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No. 2

Analysis of farmer enterprises and agricultural markets

by

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№. 2
Хоразм вилоятида (Ўзбекистон) фермер ҳўжаликларининг ва қишлоқ ҳўжалик бозорларининг таҳлили.

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Резюме

Бу ишда кўрсатилган тадқиқотнинг мақсади Хоразмдаги фермер ҳўжаликларининг ва қишлоқ ҳўжалик бозорларининг таҳлилини тақдим қилишдир. Бу таҳлил билим базасини яхшилаши ва келажакда вилоятда иқтисодий қайта тузиш бўйича тадбирларни муҳокамасини рағбатлантириши керак.

Қишлоқ ҳўжалигининг ишлаб чиқаришини ва ҳўжаликларнинг тузилишини тарифлаган ҳолда, ҳўжаликлар уч турга бўлинади: деҳқон ҳўжаликлари, ширкатлар ва хусусий фермер ҳўжаликлар.

Биринчидан, вилоят иқтисодига тўлиқлигича ва алоҳида вилоятнинг қишлоқ ҳўжалик секторига миқдорий ҳиссасини баҳолаш йўли билан уч ҳил ҳўжаликларни таҳлили ўтказилган.

Иккинчидан, бундай тузилиш кўрсаткичлари натижалари иқтисодий ислоҳотлар шароитида муҳокама қилинади ва бу ислоҳотлар бундай турдаги ҳўжаликларни фаолиятига ва мухимлигига таъсир ўтказмокда ва бундан кейин ҳам таъсир ўтказади.

Учинчидан, турли хил ҳўжаликларини олиб бориш структураларининг бир бирига боғликлигини сифатли баҳолаш ҳаракат килинган.

Таҳлил натижалари қуйидагиларни кўрсатди:

- *Ҳўжалик олиб боришнинг уч тури ҳам вилоят иқтисодига катта ҳисса қўшмоқда.*
- *Хозирги вақтда ширкатлар ва деҳқон ҳўжаликлари вилоятнинг иқтисодий ишлаб чиқаришнининг катта қисмини ташкил қилади.*
- *Хусусий ҳўжаликларнинг сони кўпаймоқда ва уларнинг ишлаб чикариши ўсиб бормоқда.*
- *Қишлоқ ҳўжалик секторидаги иқтисодий ислоҳотлар ҳорижий сармояларнинг кирими, экспорт, умумий қишлоқ ҳўжалик ишлаб чиқаришни, қайта ишлаш ва самарадорликни ўсишини қувватлаши керак.*

- *Алоҳида олинган фермер учун ҳеч бир ташкил қилиш шакллари моҳиятига кўра етарлича фойдали ва самарали ҳисобланмайди; аммо рентабенлик ва ишлаб чиқариш унумдорлиги кўпинча ички ва ташқи омилларга боғлиқдир.*
- *Қишлоқ ҳўжалигида корхоналарнинг тузилишининг уч шакли бир—бирига зид қўйилмайди, аммо улар узоқ вақт давомида пайдо бўлган ишлаб чиқариш муносабатларининг намунасидир.*

Бозор таҳлили бозор сўрови шаклида ўтказилди. Маълум вақт давомида ҳар хил бозорларда, турли хил озиқ овқат маҳсулотларининг баҳоларини ўзгариб туриши текширилди.

Натижалар қуйдагиларни кўрсатди:

- *Давлат буюртмасининг айрим истеъмол молларининг баҳосига таъсири катта.*
- *Айрим қишлоқ ҳўжалик махсулотининг баҳосининг ўзгариб туришини тушунтириш мақсадида ҳизмат қилиш секторининг ва озиқ овқат бозорининг самарасиз эканлиги кузатилди.*
- *Қайта ишлаш секторининг самарасизлиги ҳам катта аҳамиятга эга.*
- *Технологияларни ишлатиш ва тақсимлаш камчиликлари.*

Ҳулоса қилиб, ўқиш йўлларини такомиллаштириш, кредит тизимини яхшилаш ва қишлоқ ҳўжалик ишлаб чиқарувчиларига ва истеъмолчиларига маркетингнинг ҳамма поғоналарида яхшироқ ҳизмат кўрсатадиган янги замонавий бозорлар институтларни такомиллаштириш кўриб чиқилади.

No. 2
Анализ фермерских хозяйств и сельскохозяйственных рынков в Хорезмской области (Узбекистан)

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Резюме

Целью исследования, представленного в данной работе является проведение анализа фермерских хозяйств и сельскохозяйственных рынков в Хорезме. Этот анализ призван улучшить базу знаний и способствовать обсуждению предстоящих мер в отношении экономической реструктуризации региона.

Описывая сельскохозяйственное производство и структуры хозяйств, различают три различных типа хозяйств: дехканские хозяйства, ширкаты и частные фермерские хозяйства.

Во-первых, анализ этих трех типов хозяйств проводится по их количественному вкладу в экономику региона в целом и сельскохозяйственный сектор в частности. Во-вторых, результаты этих структурных показателей обсуждаются на фоне экономических реформ, которые влияют и будут оказывать влияние на деятельность и важность этих форм хозяйствования.

В-третьих, были предприняты попытки провести качественную оценку зависимости различных структур хозяйствования друг от друга.

Результаты анализа показали следующее:

- Все три типа хозяйствования вносят значительный вклад в экономику региона.
- Ширкаты и дехканские хозяйства в данное время составляют значительную часть экономического производства в регионе.
- Увеличивается количество частных хозяйств и растет их производство.
- Экономические реформы в сельскохозяйственном секторе направлены на поддержание роста поступлений иностранных инвестиций, экспорта, сельскохозяйственного производства в целом, развитие перерабатывающей промышленности и увеличение производительности.
- Для отдельно взятого фермера ни одна из организационных форм не может считаться по существу достаточно прибыльной и эффективной; однако рентабельность и производительность зависят от множества внутренних и внешних факторов.

- ❖ Три формы организации сельскохозяйственных предприятий не противоречат друг другу, являясь примером производственных отношений в сельском хозяйстве, возникших в течение длительного периода времени.

Анализ рынка проводился в форме рыночного опроса. Были исследованы колебания в ценах на различные сельскохозяйственные и пищевые продукты на различных розничных рынках в течение определенного времени.

Результаты показали следующее

- Значительное влияние государственного заказа на цены на отдельные предметы потребления.
- Неэффективность сектора обслуживания и продовольственного рынка являются причиной колебания цен на отдельные сельскохозяйственные продукты.
- Неэффективность отрасли переработки сельхозпродукции также имеет существенное значение.
- Недостатки использования и распределения технологий.

В заключение, рассматривается улучшение средств обучения, улучшение кредитной системы для учреждения более эффективных и современных институтов рынка, которые предоставят лучшее обслуживание сельскохозяйственным производителям и потребителям на всех уровнях в цепи продовольственного маркетинга.

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GLOSSARY OF IMPORTANT TERMS

Dekhan:	Household farm operation or household production unit and gardens of families, normally not larger than 0.25 ha.
Hokim:	Governor of the region or a district.
Oblast:	Administrative unit referring to a region.
Pudrat:	Family brigade working on Shirkats
Rayons:	Administrative unit referring to a district.
Shirkat:	Former Kolkhoz or Sovkhosz now run as a collective farm which sub-contracts land to family brigades

LIST OF ABBREVIATIONS

AIC:	Ago-Industrial-Complex
BMBF:	German Ministry for Education and Science
FA:	Private Farms
GDP:	Gross Domestic Product
HH:	Households
MTS:	Machine Tractor Stations
SH:	Shirkat
SME:	Small and medium scale enterprises
UNESCO:	United Nations Educational, Scientific and Cultural Organization
UrSu:	State University of Urgench
ZEF:	Center for Development Research, Bonn

ABSTRACT

The aim of the research presented in this work paper is to provide an analysis of farm enterprises and agricultural markets in Khorezm. This analysis should improve the knowledge base and stimulate discussion of future efforts towards economic restructuring of the region. In describing the agricultural production pattern and the farm structures, three different farm types are distinguished: Dekhan enterprises, Shirkats and private farms. First, the analysis of these three forms of farms is undertaken by measuring their quantitative contribution to the region's economy as a whole and the region's agricultural sector. Second, the results of those structural indicators are discussed against the background of the economic reforms, which are influencing and will continue to influence the relative performance and importance of these farm types. Third, an attempt was made to qualitatively assess the dependence of the different farm structures upon one another. The results of the analysis show that:

- All three farm types contribute significantly to the regions economy.
- Shirkats and Dekhan enterprises currently make up the greatest part of the region's agricultural output.
- Private farms are increasing in number and output.
- Economic reforms in the agricultural sector are expected to encourage increases in foreign investment, export, overall agricultural production, processing and efficiency.
- For the individual farmer, none of the organizational forms can be considered per se more profitable. Neither can any one organizational form be considered as being generally more efficient; but profitability and efficiency depend on a variety of internal and external factors.

The three forms in which agricultural enterprises are organized are not in opposition to one another, but are rather a manifestation of rural production relationships which have emerged over a long period of time.

Market analysis was undertaken in the form of a market survey. Fluctuations in the prices charged for different agricultural and food products at different retail markets were surveyed over a specified time period. Results show:

- Influences of state orders on prices for specific commodities seem to be significant.

