

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

72

Author:

Dr. Ernô Péter BOTOS dep.dir.

Offical address:

Research Institute for Viticulture and Enclogy,

University of Horticulture and Food Industry,

6000 Kecskemét, P.O.B. 25, HUNGARY

phone: 76/486311 fax: 76/327599

The Humgarian Wine Sector, Traditions and Outlook

Summary

The Hungarian wine traditions go back to several centuries always playing an important role in the national economy as well as in peoples' way of life. The economic growth of the sector have fluctuated irregularly in accordance with events of e.g. phylloxera disaster, establishing cooperative and state wineries, increas and later cut of wine export, planting large scale vineyards in 60's and 70's and finally the recent privatization and partial recompensation programmes.

The Hungarian grape sector has never been collectivized completely private growers represented over 60% of the grape production (cooperatives 25% and state 15%). In the processing sector large state and cooperative wineries integrated private small scale growers. The state monopoly in export-import was over at the beginning of 80°s. Vineyard surface is decreasing (130.000.- ha) and in the past 50% of 4.500.000.- hl national wine production was exported now this figure hardly reaches the 35%.

Because of location of vineyards at the north limit of the world grape growing areas the ecologic potential and thus wine characteristics show great variance among the 20 wine districts producing mainly white wine and less red wine. Unfortunately nowdays now commercial vineyards for table grape are cultivated.

The domestic wine market is started to become differentated introducing many new segments of yearly 33 litres per capita consumption from the cheapest wine to the expensive premium wines. This development is also stimulated by the recently running privatization.

The most famous Hungarian wine is the Tokaj wine building up its reputation for many centuries. The Tokaj wine laws since 1715 were the first ones as the beginning of appellation origin control. Aszu Tokaj wine (sweet wine from Botrytis rot grapes) is a unique type produced in 1650 at the very first time. Now Tokaj wine area is also privatized and already 8% of the vinyard surface is bought by foreign enterpreneurs owning some famous hillsides, plots and traditional wine cellars. Hungarian grape growers in Tokaj region also trust in and work for the better market results in the future.

BOTOS, Ernő Péter

The Hungarian Wine Sector, Traditions and Outlook

1. Introduction

The Hungarian grape production has never been state monopolized or collectivized. Private share was over 65% and cooperatives (20%) were also dominant, state vineyards covered only 15% of national surface. State monopoly in export-import trade was over by the beginning of 80°s.

Hungary is about to undergo the necessary steps of progress but the visible result is expected in at least over 5 years from now.

2. Traditions of grape and wine in Hungary

The viticulture of Pannonia expanded during the roman imperial rule. The development was in connection with the name of emperor PROBUS (276 - 282 A.D.). Grape growing extended to vast territories up to the river Duna (Danube).

In the Middle Ages the viticulture gained ground at the secular and church lands and wine became one of the most important economic factor. The customs orders of the kings also helped the export of wines. During the reign of king MATYAS (MATTHIAS, 1458 - 1490) the viticulture and enology of the Middle Ages were in the height of their glory, while the Turkish occupation retarded their development.

The flourishing of grape growing in Tokajhegyalja and also the domestication of producing red wines fell in the 14th century. The viticulture in Tokajhegyalja reached its fame during the reign of Prince RAKóCZI Ferenc (1703 - 1711). The grape growing and wine trade were lively in the 18th century. This is also the time for the authorization of plantations for binding the drift-blowing sandy soil of the territory between the rivers Duna (Danube) and Tisza.

The education of viticulturists and enologists began in the 19th century and nowadays it gives qualification up to a university degree in Hungary.

At the end of the 19th century a great part of the Hungarian grape plantations were destroyed by phylloxera and were largely contaminated by peronospora and powdery mildew that were hardly known before. The characteristic of this time was the greatest change in the viticulture of the modern times: application of grafts, ploughing up of soils, determination of intervals between rows and vine-stocks, discrimination of wine growing areas, change of pruning system, determination of plantable varieties, introduction of trellissing system.

