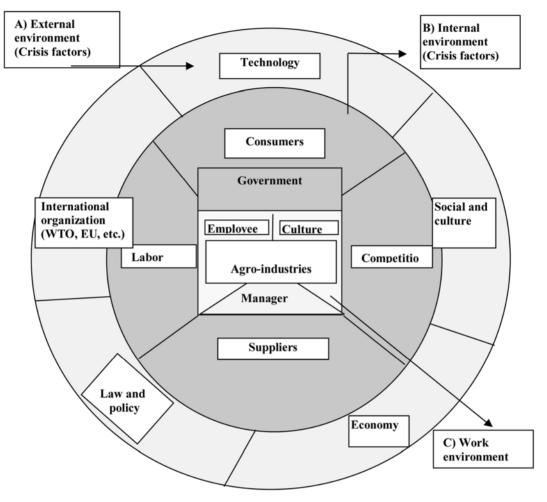


Figure 1. Internal and external environment of agro-industries (Batte, 2006)