- Inefficiencies in the services sector and in food marketing were mentioned to explain fluctuations in the prices of specific agricultural products.
- Inefficiencies in the processing sector for agricultural products were also said to be significant.
- Imperfections in the use and distribution of technologies.

As a conclusion, the case is made for the improvement of training facilities, the enhancement of the credit system and for the introduction of more efficient and modern market institutions, which would provide better services to agricultural producers and consumers on all levels of the food marketing chain.

1 INTRODUCTION

1.1 Project information

The following report is part of the ZEF/BMBF/UNESCO project “Land and Water Use Restructuring in Uzbekistan/Khorezm”. The main objective of the project is to establish a research program that combines proposals for restructuring of the landscape with proposals for legal-administrative reorganization in order to utilize human and natural resources more efficiently.

Economic studies within the project, are devoted to the operational analysis of individual farms (kolkhozes) and to the investigation of economic incentives for saving water, e.g., a water price based on an economic "River Basin" model. In addition, socio-economic consequences of different forms of land and water use restructuring are being investigated.

1.2 Aims and objectives

This report sights extensive empirical and statistical data of the region’s agricultural sector and is designed to provide an analysis’ of Khorezm’s agricultural markets, it’s different forms of agricultural enterprises and the overall economic implications of the reforms which are taking place in the Uzbek agricultural sector.

1.3 Structure

The report begins with Section 2, designed to give a short description of the region of Khorezm as a whole and the overall context in which the region’s agricultural sector performs. For reasons of readability this section is written in an essay-like manner and, where possible, abstains from the use of economic terminology.

Section 3 includes and reviews a vast amount of data on recent structures and trends in the agrarian sector, it’s changing legal and financial frameworks and the different farm structures prevalent in Khorezm. In Section 4 Khorezm’s agricultural markets are analyzed by means of empirical data collected by project participants.

In Section 5 the authors’ conclusions and suggestions on how to improve the performance of Khorezm’s agricultural sector are presented.

2 GENERAL INFORMATION ON KHOREZM, UZBEKISTAN

2.1 The region of Khorezm and its natural resources

The province of Khorezm was officially formed on January 15th, 1938. It has a surface area of 6.1 thousand sq. km, and makes up roughly 1.4% of the entire Republic of Uzbekistan. On its Northeast, Khorezm borders with the Republic of Karakalpakistan, while the Southern and Western parts of Khorezm border onto Turkmenistan. Southeast of Khorezm lies the Uzbek province of Bukara. Khorezm's climate can be described as sharply continental, resembling the climate of the Ukraine and Kazakhstan.

Khorezm is a rapidly growing region. Its average annual population growth for the year 2001 was measured at 1.6%. As for January 1st 2002 the population totaled 1,371.8 thousand people of which 23.3% lived in urban areas; leaving the rural population at 1,052.1 thousand, or 76.7%. The regions' largest city with a population of 138.2 thousand people is its capital Urgench. The national language is Uzbek.

Map 2.1: Khorezm; Uzbekistan

The province has no significant mineral resources, but its climate allows for the production of a variety of agricultural products such as cotton, rice, vegetables, fruit, melons and watermelons. Production of grain has seen an increase, while fishing and animal husbandry remain comparatively small areas of production.

To varying degrees, the agricultural products of Khorezm can be processed locally. For example 8-10% of raw cotton is processed within Khorezm. For grapes, fruit and vegetables the figures read 30%, 20% and 50% respectively, while grain, sugar beet and wine are practically completely processed within the region.

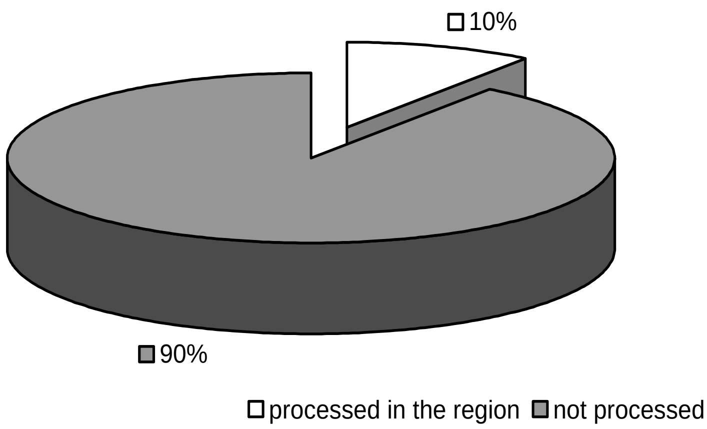

Figure 2.1: Processing of cotton in thousand tons (242.8 thousand tons)

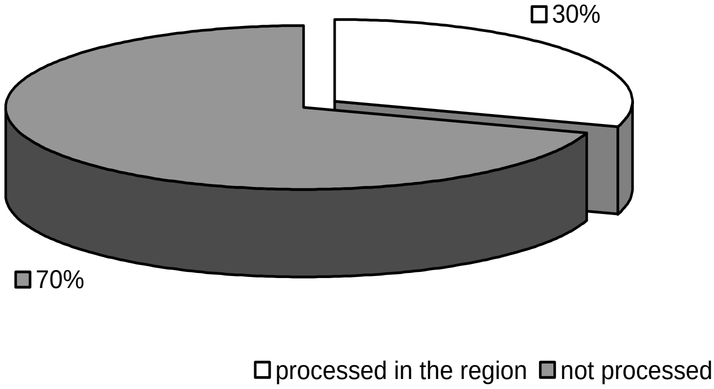

Figure 2.2: Processing of grapes, in thousand tons (10.6 thousand tons)

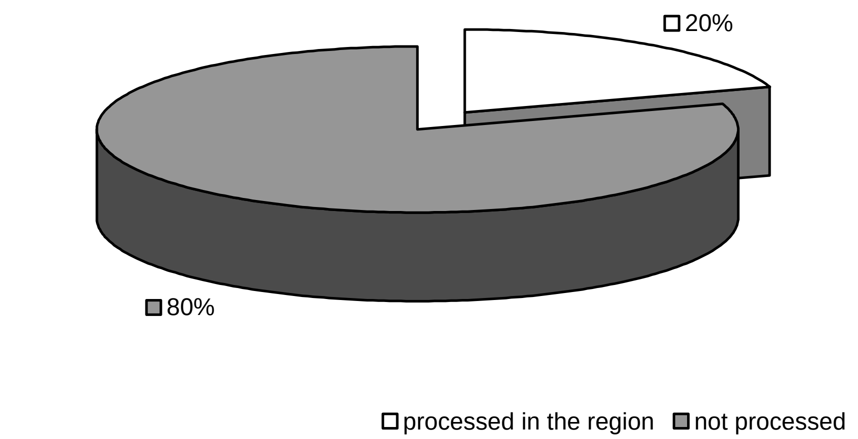

Figure 2.3: Processing of fruit, in thousand tons (49.8 thousand tons)

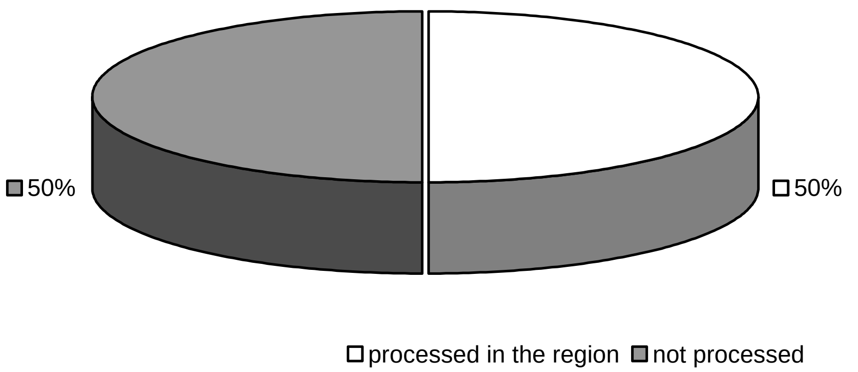

Figure 2.4: Processing of vegetables, in thousand tons (108.5 thousand tons)

2.2 Infrastructure, transport and telecommunications

Infrastructure: The region of Khorezm chiefly receives its electricity from the Takhiatash and Tuyamuyun Power Plants, but the power structure also includes a network of substations located directly in Khorezm. In 2001 11.346 kilometers of electric transmission lines were used in the distribution electricity throughout the region. Pipelines for gasoline also run through Khorezm; as does a water pipeline system, which the province partly maintains through foreign investments that are available as part of the "Uzbekistan – Water Supply" project. For 2001 the water supply volume for the region reached 2.3 million Soums which equaled a water supply of 90%. Gas supply reached a volume of 6.7million Soums[1], equaling a supply of 92%.

Transport: Khorezm's highway-system stretches for about 2.3 thousand km[2]and the railway system extends for more than 130 km. Urgench Railway Station connects the region with other regions within Uzbekistan, with Uzbekistan's capital, Tashkent and also with the republics of Karakalpakstan and Turkmenistan. The railway- and highway systems are networked in a way which allows for transportation of export-import cargoes via the following routes:

Via "Beyneu"[3] to Kazakhstan, Russia and then to Europe.

Via the Kazakh port "Ayqtan" to Iran, Azerbaijan and Russia.

