



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

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.*

Total Incomes of Farm Families in Finland

By

Prof. Maija Puurunen and M.Sc. Minna Väre

Paper Presented at
Workshop on the Farm Household-Firm Unit:
Its importance in agriculture and implications for statistics
12-13 April 2002

Wye Campus
Imperial College, University of London

TOTAL INCOMES OF FARM FAMILIES IN FINLAND

1. Introduction

In 1995 Finland joined to the European Union as the northernmost country. The membership in the EU caused significant changes in the Finnish agricultural sector. The whole food production chain had to face a new competitive situation. Changes concerning the abolition of border controls and decrease in the producer prices had a great influence on the livelihood of the farming population. The number of farms engaged in agricultural production has fallen rapidly in the last decade, and the average farm size is increasing. Both of these trends are expected to continue.

Income development of farmers and profitability of agriculture are most critical issues in the adjustment process of agriculture, and some results of the recent studies on income development and estimates concerning the Agenda regime have been presented in this paper. Discussion on the increased support bound of the agriculture cannot be avoided, because in Finland the farm income would be zero or negative in all production lines without any direct support. According to some recent studies on the impacts of Agenda 2000, the average farm income would slightly increase at the farm level. However, the positive income development depends on the development of input and output prices, of which input prices have mainly raised according to the general inflation. Most of the national aid is longstanding, but for the livestock and horticultural production in the southern parts of the country the agreement has to be renegotiated every few years. Next time the aid measures for South Finland will be reassessed in 2003. MTT Economic Research is responsible for most of the income and profitability calculations needed in the Ministry of Agriculture and Forestry for the negotiations.

From time to time income studies have been more in focus in Finnish agricultural policy; in late 80s and early 90s comparisons of income development between farmers and other salary earners were mentioned in the agricultural income laws, and for that the MTTL had a longstanding research project in collaboration with the authors of income statistics. In that connection research was mainly directed to income concepts and development of data sources (Puurunen 1990). When Finland joined to the EU effects of the common policy on farmers' income and profitability of agriculture became very important research themes and separate research programmes were based for that in Finland. At that time more effort was put to the prognoses of income and profitability development. The old income study became also topical especially for the total income formation of farm families. Pressures for a strong structural reform were seen in agriculture, which emphasised additional need for part time farming and importance of income sources out side of the farm. In 2000 Minna Väre brought up to date farmers' income study (Väre 2000).

In the following we have first briefly described the change in the farm structure and investments during the EU-membership, which is on the background of the income development of farmers in recent years. Some income concepts and structure of the statistics used in the income comparisons of Finnish farmers and other population groups has been examined in chapter 3. Income development of farmers in sector level and in different farm groups are examined in the chapter 4. In the beginning of the chapter 4 some figures of the total calculation of agriculture have been presented, and in addition to the income developments during past few years some references to the ongoing scenario work on the effects of Agenda 2000 at the MTTL have been taken with. On the farm level the income formation of farmers is examined in the different farm size groups, in different parts of the country, maybe less attention has been paid to the production line, but more to the part time/full time grouping of farms and conclusions from that.

2. Change in the structure of agriculture and investments

2.1. Farm structure

The production structure has changed considerably during the EU membership. The share of animal farms of all farms has fallen rapidly, while the share of crop farms has increased. Number of active farms was in 1995 98,700 and in 2001 it was decreased to 78,400. If the rate of change remains unchanged, the total number of farms will be under 50,000 farms on year 2010 (Lehtonen et al. 2002). While the number of farms is decreasing rapidly, the average farm size is increasing (Figure 1). In 1995-01 the average size of active farms

grew from 22 ha of arable land to 29 ha. However, the farm structure is still very much dominated by the relatively small farms. About 45% of active farms have less than 20 ha arable land and only 15% have more than 50 ha. The increase has mainly occurred through leasing rather than purchasing additional land. In 1995-01 the share of leased area grew from 22% to 40%. (Finnish agriculture.. Statistics of Tike).

In 2001 crop producing farms were 54% and dairy farms are 28% of active farms. In 1995-01 number of dairy farms has decreased about third, but at the same the average herd size has grown from 12 cows to 17.5 cows. Due to the growth in both the herd size and average yields the amount of milk delivered to dairies has stayed at the level of about 2.3 billion litres. In the quota system of the EU, the milk quota of Finland has been slightly exceeded in the past few years.