After 1945 great changes occured. These refer to property nexus (e.g. nationalization of wine trade), increase of land and income taxes, total change of the administration department, and decrease of production level. Despite collectivization there are important territories of grapes that remained in the private sector.

From the late 50s there was an increasing development of production. The government gave significant support for the improvement of grape and wine production of state farms and cooperatives. In these plantations the characteristics of production are referring to production with wide row spacing, high-cordon training systems nowadays as well. The change of varieties, the spreading of mechanical technics, the chemical processing of production are also characteristic to this period. Despite the great changes the average crop yield did not increase in the last 20 years. The characteristic symptomes of the defective economy also afflicted viticulture and enology. Up to the last few years the export played an important role, while the domestic consumption gradually decreased, the improvement of technics and technologies in enology has stopped.

3. Technical and economic aspects of the grape production

3.1. Ecologic conditions

Ecologic conditions in Hungary are excellent for white wines and very good for red wines in the South of the country with mediterranean influence as well. The Great Plain, where almost the half of the vineyard surface is located, featured by continental climate which means hot dry summers and cold winters. The other wine districts are situated in the hill and mountain areas and vineyards are mainly planted on slopes exposed to the direction of the South. The figure 1. shows an aggregated evaluation of the national vinayrds site registration system (over 400,000 ha as well as not planted but potential lands for grape vine included) evaluating from ecologic point of view. This is based on 18 ecologic factor e.g. altitude, exposition, frosts, characteristics of soil etc. The ecotops (homogenous

through these factors) of vinyards (or potential lands) are evaluated by scoring system 0-400 marks as well as clustering analyses into I.II.III and IV classes. The map indicates better ecologic conditios by darker colours, and lights mean higher risk in grape production.

3.2. Wine districts of Hungary

Recently modified wine law has been passed in reaction to all the production and market problems. The area of vineyards is constantly decreasing at present 125000 ha. However its production potential is almost the same as it was due to positive selection.

The new wine law describes 20 wine districts (Figure 2.) replacing the 16 former ones, and it aims to regulate smaller and smaller areas, paying much more attention to ecological potential and quality factors. Hungary is famous for spicy, flavoured white wine which is more marketable than red wines produced in limited areas (we regard Eger, Sopron, Szekszárd and Villány areas as red wiune districts). In fact there is no large scale table growing district in consequence of insufficient ecological conditions for the table grape.

3.3. Vinevard management

The special feature of the Hungarian grape growing is in the fact that half of its territory is cultivated by a wide row spacing system with a little number of stocks and using high cordon trellis training system. The other half of its territory is cultivated by private owners in an integration system using great number of stocks as a traditional system that need little loading of buds on a grape-vine stock.

Characteristics of cultivation

in larger scale

in private scale

- (2,500-3,300 pes/ha) (6,000-15,000 pes/ha)
 - high number of buds/grape-vine little number of buds/grape-vine
- cultivation based on machinery essential manual work
- little manual work demand (1,000 hours/ha or more) (400-600 hours/ha)
- few number of stocks great number of stocks

The principal property classifications in the grape and wine industry are as follows.

a. private vineyards

i. family vineyards

These are used to produce grapes and wine principally for own and local consumption. These vineyards are one or two decares in size and are not subject to taxation nor to the privatization process.

ii. commercial private vineyards

These range between 2 decares and 5 hectares in size and some of them have relatively well equipped wine cellars. They are integrated into cooperatives or through contracts with state wineries. Although not subject to privatization directly, these vineyards are affected by privatization of the wineries with which they have been integrated.

b. cooperatives

i. real cooperatives

There are only a few of these in the wine sector and they are modeled after the wine cooperatives of western Europe. The cooperatives are formed by members with private vineyards for the purpose of producing and selling wine and related products. They typically range in size between 20 and 800 hectares and produce 10,000 to 40,000 hectoliters of wine. Privatization affects these cooperatives only to the extend that members decide to sell off their winery assets.