Via Turkmenistan to Iran, Turkey and Afghanistan using mainly rail or automobile transport.

The Uzbek government's decision to build a high-speed highway connecting Andjian, Tashkent, Nukus and Kungrad means there will be further development of Khorezm's already existing highway system, as parts of the planned 2294 km construction will span through the territory of Khorezm. The highway-construction-project's preliminary design was set to meet international standards and has already received the approval of European experts. When completed, this highway extension will pass from Uzbekistan's East to its Northeast, incorporating 18 large and more than 600 small bridges to go with approximately 305 overpasses. Besides the core construction of roads, the project is also meant to include 80 gasoline stations, 12 auto camping sites and 2 customs offices (to be located at the Kyrgyz and Kazakh borders). As an effect – so it is expected - the highway

[1] according to Urgenchtransgas

[2] Two thousand kilometers of these are hard surface

[3] Beyneu is a railway station located at the Kazak/Uzbek border

could take up the basic stream of transit and interstate traffic, also allowing automobile transportations to port Aktau (Republic of Kazakhstan). Yet another important method of transportation is provided by Urgench's newly acquired industrial-and-commercial airport. The airport's service capacity is sufficient for 250 to 300 people (per hour) and all types of aircraft. International airports of destination so far feature all of Central Asia as well as many regions of Russia and other CIS-countries.

Telecommunication: Over the last years there have been dynamic developments in the telecommunication sector, related to the activities of large joint venture companies in the likes of "UzAloquaDaewoo" and "Uzdunrobita. All basic forms of telecommunication[4] are available within the region and a new telephone station has recently gone into operation.

2.2.1 The Region's economy

The Gross National Product (GDP) for the province of Khorezm was 189.8 billion Soums in 2001. The province's small and medium scale enterprises (SME) (excluding farm entities) on their part were responsible for 25.7% of Uzbekistan's entire GDP, which comprises a share rise of 6% for the same indicator compared to its value in 2000. In comparison, the volume of production and services by large and medium scale enterprises with foreign investments totaled only 1.7 billion Soums in 2001; 0.89% of Khorezm's GDP.

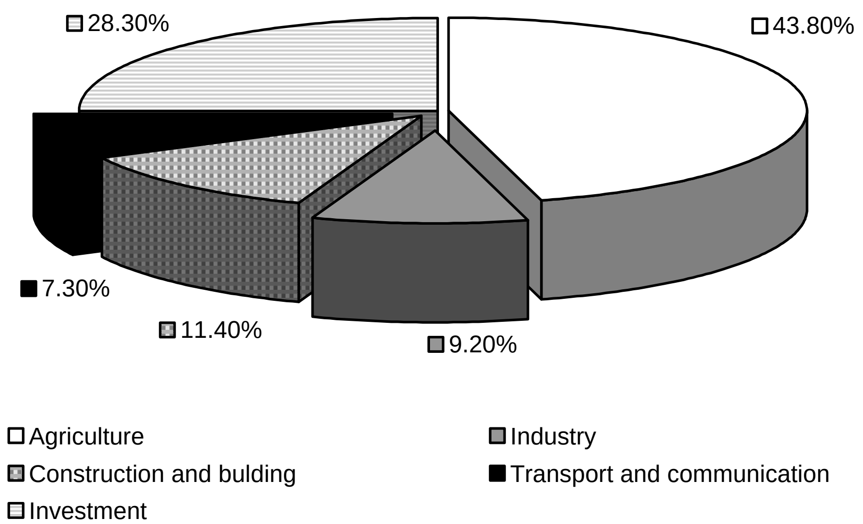

Figure 2.5: Khorezm's GDP in 2001 in billion Soums (189.8 billion Soum)

[4] Telephone, radio relay , mobile and regional television

A total number of 12.65 thousand entities were registered at the date of January 1st, 2002. 11.5 thousand, or 91.2%, of these enterprises were considered SME's. As can be seen in figure 5 the economy of the province is mainly agricultural, with agriculture making up for 43.8% of Khorezm's GDP in 2001. The figure shows respective values of 9.2% for industry, 11.4% for major construction, 7.3% for transport and communication and a combined 28.3% for other branches of industry.

In the provinces economy, light industry and the food industry appear most advanced; with light industry accounting for 60% of total industrial output and the food industry providing a share of 25.4% of same. Khorezm also possesses facilities for oil extraction, silk spinning, cotton processing, sewing, wine production, and a number of other smaller industries, like for example the widely renowned carpet works made in Khiva. Likewise worthy of mention is Khorezm's considerably developed textile industry, which has shown increased growth in recent times.

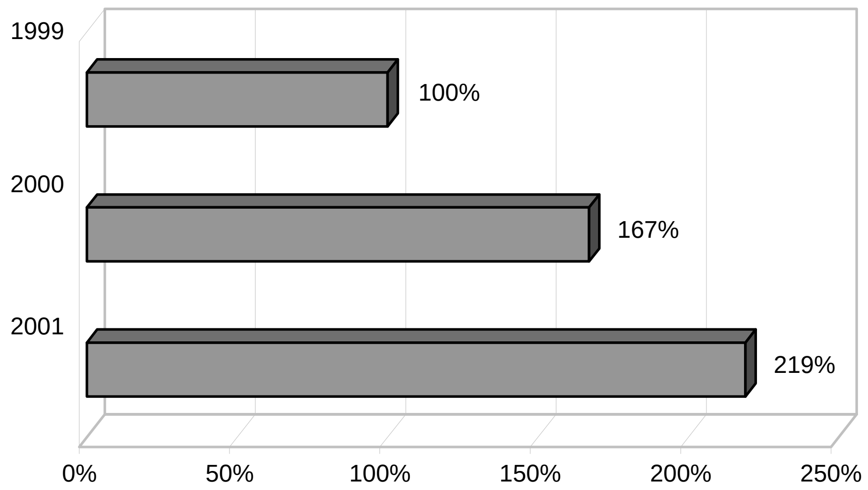

Figure 2.6: Growth in Khorezm's GDP

2.2.2 Industry

64 basic industrial enterprises operate within the region of Khorezm, more than one third of which are located in the provincial center Urgench. The enterprises vary in type of ownership, resulting in a structure of 44 joint-stock enterprises, 9 joint ventures, 6 collective farms, 2 public farms, 2 state held farms and a single privately owned farm. [In 2001 the aforementioned enterprises made a combined 73.5 billion Soums.] The year 2001 also saw growth in the main branches of industry; most noticeably 6.8% growth in light industry.

2.2.3 Foreign trade

An existing study/program on Khorezm's potentials for export, envisages an increase in export between 2001 and 2005; mainly to be achieved by means of modernization of operating enterprises and the rational use of production capacities. The programs realization is heavily interrelated with developments in the processing industries for agricultural products. The study likewise suggests increased volumes of production by joint-stock companies "Gurlan[5]", Joint Venture (JV) "Darital[6]", JV "Meva[7]" and JV "Semurg-San-T[8]". According to the study, the province's exports should increase upon the year 2005 to reach a total value of 130 million US $ and should include an expansion of the product list for exportable goods from 18 (the actual number of export goods in 2001) to 22. Furthermore the number of enterprises, which process cotton-fiber is expected to reach 7.

New production facilities[9] have been introduced in an attempt to reduce the share which raw materials hold in the total volume of industrial production. If successful, the share that finished products have in total exports could gradually increase from 5.4% in 2001 to eventually 30% in 2005. Increase in exports is projected also for the export of services by Khorezm's travel agencies, which should see increases of around 44.4%. One more implication of the regional program is the significant development of small and regional scale enterprises. Their share in Khorezm's exports is projected to increase 120% by 2005. Khorezm's foreign trade turnover reached 76.1 million $ US in 2001. Imports marked at 26.8 mil. US $ (35.3% of total turnover), while exports resulted in 49.3 mil. $ US (64.7 %[10]).

[5] production knitted works

[6] production of footwear

[7] production of juices, ketchup, fruit and mashed potatoes

[8] processing of leather

[9] production facilities have been introduced in agricultural production (especially processing of cotton fiber) , the chemical industry and also for carpet works

[10] For 2001, exports figured 22,5 mil US $ higher than imports; a positive export-import balance.

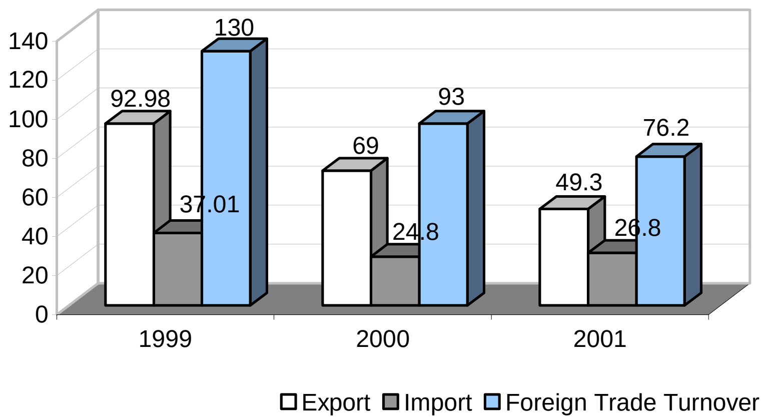

Figure 2.7: Foreign trade in mil. US $

Export can further be divided into two fractions: into exports to non-CIS countries, which made up 62% of the total exports (30.6 mil US $), and into exports to CIS states, which account for the remaining 38%, or 18.7 mil US $, of total trade. What is exported is mostly cotton fiber (83%), to a much lesser degree, food products (4.8%) and to an even lesser degree still some machines and equipment (1.3%), but the list of export products also includes oleic acids, footwear, cotton wool, yarn, silk, fruit and vegetable juices, processed leather and carpet products.