Production conditions of agriculture vary in different parts of the country; wheat can be produced in the most southern third of the country, barley and oats are possible roughly in the two thirds of the country, and the most northern third of the country is suitable mainly for hay and grass growing. Thus milk and beef production is most common in the central and northern parts of the country. In 2001 the average farm size was 33 ha field, in southern parts 28,5 ha and in northern parts of the country. About 88 % of the farms are owned by natural persons. Nearly all the Finnish farmers own some forest, in average 44 ha per farm; forest areas are larger in eastern and especially northern parts of the country, but for the shorter growing season northern forests are less productive.

Besides of the small farm size, Finnish farms are quite capital intensive. Most of the production buildings for animal husbandry are insulated for cold and well equipped, and the machine capacity of arable farming is relative high in proportion to the average cultivated area. The relatively high machine capacity is needed for the short growing season and uncertain cultivation conditions, even if co-operation in the use of machinery between farms has increased in recent years.

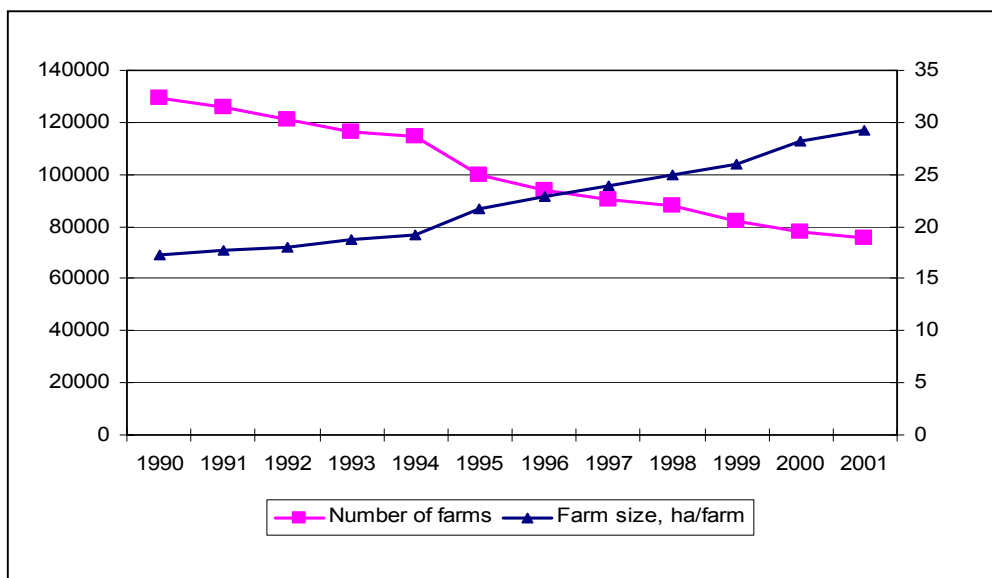


Figure 1. Number of active farms and farm size in 1990-2001. (MTT Economic Research, Tike)

2.2. Investments

Provisions concerning the measures to improve the efficiency of the structures of agriculture are laid down in the structural regulation of the Council of Europe. In addition to that, Finland has been allowed to apply more powerful measures than commonly applied within the EU in order to speed up the structural change during the adjustment period agreed on the membership negotiations. These included the aid for investments concerning the expansion of pig and poultry husbandry, which are not eligible for support in the EU, as well as raised investment aid applied in the most southern support areas. Investment aid may be granted as direct subsidies on state loans or interest-rate subsidies.

In 1992-95 agricultural investments fell to less than half of the level of the late 1980s as a result of the growing uncertainty concerning the future policy and preconditions for profitable production, as well as the serious depression of the whole national economy. From the first EU years there has been an investment boom in agriculture, partly due to the extensive public investment aid program. From 1995 the total amount of agricultural investments has increased from 500 million € to 850 million € in 1998-2000, after that the investments have slightly decreased. In 1995 production buildings were under a half of the investments, but in 1999 building investments were same size as machinery and implements and later on slightly bigger (PTT katsaus 1/2002). In 2001 the share of agriculture in gross domestic product was only one per cent but the share of agricultural investments was over three per cent. From the employed labour force the share of agriculture was 4.7 %.

3. Income concepts and statistics

In the international recommendation for income distribution statistics by the UN from 1977, uniform concepts for examining different income earner groups and their incomes from different sources have been developed. In Finland, as well as in other Nordic Countries, this international recommendation for statistics has been applied e.g. in the Income Distribution Statistics, and, for the part of background information, in the Household Survey, too. Available income, which indicates the consumption potential of households, is the central concept for income distribution statistics. The following chart describes the formation of available income:

$$\begin{aligned} \text{Entrepreneurial income} + \text{Wages and salaries} &= \text{Primary income} \\ &+ \text{Capital income} &= \text{Factor income} \\ + \text{Income transfers received} - \text{Income transfers paid} &= \text{Available income} \end{aligned}$$

The Available income concept is also used in the statistics produced by Eurostat's initiative the Income of the Agricultural Households Sector (IAHS) statistics, which were formerly known as the Total Income of Agriculture Households (TIAH) statistics. The objectives set by Eurostat for these statistics were not only monitoring the income changes and but comparing the absolute income of farmers with that of other socio-professional groups on a unit basis (Hill 2000).