ii. "pseudo" cooperatives

These cooperatives were formed by taking over land and becoming employers of the former owners. In this form, the land belongs to the cooperative which employs workers, experts and managers without regard to their former land ownership status. Some of these are really large scale. Land in vineyards typically ranges between 50 and 1,000 hectares and winery capacity may reach 80,000 to 100,000 hectoliters. Management is elected by cooperative members. Under the privatization and recompensation program, these cooperatives must give property shares to their members and restore land to former owners.

c. state properties

i. state farms

At the start of the privatization process, there were 13 state farms that cultivated grapes and made wine. They also had agricultural enterprises in livestock, cereals, fruit and other commodities. Typically,

these farms owned 100 to 1.000 hectares of vineyard and had the capacity to produce 100.000 to 300.000 hectoliters of wine. About one-half of their grapes were contracted from privately owned vineyards. Management was initially appointed by the State but more recently has been elected by a Farm Council. These farms will be privatized through the recompensation program for former land owners and through various arrangements including complete, subsidized or conditional buy-out.

ii. state wineries

At the beginning of the privatization program there were 6 state wineries located in different wine areas. Their business is only wine and related products such as brandy, and their principal economic role has been the integration of smaller cooperatives and state farms. They are typically large, with capacities ranging from 100,000 to 700,000 hectoliters.

The structure of Hungarian vineyards is outlined in Table 1.

Table 1. The allocation of Hungarian vineyards, 1990, before privatization

Ownership	198	81-85	1986-90 1	990	Distri	bution,	1990
	danis i.	1,000	harvested hectares	71	pe	rcent	
Private		72	75	78		71	
Cooperative		33	28	24		21	
State		24	15	9		8	
Total		129	118	111		100	

Source: Government of Hungary, National Statistics Center, 1991.

4. Wine production

4.1. Domestic market and wine consumption

For a decade wine consumption seems to have fluctuated around 25 litres per capita. The great change took place in the 70°s when beer consumption increased to 80 litres per capita in contrast to the wine figure decline. Surprisingly recently the wine consumption figure goes up to 33 litres per capita mainly due to very cheap (0.5 USD/1) unbottled bulk wine sales by producers. (Up to certain limit of income small producers are allowed to pay no tax.) These wine are very compatitive with beer and many consumers

have changed their drinking habit for wine. In spite of this figure for long term the wine consumption is expected to be stabilized around 30 litres per capita (Figure 3-4.)

In Hungary 70% of the women buy sweet and semi-sweet wines, one-fourth of them prefer the semi-dry ones, while 10% of them give preference to dry wines. Few men like sweet wines. The number of men preferring semi-sweet wines is surprisingly. More than half of the men buy semi-dry or dry wines.

According to a study more men looking for brand or wine type than women. There is no great difference between sexes in categories "ask for advice" and "take choice by own". On the other hand 10% of women do not make a select opposite to 6% of the men.

Very different the frequency of wine consumption in the sex groups. 24% of the men admit they drink wine day by day opposite to 4% of women. The most men drink wine every few days. The women have 11% in this category. Almost the same the rate of the sexes in the "weekly" group. 67% of the women drink wine rarely. Only one-fourth of the men belong to this category.

The major share of the Hungarian women (63%) and the Hungarian men (75%) regard the grape-variety characteristic as the most important feature. The next important factor is the price in the opinion of 53% of the women and 42% of men.

4.2. Wine export of Hungrian wine

The two biggest market shocks for Hungarian wine were the Soviet market crash and the German "wine market reunification". (Formerly was an other one due to the ex-U.S.S.R. anti-alcohol campaign launched by Mr. Gorbatschow in middle of 80s.) Hungary was extremely interested in both markets. The ex-U.S.S.R. imported 1.5 millions hl. of Hungarian wine, ex-G.D.R. and others 0.5 millions. Now Hungary has only a frame contract with the Russia based on a hard currency payment and wine is not mutually regarded as a strategically important good. In spite of recent difficulties Hungary is trying to keep its position in the Russian wine market in the long term (Figure 5.).