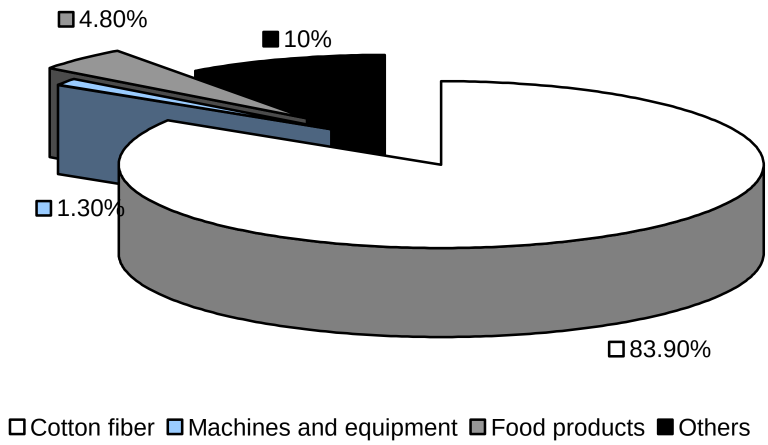

Figure 2.8: Export

Imports can likewise be divided, by which we receive respective figures of 16.08 mil. US $ (60% of total trade volume) for imports from non-CIS and Baltic countries, and another 10.72 mil US $ (the remaining 40%) for imports from CIS-states.

The list of imported products features medicines, wood, building material, ferrous metals, sugar beet and also spare parts, but is mainly comprised by food products (48.4%), machines and equipment (38%).

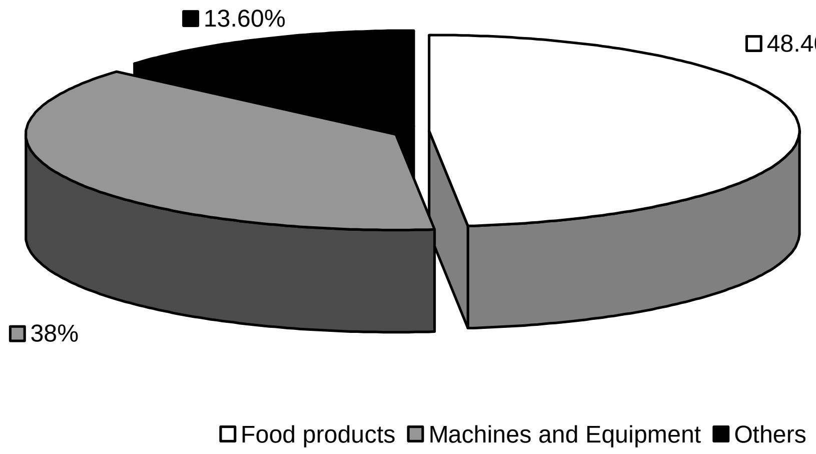

Figure 2.9: Import

2.3 Investment climate

Legislature allows foreign investors to establish enterprises within the Republic of Uzbekistan and ascribes to them certain rights, guarantees and preferences specified in the law. 33 joint ventures are registered in the province of Khorezm and 28 of these are small or medium scale enterprises. Out of the total 33 enterprises operating as joint ventures with foreign investment, 24 operate in the industrial sector, 4 provide services, 4 indulge in trade and 1 does business in construction. In the year 2001 three new joint ventures registered:

- Uzbek-German JV “Khiva – Carpet”[11]
- Uzbek-Chinese JV “Asia-Textiles LTD”[12]
- Uzbek-German JV “Unicho”[13]

The most important economic partners to the region are enterprises from the UK, Turkey, Russia, Germany and Italy. Enterprises operating on foreign investments produced, or provided services worth 2.5 billion Soums in 2001, which equals 3.4% of total industrial production for that year. These enterprises were able to make exports in the amount of 820.9 thousand $ and imports of 9.2 mil. US $; these figures equal 1.6% of total export and 34.3% of total import for the province respectively.

Listed here, are some specifications to the ways in which foreign investors may participate in investment activities in the Republic of Uzbekistan:

- Equity participation in companies, banks, trusts, cartels, associations, and other enterprises established together with legal entities and residents of Uzbekistan. In practice this provision is applied only to joint ventures that involve Uzbek legal entities;
- establishment of an enterprise with 100% foreign capital;
- portfolio investment through the acquisition of bonds, shares and share certificates and other securities issued by Uzbek companies or the government;
- Total or partial acquisition of rights for land plots and/or real estate including land utilization rights and concession rights regarding the utilization of underground resources, etc.

Tax concessions provided to enterprises with foreign investors:

- 7-years grace period for profit tax - if foreign investment is made on project(s) within the Government Investment Program’s listings;

[11] Located in Khiva; produces carpets

[12] Located in Urgench; produces knitted wear of all sorts

[13] Located in Hazarasp; produces cotton yarn

- 5-year grace period for profit tax taking effect from the first day of production - if more than 25% of the products are goods for children;
- 2-year grace period for profit tax from the date when production is started - if share of 50% or more of the company's paid-up charter fund is foreign capital and the company produces export-oriented and import-substituting products;
- 20% profit tax - if 50% or more of the company's initial funds are foreign capital and range from $500,000 US to $1,000,000 US;
- 16% profit tax - if 50% or more of the company's initial funds are foreign capital and comprise $1,000,000 US or more;
- profits tax exemptions on revenues is granted for profits, which are reinvested into development and into the expansion of production - if the share of 50% or more of the company's charter fund is foreign capital;
- 50% profit tax reduction - if the company exports 30% or more of the total sales volume of its products;
- 30% profit tax reduction - if the company exports from 15% to 30% of the total sales volume of its products;
- profit tax exemption on export revenues its own goods for which hard currency was earned;
- property tax exemptions - if the company's exports account for at least 50% of the total volume of sales of its own products;
- 50% property tax reduction - if the company's export accounts for 25% - 30% of the total sales volume of its products;
- 30% property tax reduction - if the company's exports constitute up to 25% of the total sales volume of its products (works, services);
- property tax exempt if the charter capital is equal to or more than $ 5000,000 US
- land tax exemption for two years;
- profit tax exemptions for 3 years from the first day of production and 50% reduction of profit tax during the next two years if the company is established in rural areas;
- exemption from payroll restrictions:

  if an enterprise’s production includes, to 70% or more, the utilization of local equipment and raw materials, the enterprise is granted a reduction of its profit tax rate to varying degrees.

2.3.1 Small and medium scale enterprises

Opportunities for the creation of jobs come to the region mainly in form of small and medium scale businesses. These enterprises also play an important role in the maintenance of economic and sociopolitical stability within the region. On January 1st 2001 the region had 10 thousand operating small or medium scale enterprises. Specifically that meant 255 medium scale enterprises, 987 small firms and 8759 micro firms. Results for the year 2001 showed that the production of SME's had increased 29.6% from the year before and had reached 45.7 billion Soums. SME's also provided for the creation of 30000 new jobs; significantly, 28375 of these were created in rural areas. In the bigger economic scheme, SME's were responsible for 25.6% of the total trade turnover. As there is a specified need to expand the role of small and medium scale businesses in he province's economy and in order to achieve qualitative changes in this sphere, a program for the development of small and medium scale private businesses was developed. The program focuses on the time span from 2002 to 2005 and sets to determine the role small and medium scale enterprises play within the province's economy, while maintaining a steady development of small and medium scale private businesses.

The program's targets are set out to create an extra 72 thousand jobs for the area. Specifically the programs targets are:

- to raise SME's share in the provinces total production to 42% for the year 2005;
- to raise the number of SME's to 19.2 thousand[14], and to have that number include 6.1 thousand Dekhan entities again of which 1.4 thousand should be legal entities status wise;

The method by which this agenda is to be completed contains the following aspects:

- Creation of small and medium scale enterprises
- Encouragement of businesspeople to create their own private enterprises, collective farms and companies in the various fields of production.

2.3.2 Banks and infrastructure of financial business support

Khorezm has 13 operating basic finance institutions. They play an important role in the development of business in the province. 2001 saw finance institutions provide a combined 4.705,4 million Soums in loans for the development of small and medium scale enterprises. The most important of these institutions are: the "National Bank", "Pakhta Bank", Uzuyjoyamgharmabank", Zamin Bank", "Promstroyban", "Asaka Bank" and others.

[14] in comparison: there were 11,5 thousand SME's in 2002

3 AGRICULTURAL PRODUCTION AND FARM STRUCTURE

3.1 Khorezm's agricultural sector

Khorezm's agricultural sector employs 18.5 thousand people on 3.739 farms, cultivating 42.5 thousand hectares of land. Agricultural production centers on cotton as its main agricultural good, but the region is also host to multiple gardens, vineyards, vegetable- melon- and potato plantations. Developments in 2001 featured significant increases in crop and fig production and the introduction of sugar beet to Uzbekistan[15].

In 2001 the total agricultural production was measured at 123.2 billion Soums; 66.3 billion of this sum stemmed from animal husbandry and 56.9 billion Soums came from plant cultivation. Farming entities saw an increase in their share of agricultural production by contributing 69% of total agricultural production; whereas private farms created 5.2% of the total agricultural output. Attempts to develop the private sector, through allocation of soft loans could mean a future increase in agricultural production. Other methods may involve the improvement of the efficiency at which enterprises operate, or providing services to farms or helping to increase the market value of products. One result of socio-economic policy so far has been the founding of 115 Shirkats[16] and the current intention is to increase irrigation to include 239.3 hectares by the year 2005, as well as to implement an array of measures for increasing agricultural productivity.

3.2 Farm analysis

Agriculture in Uzbekistan has faced various changes since the dissolution of the Soviet Union in 1991. Many state owned farms were transformed into collective farms and property rights to land were transferred. The last few years have also seen some structural transformation, such as an evolving market infrastructure, the lightening up of the state's cotton monopoly and the increase of production in grain and other agricultural crops. Uzbek agriculture operates on a relatively small share of arable land but with a high density of population in rural areas. More than 60% of Uzbekistan's territory is desert, arid and semiarid area and merely 10% of the total area is arable land. Agricultural activities are concentrated in a few regions with extremely high population pressure on land, resulting from high growth rates of population. Yet agriculture is of utmost importance to the Uzbek economy and accounts for about 1/3rd of total GDP.

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[15] Sugar is processed within Khorezm's own sugar factory

[16] See „Farm Analysis" on same page below

It is general opinion, that successful economic reforms are critically dependent on developments in the agrarian sector.

There are three main types of agricultural enterprises in the Region:

- Shirkats:

A Shirkat is an independent enterprise with all rights of a legal entity. It is basically a voluntary union of workers, producing agricultural products. All members participate in all of the union's activities, whereas profits are distributed according to the property share each member holds. Each Shirkat is subject to specific legal regulations, fully responsible for the balance of its banking accounts and each Shirkat possesses a registered seal/stamp to use in its business operations. The regulations for Shirkats tend as framework for economic and organizational aspects such as rights and responsibilities of its members, regulations concerning land use and distribution, property rights, management, future reorganization and possible liquidation of Shirkats. To be considered a Shirkat and to be able to do business under the laws and regulations concerning Shirkats, prospective applicants must register with the Hokim[17].

- Dekhan enterprises:

In distributing the land after Soviet Rule, some of the land was given to families on grounds of lifelong hereditary possession. Family enterprises involved in the manufacture and sale of agricultural goods produced on such land are called Dekhan enterprises. One generally finds members of Shirkats, rural inhabitants employed in other organizational forms of agriculture and families of people in social professions such as teachers or doctors, to receive land on these terms. Land assignments may consist of up to 0.35 ha of irrigated land (this includes buildings) and of up to 1 ha of non-irrigated land. A Dekhan enterprise consists of the head of the landowning family, his or her spouse, their children and possibly their parents. It is left to the partaking members' discretion, whether to apply for the legal status of a Dekhan enterprise and agricultural production is allowed upon the land, regardless. Yet, in order to officially register as a Dekhan enterprise it is mandatory for the head of the family to address either the management of a Shirkat or the land distributing governmental body for permission to organize as a Dekhan enterprise. The Shirkat's manager subsequently submits a set of

[17] governmental administration on oblast level

organizational questions to a special committee. The final decision however as to whether to allow the formation of the Dekhan lies with the Hokim.

- Private farms:

A private farm, in the sense used here, is an independent enterprise engaged in agricultural production on leased land. A private farm enjoys all rights of a legal entity, based on the joint activities of all its members. A private farm may consist of the enterprises legal head, their spouse, their children[18], their parents and other relatives, whose main field of employment is with that enterprise. The existence of private farms creates a basis for competition in agricultural production, but is subject to certain regulations: A private farm enterprise wanting to specialize on livestock may only be organized, if a family owns at least 30 heads of cattle. In such a case the land which is leased out may total 0.3 hectare of irrigated land[19] and at least 1 ha of non-irrigated land per head of cattle. The actual size of the plots will differ in different oblasts, rayons and even within enterprises as a consequence of the consideration of factors such as soil quality and location. A private farm enterprise specializing on the production of grain and cotton will receive at least 10 ha of arable land, while those specializing in gardening, winegrowing, vegetables or other crop will receive a minimum of 1 ha of arable land. The land which is leased out usually belongs to the reserve fund, to enterprises with insufficient manpower to efficiently tend it, or to enterprises incapable of drawing profit from it. To obtain such land on terms of lease, future farmers must address the formal head of the agricultural cooperative society (Shirkat) of which he wishes to receive the land. The private farm, will effectively, once established, be run like a family farm. The final decision on the creation of a private farm comes from the Hokim of the respective rayon (district) and will usually reflect the conclusions earlier reached upon by a regional committee for the allocation of land. With the Hokim's formal decision to allow the formation of a Farmer Enterprise, comes the right to register with the state and to lease land from the Hokimiyat of the rayon. Should it be the case that the Hokim decides against the formation of a Farmer Enterprise, farmers may appeal against this decision in the courts of law. There are further regulations for private farms, which pay attention to various matters such as the naming of a farm, activities it may engage in, possible management systems, rights and responsibilities, procedures of reorganization and matters of liquidation.

[18] including adopted children

[19] 0,45 ha in Karakalpakistan

Once a private farm has successfully formed we may distinguish three categories depending on the form of capital provided to them:

- Private farms created on the land of Shirkats.

  Farmers under such conditions generally do not own any fixed capital on their balance sheet at the moment of the enterprises formation. They use the Shirkat's existing infrastructure as part of the contract.
- Private farms possessing livestock at the time of their initial formation.

  Such an enterprise may be completely independent in its activity but may use the Shirkat's infrastructure on agreement
- Private farms created on the basis of being unprofitable.

  These Enterprises usually develop as a result of farmers voluntarily coming together to unite as an association of farms.

The following data should provide the reader with a dimension of the degree in which private farms are developing in Uzbekistan and of what their performance within the agricultural sector so far has been:

More than 47330 private farms had been formed by April 2001. For April 2002 that same figure had increased tremendously to 56500. The additional private farms received over 1 million ha of land on lease. In Khorezm, private farms account for 5.3% of the total agricultural production.

Table 3.1: Agricultural production of private farms and Dekhan enterprises in 2000 and 2001

Indicator	Value in 2000	Value in 2001	Change between 2001 and 1998 in %
Total Gross output of agriculture (mil. Soum)	112129.6	116726.9	4.1
Volume of production by private farms in mil. Soum	3720.6	6220.8	167.2
Volume of production by private farms in %	3.2	5.3	165.6
Volume of production by Dekhan enterprises in mil. Soum	77005.9	78007.0	101.3
Volume of production by Dekhan enterprises in %	68.7	66.8	97.2

The three forms in which agricultural enterprises may be organized do not oppose each other, but are rather a true expression of current rural productional relationships. Neither form may be considered per se more profitable or more efficient in terms of production.

Besides their importance for economic performance, Dekhan enterprises and private farms additionally possess sociopolitical relevance in respect to the fact, that the activities of such enterprises consume a great share of the able-bodied worker's and even children's and retiree's (to a degree also the disabled) free time. As a result of the structural developments, households now possess 600 thousand ha of land and more than half of the republics total households have registered and received the status of being a Dekhan enterprise[20].

[20] 1.8 million of total 3.4 million households have registered.

Table 3.2: Area of cultivated land in Khorezm 1998 -2001

		1998					1999					2000					2001				
		SH	**FA**	**HH**	**SF**	**Total**	**SH**	**FA**	**HH**	**SF**	**Total**	**SH**	**FA**	**HH**	**SF**	**Total**	**SH**	**FA**	**HH**	**SF**	**Total**
1	**Cotton**	98208	1939	0	498	100645	96923	2763	0	644	100330	87081	8010	0	839	95930	92834	15395	0	1384	109613
2	**Grain (total)**	51250	3331	18728	2826	76135	46111	4722	19108	3079	73020	35483	9848	17378	2411	65120	23796	8507	15905	961	49169
3	**Wheat**	15411	581	14724	321	31037	14762	495	15000	202	30459	14611	1826	14010	279	30726	16134	5173	14242	470	36019
4	**Maize**	1571	169	395	9	2144	1349	146	469	39	2003	713	193	467	89	1462	438	360	486	43	1327
5	**Rice**	34020	2468	2838	2451	41777	29732	4024	3344	2787	39887	19456	7590	2623	2027	31696	6386	2666	366	387	9805
6	**Sugar beet**	7458	38	0	10	7506	13486	156	0	43	13685	13501	1498	0	19	15018	6809	1116	0	13	7938
7	**Potatoes**	616	18	1534	1	2169	564	10	1651	2	2227	691	30	1596	1	2318	598	79	2056	12	2745
8	**Vegetable**	2186	167	4127	67	6547	2189	274	3203	92	5758	1793	392	3791	93	6069	1988	670	4351	76	7085
9	**Fruit**	6553	272	4850	71	11746	5958	210	3857	102	10127	5531	622	3638	84	9875	5071	872	3792	184	9919
10	**Melon**	1241	161	1053	374	2829	1013	177	1053	154	2397	851	347	763	138	2099	1520	1069	1039	385	43
11	**Grapes**	1010	10	325	0	1345	1005	10	458	16	1489	964	29	734	15	1742	824	37	734	19	1614
12	**Clover**	16026	512	699	318	17555	14140	554	706	313	15713	13851	975	811	293	15930	9038	1499	691	263	11491