This problem is partly due to the decrease of wine export profitability of the Hungarian wine. Table wine produced better export results in profitability than quality bottled wine in the recent past. The confusing barter trade caused this value inverse. The DRC (domestic resource cost

coefficient) shows this trend as well as smaller and cut subsidy comparing to the EC figures.

5. Privatization and its impact on the wine sector

Initially, the Hungarian public were strongly supportive of privatization. For many it represented an opportunity to take part in ownership. More recently, the public have begun to question it. Some believe that privatization is leading to more centralization because firms will be consolidated into large private organizations. Others are concerned about illegal privatization involving past officials and misappropriated funds. Still others fear a sell-out of Hungarian assets and jobs to foreigners with a consequent widening of the gap between the rich and the poor.

The State Property Agency (established to handle the sale of properties) and State Holding Company (established to represent state property) use four procedures in disposing of government assets:

- [1] limited competition,
- [2] open competition,
 - [3] open auction.
- [4] selected and comissioned.

Privatization strategies are studied and analysed as follows:

- 1. Joint venture
- 2. Complete buy-out
- 3, Conditional buy-out
 - 4. Subsidized buy-out
 - 5. Sale to members
 - 6. Partial recompensation

Criterion variables against which to evaluate privatization:

A. EQUITY PRICE

- 1. Revenue to the state
- 2. Income to the sector

B. QUALITY FACTORS

- 3, Management quality
- 4, Technology improvements
 - 5, Cost reduction and/or efficiency

- 6. Quality of new product
 - 7. Marketing

C. FIRM STRUCTURE

- 8. Integration through ownership
- 9, Integration through contract
- 10, Firm size

D. SOCIAL IMPACTS

- 11, Employement
- 12. Other local/regional impact

The evaluation matrix is composed of privatization strategies and criterion variables having scored each cell of 1 to 5 with 5 indicating the greatest impact or level. Theoretical potential result is also compared to the practice, to our experiences.

The results were used to estimate scores in each cell of an evaluation matrix of 6 privatization strategies 12 criterion variables. Certain values were estimated based on theoretical expectations and are considered to be hypotheses. The results are shown in Table 2. and are discussed in following paragraphs. The discussion is linked to Table 3 by indicating the line number (1 through 12) and the strategy designation (B thorugh G).

There is a considerable difference between the short and long term impacts of various strategies on employment and regional economies. Those strategies that have the least short term impact on these variables are likely to adverse long term effects because of their poor competitive outlook.

There is not one privatization strategy results in optimum but depending on goals some of them or their combinations in the practice may have higher benefit to the state or the sector. In the most cases contradiction is pointed out between short and long term goals, sector's and state's interest, firm's and regional impacts.

The privatization programme in Hungary has been running for a couple of years having roots in the past. Many state wineries have already been bought, common properties are being sold to members above all in cooperatives and also coupon system is introduced so as to carry out partial recompensation which prefers old owners.

Unfortunately privatization is also joined with external economic problemes including market difficulties (e.g. former the U.S.S.R. wine market loss) and national economic recession.

Table 2. Estimated impacts of privatization strategies on criterion variables. Hungarian wine industry, 1992.

grides to todebted to this been	Strategy					
Criteria	В	C	D	K	Ł	G
Equity price	is was		ado di			
1. to state	3	5	4	1	1	1
2. to region	4	1	3	5	2	3
Management						
3. quality	4	5	5	2	2	1
4. technology	4	5	4	3	2	1
5. cots	4	5	4	3	2	1
6. product	5	5	5	3	2 ·	1
7. marketing	5	5	5	2	2	1
Structure						
8. integration by ownership	5	2	2	4	5	1
9. integration by contracts	2	5	5	3	1	3
10. firm size	4	5	5	2	1	1
Impacts						
11. employment	3	1	3	4	5	4
12. region	3	2	3	5	5	4

Strategies are as follows: B= joint venture; C= complete buy-out; D=conditional buy-out; E= subsidized buy-out; F= member buy-out; G= recompensation program.