Table 3.3: Agricultural production in Khorezm 1998 – 2001 (in tons)

		1998					1999					2000				
		SH	FA	HH	SF	Total	SH	FA	HH	SF	Total	SH	FA	HH	SF	Total
1	**Cotton**	21210	3668	0	112	21689	28040	7976	0	167	29005	18239	1547	0	113	199007
2	**Grain**	20741	1398	10385	771	33296	18156	1878	10544	840	31419	90989	1443	8694	279	101406
3	**Wheat**	77343	2665	81502	812	16232	77527	2401	82740	745	16341	68524	6758	7677	723	152778
4	**Maize**	4553	558	1975	31	7117	4681	529	2273	110	7593	474	189	1225	99	1987
5	**Rice**	12503	1047	18447	681	16077	98689	1569	19389	752	14129	21029	7292	8230	194	38493
6	**Sugar**	94728	299	0	164	95191	19854	2182	0	344	20106	92824	9249	0	75	102148
7	**Potatoes**	5705	160	22550	0	28415	6242	71	24448	21	30782	4440	124	1594	8	20513
8	**Vegetable**	35471	3078	11390	728	15318	43602	4707	94599	106	14397	20732	1794	6508	700	88309
9	**Fruit**	14870	1241	26675	107	42893	19213	1628	30380	310	51531	17542	1589	2758	233	46953
10	**Melons**	12681	2455	31590	107	47798	12362	2154	25681	126	41457	6575	1039	1509	543	23251
11	**Grapes**	4353	48	5800	9	10210	5470	64	5714	57	11305	5180	87	5849	68	11184
12	**Clover**	36970	1604	10630	449	40087	33429	1577	14792	717	37204	20244	1913	1678	422	242582

		2001					Changes 1998 to 2001		
1	**Cotton**	20742	3291	0	247	24281	897,4	0,0	219,1
2	**Grain**	62880	1692	61349	163	14278	121,0	59,1	21,2
3	**Wheat**	53642	1266	55629	100	12294	475,2	68,3	123,8
4	**Maize**	510	594	1598	42	2744	106,5	80,9	135,5
5	**Rice**	8069	3290	1382	533	13274	31,4	7,5	7,8
6	**Sugar**	45181	7693	0	194	53068	2572,9	0,0	118,3
7	**Potatoes**	5234	388	21740	39	27401	242,5	96,4	0,0
8	**Vegetabl**	31723	6628	70706	695	10975	215,3	62,1	95,5
9	**Fruit**	20493	3261	25609	514	49877	262,8	96,0	480,4
10	**Melons**	11582	5994	15203	158	34363	244,2	48,1	147,8
11	**Grapes**	4870	143	5524	85	10622	297,9	95,2	944,4
12	**Clover**	12771	3909	19435	422	19047	243,7	182,8	93,9

Table 3.4: Animal husbandry in Khorezm 1998 - 2001

1998					1999				
SH	FA	HH	SF	Total	SH	FA	HH	SF	Total
5166	384	990	42965	49505	3289	285	977	45601	50152
21951	472	5524	322709	350656	21382	511	5267	334078	361238
19640	112	872	76800	97424	23953	582	756	76340	101631

2000					2001				
SH	FA	HH	SF	Total	SH	FA	HH	SF	Total
3520	330	1158	46821	51829	3439	349	1169	47349	52306
16709	462	7125	353379	377675	13968	181	5232	361974	381355
22176	406	843	81504	104929	20371	155	1334	82418	104278

Table 3.5: Fertilizer Usage in Khorezm 1998 - 2001

	N_ph_r	N_el_r	P_ph_r	P_el_r	K_ph_r	K_el_r
1998	174353	59261	21085	7681	1055	632
1999	145788	48890	30208	11700	3361	2019
2000	143529	48919	15134	5866	1268	760
2001	121483	39506	13652	6022	0	0

Table 3.6: Water usage in Khorezm

rayons	years	thousand cub.m/ha		
		norm	limit	real
total	**1998**	17,63	12,87	14,55
total	**1999**	16,62	13,14	15,8
total	**2000**	16,07	12,68	9,13
total	**2001**	11,83	11,72	5,78

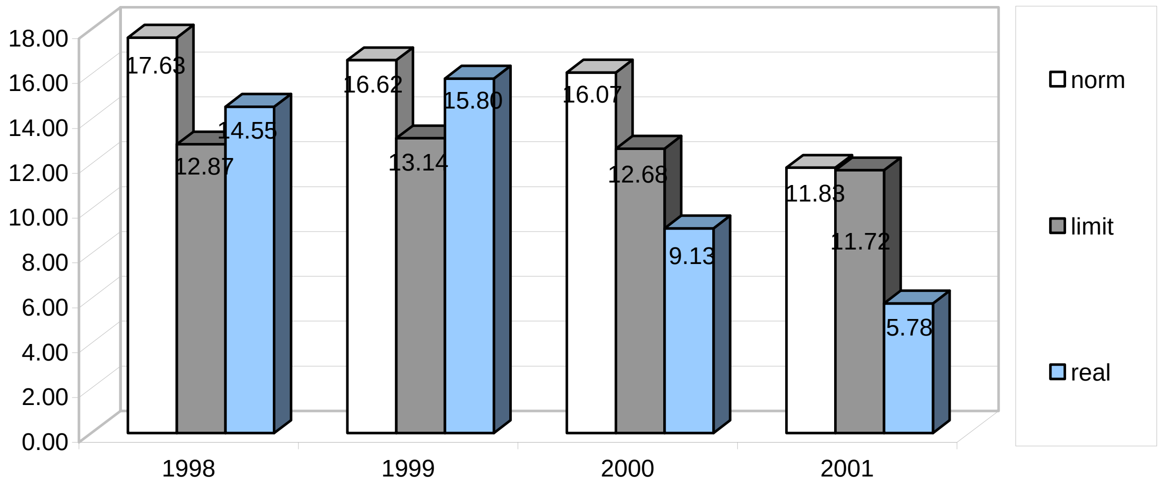

Figure 3.1: Changes in water consumption in Khorezm 1998 – 2001 (in m²/ha)

Table 3.7: Purchased amounts of seed by agricultural enterprises 1998 – 2001 (in 1000 tons)

Seeds	1998	1999	2000	2001
Cotton	20,5	11,4	16,5	8,8
Wheat	2,4	2,9	3,1	4,1
Rice	0	3,6	8,1	5,2

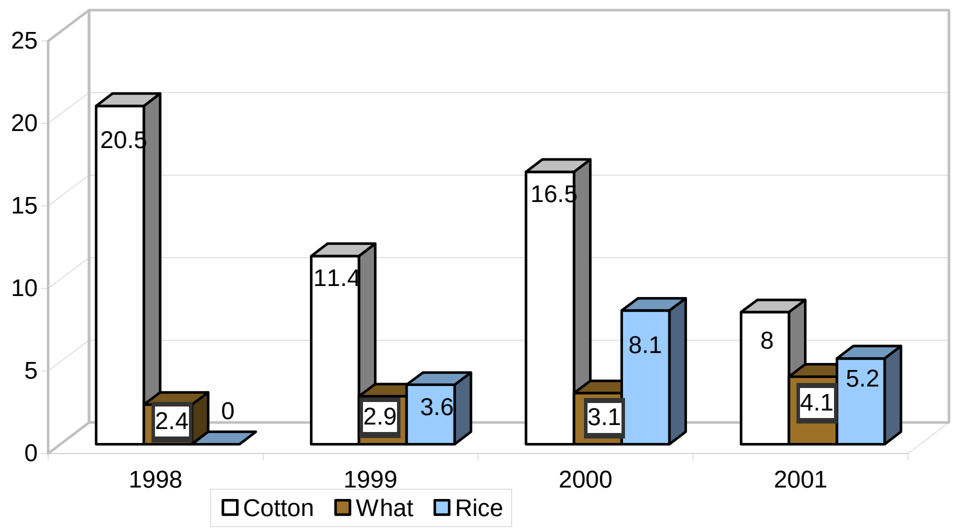

Figure 3.2: Purchased amount of seeds by agricultural enterprises (in 1000 tons)

3.2.1 Technical information

Table 3.8: Amount of agricultural machinery in use for 1998 - 2001

		Machinery (units)							
		1998		1999		2000		2001	
		SH	FA	SH	FA	SH	FA	SH	FA
1	**Tractors**	9887	141	9538	218	8964	390	8857	520
2	**Ploughs**	1889	32	1740	51	1599	63	1666	109
3	**Case combines**	49	0	48	0	48	0	84	0
4	**Grain harvester combines**	570	6	566	7	539	6	545	13
5	**Cotton picking machines**	263	0	97	0	45	0	42	0
6	**Pumps**	1721	5	1646	6	1577	33	1575	39

Machine Tractor Stations (MTSs) were created in an attempt to consolidate the use of machinery formerly belonging to collective state owned farms, cooperatives and other enterprises. Today the MTSs cultivate land according to contracts provide services primarily to those enterprises from which they receive machinery. MTSs are not usually interested in cultivating land for private farms or Dekhans, because these normally only have very small plots of land to cultivate and gains from cultivation would scarcely, if at all, cover the costs of transporting machineries to and from those small plots. Of course the distance between the MTSs and the land, which is to be cultivated, plays a role in this consideration too.