Scores are relative probabilities that strategy will have a significant impact on the criterion variable. 5 is high and 1 is low probability.

6. Tokai wine

6.1. The story and tradition of Tokaj wine

In the Tokaj-Hegyalja area vitiviniculture has a long tradition.

It is believed that attempts to adulterate the wine have been made all the time. In Hungary King Charles III. ordered the confiscation of the adulterated wine in 1723.

The first aszu (botrytis infected berries selected from the cluster)

wine was made on the Easter of 1650 by Máté Szepsi Laczkó Reformation Church preacher for Zsuzsanna. Lorántffy consort of a reigning prince from the Oremus vineyard belonging to the estate of Sárospatak. The technology of aszu which is valid and used even today can be indebted to Máté Szepsi Laczkó.

According to the XVII. Act of 1908 Tokaj wine may be made only from the vineyards of hills of the Tokaj wine-growing area. It is prohibited to blend Tokaj wine with others. The second section of the IX. th statute of 1924 contains the special regulations related to the wines of Tokaj-Hegyalja. This Act includes the names and the chemical parameters of the wines of Tokaj-Hegyalja. This is the first statute where the chemical parameters are shown.

The V.th statute of 1936 widens the assortment of Tokaj wines with grape-wine, 6 "Puttonyos" /tubs/ Aszu and the Tokaj Essence.

The designation of origin is a higher standard of the signs of origin. Tokaj wine is a product of such quality. The special and unique characters are determined by the geographical environment where the wine comes from and this is the designation of origin.

At present companies in 13 countries of the 5 continents put their own wines with "Tokaj" name into circulation. These wines have nothing to do with the real Tokaj wine. At the same time they mislead the consumers and these wines cause prejudice to credit of the real Tokaj wine.

The false Tokaj wines known up to now are the following: "Australian Tokay", "Carmel Tokay" /Israel/, "Tokay dAlsace", /France/, "Flurlinger Tokayaer"/Switzerland/, "Tokajec Tokaj" /Yugoslavia/, "Tocai Friuliana" /Italy/, "Israel Tokay", "California Tokay", "Canadian Tokay", Tokaj Juzsnoberezsnij" /Crimean Peninsula, Sovietunion/. In addition to the above mentioned, wines from Ethiopia, Romania and Czechoslovakia are put into circulation under the name of "Tokay".

The wonderful exposure, climate, soil, the Furmint and Linden-leaf grapes, aszu, the centuries old method of ripening and treating of the wine and the specialists and of course the famous cellars here made the Tokaj wine "princely". All these together result in the Tokaj wine. All over the world people tried to imitate it, but they failed, because the components mentioned above are together only in this very small part of the world, so that they take shape only in the real Tokaj wine. The Tokaj wine is unique among the wines of the world, to preserve its speciality, and to protect it is our noble duty.

Table 3. Privatization in Tokai wine district

	1990. Before privatization	1993. April After privatization
vineyard surface, ha	6.200,-	5.100,-
state owned vineyard, ha	1.100	73,-
rivate enterprises (winer	ies)	29,-

The result of privatization is 33 private wineries representing 90% of the total grape production of Tokaj. They include 19 wine celler cooperatives, 5 limited companies (2 Hungarian and 3 foreign ones), 4 share companies (by French, Japanise and Spanich investments), and 1 wine trade house as share company as the legal successor of certain parts of the Tokaj State Winery. A famous hillside (Szarvas "Deer") and a cellar will still belong to the state through experimental station.

Foreigners represent only 9% of vineyards but their importance is high for wine cellers which buy grapes from growers and owning the most famous hillsides and best quality plots as Megyer, Pajzos, Oremus, Hétszőlő (Seven Vines), Disznőkő (Pig rock) etc. Spanish, Danish and Japan capital have interest in Tokaj, and GMF, CANA and AXA French companies are also in the business in Tokaj area owning 50-70 ha of each.