Despite of these considerations, by January first 2002 an actual amount of 78 private farms in Khorezm were able to sign contracts with “Uzselkhomachleasing” worth a combined 784 million Soums and providing for the delivery of 113 units of agricultural machinery and 7 tractor trailers.

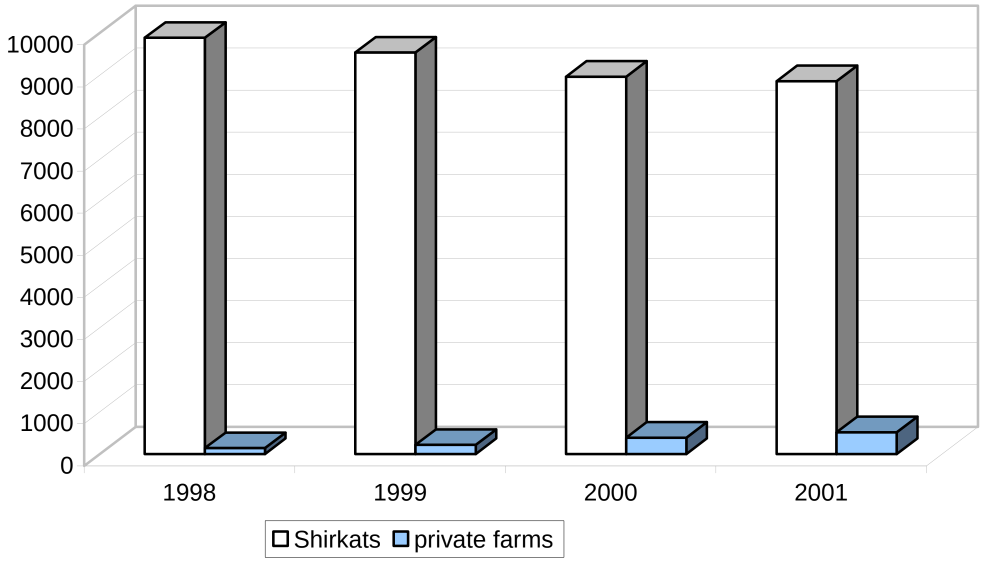

Figure 3.3: Number of tractors in usage on Shirkats and private farms

3.2.2 Capital available to farms

Table 3.9: Credits granted to small and medium scale businesses

Bank		Credits given for 9 months	Including		For 9 months of 2002	Including		Difference between 2001 and 2002	Including the credits which were given to Dekhan and farmer enterprises
			From bank sources	Outside of budgetary fund		From bank sources	Outside of budgetary fund		
1	Aloqabank	11.5	11.5	0	36.2	36.2	0	24.7	9
2	Asakabank	235.6	235.6	0	335.3	317.4	17.9	99.7	72.9
3	NationalBankofUzb.	504.8	1460.8	44	2511.7	2358	153.7	1006.9	235.7
4	Sanoatqurilishbank	461.3	459.7	1.6	652.1	610.2	41.9	190.8	57
5	Housingsavingbank	422.8	226.8	16	210.7	165.9	44.8	-32.1	18.2
6	Turonbank	17.1	17.1	0	118.3	117.7	0.6	101.2	5.4
7	Tadbirkorbank	461.3	392.5	68.8	532.1	390.7	141.4	70.8	113.6
8	Savdogarbank	62.9	4.9	18	77.6	69.6	8	24.7	8
9	Zaminbank	68.5	44.1	14.4	338.2	235.6	102.6	279.7	23.8
10	Gallabank	222.7	1351	87.6	234.4	162.1	72.3	11.7	59.8
11	Pakhtabank	442.5	336.3	106.2	657.8	590.3	67.5	215.3	179.4
12	Khalqbank	0	0	0	197.6	197.6	0	197.6	8.5
	Total	3711	3354.4	356.6	5902	5251.3	650.7	2191	791.3

The provision of credits to SMEs, Dekhan and private farm enterprises by financial institutions increased significantly during the last years. During the first 9 months of 2001 12 banks provided credits of about 3.7 billion Soums while in the same period in 2002 the credit volume amounted to 5.9 billion Soums. The major share of credits was provided by the National Bank of Foreign Economic Activity of Republic of Uzbekistan. (1 billion Soums, 25 % of the total amount).

3.2.3 Government fees, taxes and subsidies

By the law "On Private Farm" (30.04.1998), private farmer enterprises are freed from paying taxes for the first two years of their existence. However, the volume of taxes paid by farm enterprises has increased steadily and amounted to 66.8 million Soums in 2001. Government intervention in agricultural production is particularly significant in two commodity markets: cotton and wheat.

Table 3.10: Difference between the state ordered price and the market price for agricultural crops in 1998 - 2001

		Produced (ton)	State price (tons/Soum)	Market price (tons/Soum)	Difference between prices (tons/Soum)	Bought by government (tons)	On state price sold ('0000 Soum)
1998	Cotton	216898	24669	--	--	216898	5350656,8
	Wheat	162322	12440	16115	3675	40659	505798,0
	Rice	160770	33710	41810	8100	87140	2937489,4
1999	Cotton	290055	42121	--	--	290055	12217406,7
	Wheat	143413	21051	38488	17437	45086	949105,4
	Rice	141292	49620	43186	-6434	70216	3484117,9
2000	Cotton	199007	52200	--	--	199007	10388165,4
	Wheat	152778	28871	55240	26369	50078	1445801,9
	Rice	38493	61525	81733	20208	2427	149321,2
2001	Cotton	242811	80641	--	--	242811	19580521,9
	Wheat	122941	47890	48125	235	42706	2045190,3
	Rice	13274	118580	153936	35356	277	32846,7

Table 3.11: Taxation of private farms in 1998 - 2001

	Quantity unit)	Area (hectar)	Taxes (thousand Soum)
1998	1100	7972	9723
1999	1324	10462	21818
2000	2759	24968	40507
2001	3739	34196	66814

3.2.4 Contracts in agricultural production

Contracts are of major importance in the mechanisms of market economies. This holds especially true for enterprises engaged in the production of agricultural goods. The enterprises in the market economy must pay attention to market analysis and marketing strategies. The sale of these goods usually involves the signing of contracts. Such a contract will make specifications about the agreed upon price, which is paid/demanded for a product, its quality, quantity and terms of its delivery. When agricultural goods are involved, contracts will most likely also include specifications about the form of transportation, since agricultural goods are perishable and may be damaged during transport. Proper contract specifications will most likely always include responsibilities and the sanctions for the case these responsibilities are not met. Contracting usually takes place between producers and consumers, but there may also be contracting between a Shirkat its Dekhan enterprises. Regardless of between whom a contract is devised either party may appeal to court in cases of dispute and contract violation. As initially mentioned, contracts are of major importance to the mechanisms of a market economy, yet in practice it becomes evident, that many owners of agricultural enterprises do not understand and share this estimation. As a result those who actually produce agricultural products bear losses, which inappropriately stem from inefficient sales.

3.3 State regulation of the Agro-Industrial-Complex and essential mechanisms of Uzbekistan's food market

The Agro-Industrial-Complex (AIC) comprises the totality of interconnected sectors that are directly involved in the manufacture of consumer goods from agricultural raw material. Because of the high degree of interconnectedness between and within the sectors, any stable development of the AIC is dependent on its development as a whole. That means, that no one sector of the AIC, can achieve stable development in isolation. Sate regulation of the AIC bear this consideration at their essence and include the following aspects:

The first aspect is the preparation and training of AIC specialist entrepreneurs and other highly qualified specialists. Currently various special training centers provide training about the marketing and management skills mandatory in this sector. Examples for such training centers are:

- The Republican Business School
- Business Fund Center
- Republican Business Incubator
- Center for Development of Market Skills

In the year 2000 these institutions trained 32135 specialists, including 4505 heads of Dekhan enterprises and Farmer Enterprises.

The second aspect is that of adequately meeting the food processing industry's demand for agricultural raw materials. Considering the interconnectedness of the AIC's sub-sectors, one may conjure up various ways in which a reorientation of the food sector towards using domestic raw material may be beneficial, but this needs to be further examined. At present, thanks to state support, the number of agricultural manufacturers and farmer enterprises which produce and deliver milk, meat, vegetables and fruit to the domestic processing industry is increasing rapidly. As mentioned before, about 25% of domestically produced cotton is being processed within the Republic and the production of cotton-fiber has reached 1 million tons.

The Uzbek government has further implemented the following measures to support a steadiness in supply of food and other agricultural goods:

- It attempts to stimulate the constant renewal of the material and technical base of manufacturers in the AIC;
- Encourages foreign direct investment in AIC;
- Supports different organizational forms of agricultural production;
- Regulates the insurance system concerning hazards, which may be threatening to the AIC's development;

A third aspect of state regulations of the AIC is the formation and support of the price system which stimulates the stability of the population's supply and demand for food and other agricultural products.