6.2. Tokai wine markets and consumption

Domestic market

Tokaj wine sales account for under 2% of Hunfarian wine consumption. The Szamorodni and Aszu wines (the characterics of Tokaj types of wines) accounting for some 30% of production clearly outprice themselves in an economy of low disposable incomes. The table wines and varietals (Furmint, Hásrlevelű and Muscat Lamel) account for the rest of sales. Furmint marketed as an oxidized wine and is clearly a tradition in the area and appriciated.

Since Aszu and Szamarodni wines are unique to Tokaj, thier appeal is likely to continue, especially for an increasing tourist market who are more likely to posses the spending power. Export markets

Since the downfall of the east bloc market which accounted for an average 95% of export trade before 1991, there have been few signes of recovery in 1991 and 1992, although the potential to redevelop this market on free market lines is promising but long term. The necessary market structure and distribution chains will first need to be established. Poland, Czech and Slovakia were also significant markets for Tokaj wines and ther is no reason why these traditional markets should not be re-established, although in the same way as the CIS, consumer disposable income is low. Future sales potential in the hard currency markets should be dedicated towards education and image building. The sweet Tokaj wines being oxidized also have a unique flavour, and owing to their costs of production will never compete in the mass market, but are more connoisseurs drink and very much compete with great sweet wines from Bordeaux, the Mosel and the Rheingau in terms of image and many would say, quality. The potential for future increased sales is limited but positive.

References

- Bodnár, S. (1991): Quality and origin protection of the Tokaj wines. 23-28.
 in "Vine and Wine Economy" edited by E.P. Botos, Elsevier,
 Amsterdam, 336 pp.
- Botos, E.P. (1991): Vine and Wine Economy. Elsevier, Amsterdam 324 pp.
- Botos, E.P. (1990): Developments in appellation origin control system and its role in the wine sector. Hungarian Acedemy of Sciences, Budapest, 123 pp.
- Botos E.P., K.Moulton, A.Buckwell (1993): Evaluation of privatization strategies in the Hungarian wine sector, economic and marketing aspects. Szôlô- és Borgazdaság. Budapest, 3./1/,9-15.
- Botos, E.P. (1989): Il catasto ed il sistema di classificazione delle aree coltivate a vite in Ungheria. Vignevini, 16.7-8.25-30.
- Cseh, A.-Kecskés, L. (1991): Marketing study on wine consumption in Hungary.
 in "Vine and Wine Economy" edited by E.P. Botos, Elsevier,
 Amsterdam, 336 pp.
- Csáki, Csaba "Agricultural Policy Changes in Eastern Europe at the Beginning of the Nineties". American Journal of Agricultiutal Economics, December, 1991.

Figure 1. Ecologic potential for grape-vine in Hungary. (Evaluation based on national registration)

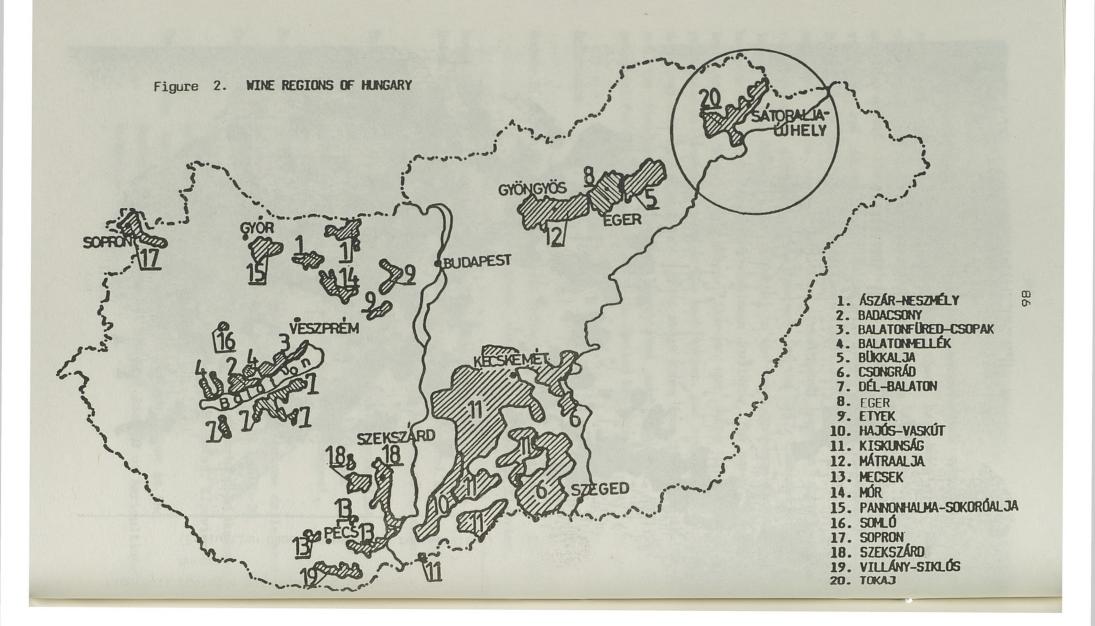


Figure 3. DEVELOPMENT of ALCOHOL CONSUMPTION

litres per capita (in spirit)

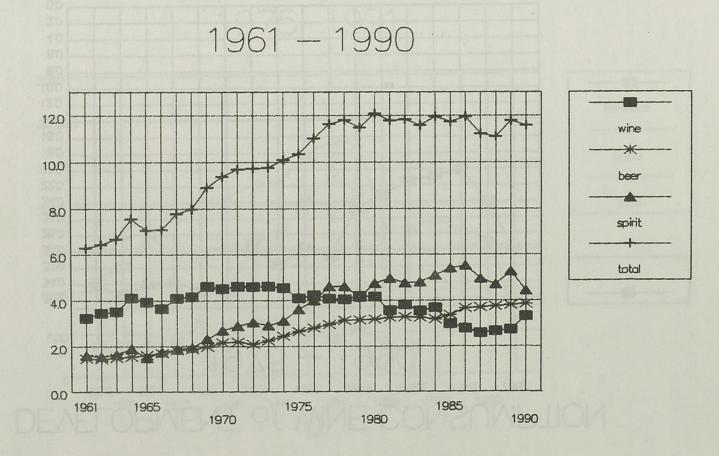
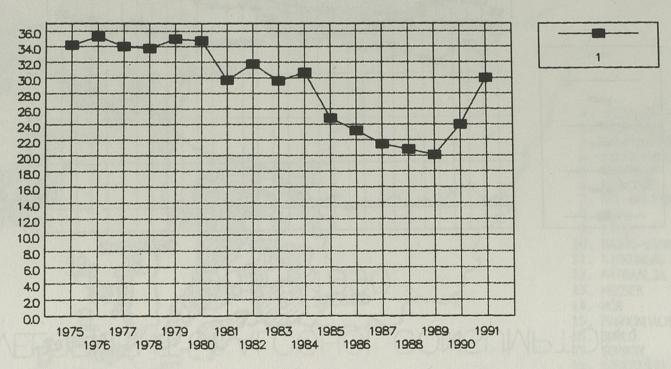


Figure 4. DEVELOPMENT of WINE CONSUMPTION

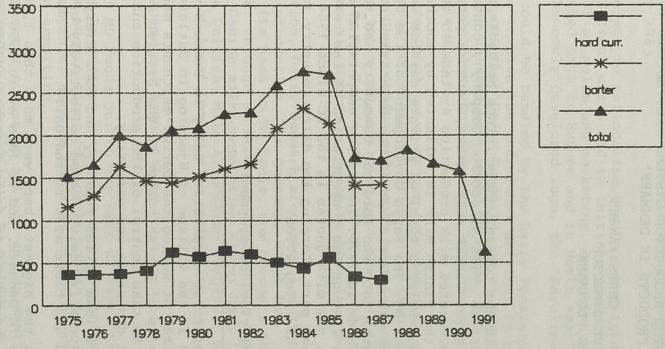
1975 - 1990



tres per capita

DEVELOPMENT of WINE EXPORT

1975-1991



Hectofiter

Year