The final aspect in the states efforts is the creation of an adequate infrastructure, which is to insure a stable food market and a stable market for technical equipment. This includes the support of exports of agricultural goods and the protection of local producers of agricultural goods in domestic markets.

The following page contains a listing of the forms and methods of state regulation on the AIC:

Table 3.12: Forms and methods of state regulation on AIC

Forms	Methods
Legal security	Adoption of essential laws
Financial support producers	Setting quotas Subsidies and compensations Definition of minimum prices Subsidized credits (with reduced or zero interest rates) by Business Funds of Dekhan or farmer enterprises Funds Preferred taxation (at present there is united land tax) Insurance State purchases (30% state order of cotton and grain yields) Protection of agricultural producers (Farmers Association, Ministry of Justice of Uzbekistan)
Infrastructure	Creation of food marketing system Creation of wholesale and retail market system Creation of goods exchange, fairs and others Creation of special banks for agricultural producers
Material and technical support	Uzbek company for agricultural machinery leasing "Uzagromashservice" association "Uzagrochemistry" service
Provision of AIC with specialists etc.	Preparation and training of entrepreneurs, managers and other personnel of AIC.

3.4 Trends of economic reforms in the agrarian sector

The economic reforms which have taken place in the agrarian sector of Uzbekistan follow a number of main trends, which we may summarize at this point:

1. To further strengthen and develop cooperatives (shirkats), private farms and Dekhan enterprises, giving them the right to autonomously allocate their products, by first decreasing and later abolishing "state orders" on cotton and grain.
2. To further develop private farm enterprises in those cases, where economic and social gains can be expected from doing this. This usually takes place on the land of shirkats bearing losses or with very low profits. In accordance with the Decrees of the Cabinet of Ministers of Uzbekistan № 243 from 13.05.1999 and №543 from 25.12.1999 8 unprofitable enterprises in Khorezm and 8 government enterprises in Karakalpakstan and Syr Darya region were re-organized into 1022 private farmer enterprises. The number of private farmer enterprises in Uzbekistan on 01.01.2002 totaled 55445. They cultivated a combined 1054.7 thousand hectares of land and produced 569 thousand tons of grain, 549 thousand tons of cotton, 31 thousand tons of potatoes, 129 thousand tons of vegetables, 11 thousand tons of meat, 54 thousand tons of milk and 11,982 thousand eggs in 2001.
3. To elaborate on and to implement measures which will help sustain sufficient quantities of water and land resources, while at the same time increasing yields of agricultural crops and improving livestock productivity. Steps towards achieving this goal have already taken place in the form the introduction of new water saving methods in land irrigation and the introduction of high-yielding varieties of agricultural crops on a large scale. There have also been improvements in the melioration of land.
4. To provide agricultural enterprises with a material and technical basis and with modern equipment and machines on lease basis. In accordance with the Decree of the President of Uzbekistan on "Measures on further stimulation of lease system" all lease payments are free from VAT (value added tax), also all technical equipment, imported to Uzbekistan is free from all customs fees and VAT. This Decree is to inspire further strengthening of the material and technical basis of agrarian producers.
5. To implement a system of incentives to improve the productivity of workers in the agrarian sector and to increase the salaries of the workers in Shirkats.

4 MARKET ANALYSIS

4.1 Technical description of the empirical study

9 different commodities, typical for Khorezm, were chosen for the price analysis. Except for the price of meat, the prices were neither fixed nor adjusted by the state. A questionnaire was generated, in which it was attempted to classify each product into three categories, which would more appropriately account for differences in the quality attributes of the respective products and these attributes influence on the respective prices. Prices were determined each Sunday at 10 a.m. and the same seller was interviewed, in order to establish confidentiality. It is necessary to note, that markets in Central Asia differ significantly from markets in Europe, where the specified price for a product is in deed its final price.

In local markets in Uzbekistan and Khorezm the listed price is not necessarily the final price, but instead it may end up 5-25% below the initial price given by the sales merchant. Error in the process of determining the real prices may occur because of this given fact.

Table 4.1: Overview of markets in Khorezm

City	Name of the market	Location and types of services	Speciali-zation	Number of trade places	Work days
Urgench	Central Universal Market	Located in the center of the city; serves population of Urgench city, Urgench and Khanka rayons(districts)	All types of agricultural products except cattle	1050	Every day
	Chalish Market	Located north side of the city; serves north side of the city and Urgench rayon	Cattle, Vegetables, fruits and grain products	250	Wednesday and Sunday
	Goybu Market	Located north side of the city; serves north side of the Urganch rayon ,Koshkopir rayon and Khanka rayons	Cattle, grain products and Vegetables	300	Sunday
Khiva	Central Market (Caravan saray)	Located in the center of the city; serves population of Khiva,Koshkopir and Yangiarik rayons	All types of products except cattle	500	Every day

4.2 Price analysis for different agricultural products

Meat

The analysis of the prices for meat over a longer period of time shows that increases in prices of meat seem to correspond to the growth of inflation in the country. Except for the typical and seasonal factors influencing (i.e. supply and demand, the resource of cost, levels income of a settlement and etc.) the dynamics of the prices for meat in a research period, it is necessary to note two factors which appear to have affected the price of meat during this period:

1. Fluctuation of the informal dollar rate per one month in June;
2. Administrative measures to stabilize the price of meat undertaken in the beginning of July by the city's administration.

Meat occupies a special place in the local market, as the majority of the population considers cattle and sheep as a form of savings; a fact, which can be interpreted as mistrust of savings banks amongst the population. One of the factors responsible for the fluctuation of the prices on meat in June (a fluctuation between 1700 Soums / kg and 1800 Soums / kg), was a sharp decrease of the Dollar's value on the black market (the value of the Dollar decreased from 1300 Soum / $ to 950Soum/ $). In a sort of panic, people responded to this, in part, by transferring their savings into other forms of savings, including the purchase of cattle, which in its turn gave cause to a rise in prices on meat.

In order to stop the sharp increases in cattle prices the city government, using their authority to fix the price for meat responded. Hence, during this period, in which prices were fixed, the dynamics of the prices reflected a higher level of stability. As this measure had an administrative character it could influence the dynamics of the prices only for a limited time.

Eggs

It is necessary to note that the costs for the local production of eggs, which is based on cereals and other fodder, are high if compared with enterprises in many other countries and that the profitability of egg production is relatively low. The reasons for this observation include the following:

1. High cost of fodder in the Khorezm region;
2. Imperfection of technologies because of which no economies of scale are realized;
3. Weak productivity of breeding material;
4. Weak management and weak marketing in the egg sector;

As to the dynamics of the prices of eggs in the researched period, the reason for the significant decrease from 60 Soum to 47 Soum during June 2nd and July 7th can be seen, in the decrease of the prices for wheat, which is the main fodder resource in fowling.

Rice

Rice is considered to be a traditional product of consumption and is an integral part of the national Uzbek kitchen. Therefore it traditionally plays an important role in the region's agricultural production. There are state and market prices for rice. The state buys rice for a fixed price on the basis of their contracts with farms. The price is determined on the basis of established norms resulting from average productivity and quality of the sown areas. The dynamics of the prices for rice show a decrease of the prices for rice, which is characteristic for the summer period, when all farmers and peasants sell their stocks following the harvest.

Yet if we compare the rates of the price reduction with the identical period of the year 2001, we see that rate of this price reduction for the current year is bigger than was the case in the previous year. This is due to a prediction in 2002, that the available volume of water in the river Amudarya would be sufficient for high earnings and the state order for sowing and producing rice was therefore expected to be much higher than in 2001 which, in its turn, was a serious drought year. Last year, because of the actual lack of water resources, the sowing of rice was restricted by a special decree by the Ministry of Water and Rural Resources which has significantly influenced the volume of locally produced rice.

Sour Cream

Trade of milk products has the following particularities:

- milk products are perishable products that require an additional expense in
- the manner of refrigeration equipment;
- in view of the absence of the terms of long keeping milk products, trade is basically made in the morning times, near the houses;
- the population of the region consumes sour cream products, particularly in summer;
- very small assortments of milk products are available in markets because of the retarded state of processing technology. The dynamics of the prices on sour cream are not stable but the total trend shows that in the summer time demand for fat milk products falls, while with approach of autumn prices on such products increases.

5 CONCLUSIONS

The conclusions from this paper can be summarized as follows:

- The private farm enterprises depend on large agricultural enterprises (Shirkats) and other large agricultural service and input supply organization with respect to the provision of financial, material and technical resources. This constraint may be one explanation why the share of private farm enterprises in the total sowing area grows at higher rates than their share of gross output of agriculture does.
- Credits, which are taken by private farm enterprises, are insufficient for the acquisition of farm machinery. Therefore the material and technical base of private farmer enterprises is not being enhanced sufficiently.
- The lack of a well developed and effective network of market institutions, middle- and salesmen etc., which provide services to private farmers and Dekhan enterprises, hampers the development of these farm types
- Taking into account the low level of economic and legal knowledge of farmers and Dekhan managers it is necessary to create and support training centers, which provide vocational education particularly with respect to the economic and legal aspects of these types of farms. Measures should be taken to increase the responsibility of Farmers Associations and Associations of Dekhans. These Associations should represent the interests of private Farmers and Dekhan enterprises on a regional and district level.

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