In Finland the central statistics for examining of the incomes of the farm population are the Agricultural Enterprise and Income Statistics (here EISA), which are based on taxation data; the results of the bookkeeping farms in the Profitability Study of Agriculture, which include also the data for the FADN; and the Income Distribution Statistics (IDS), which produce the concept of available income and cover all population groups. The IDS are also based on the income data of taxation, even if these have been corrected through data from various registers and interviews so that they are more in accordance with the recommendation for income distribution statistics. Information concerning the incomes of wage earners is available also in the Industrial Statistics (IS) and in the various other wage statistics. EISA, IDS and IS are produced by the Statistics Finland, statistics on farm structure and agricultural aids are produced by the Information Centre of the Ministry of Agriculture and Forestry TIKE and bookkeeping results and the Finnish FADN data by the MTT Economic Research (MTTL). The statistics based on the taxation have a completion delay of one and a half year. At present, the latest publications of EISA include the data from the year 1999, and the year 2000 is in the publishing process.

The EISA is based on an extensive sample of about 9,000 farms, which makes a versatile classification of farms possible. The statistics are compiled on tax forms of family farms' agriculture and forestry. In the

income study of MTTL, the data from the register of personal taxation (PT) concerning the sample farms' farmer and spouse have been added to the data of EISAF. On the basis of the resulting data on incomes (here EISA+PT), it is possible to achieve, roughly, factor incomes that are in accordance with the concepts of IDS. In addition, from the income transfers paid the income data includes taxes, and from the income transfers received the taxable pensions. Even if the concept of available income cannot be completely achieved through the EISA+PT, it still forms the most versatile and extensive data for examining income disparities within the farm population.

On the whole, income comparisons within the farm population are based on the following structure of concepts concerning nominal incomes in the EISA+PT -data:

| | |
|--|--------------------|
| Agricultural income + Income from forestry + other entrepreneurial income + wages and salaries | = Primary income |
| + Property income | = Factory income |
| + Pensions | = Total income |
| - Taxes | = Total net income |

Entrepreneurial income from agriculture, which in this connection has also been called farm income, indicates the compensation the farm family receives for its labour and own capital used in agriculture. In the income study of MTTL agricultural income has not been divided further into labour and capital income because capital and labour are factors of production that partly replace each other, and in the EISAF there are no unambiguous foundations for division between the two kinds of income.

Still, the most perfect data is the farm bookkeeping, which is co-ordinated by the MTTL. It bases on a sample of about 1,000 farms according to the FADN system, and it is the only statistics, which produce profitability figures for agriculture. During last few years the farm bookkeeping has been fundamentally reformed to produce results from agriculture, forestry and one other entrepreneurial activity on accrual basis in addition to cash based wage income and other incomes of the farm family. Farm property has been evaluated and former (per cent based) depreciation is changed for a planned depreciation system. The FADN data expected by the EU forms one part of the data collected and processed for national purposes. Compared with the bookkeeping data, which describes bigger and more full time farms, the EISA+PT covers also the small farms, but it is cash based, and e.g. depreciation is calculated on the varying per cent basis from the sum of net investments. In the following, farmers income development has been examined mainly on the basis of EISA+PT data and income comparisons on the IDS.

4. Economic development of agriculture

4.1. Results of the total calculation and impacts of Agenda 2000

The Agricultural Economics Research Institute MTTL monitors the income development of agriculture on macro level by means of the total calculation, which is based on the cash flows per calendar year. The net result of the calculation is farm income, which is a compensation for the work and own agricultural capital of farmers. According to the calculation in 1995-2001e the gross return of agriculture has decreased especially in 1998/99, which were worse years for rain and drought, costs have slightly risen and in 1998/99 farm income was only 70-75 % of the 1995's level. In 2000/01e the gross return was higher because of Agenda 2000 and some production price developments, and farm income reached 80-90% of the level in 1995. In 2001 the gross return is estimated to be 3,559 million €, costs 2,510 million € and agricultural income 1,049 million €. During last few decades the Finnish agriculture has been quite heavily support bound, but in the EU membership the supports became even more important. During the EU membership subsidies have been about 45 % of the gross return, i.e. production aids exceed the whole farm income. (Finnish agriculture.. 2002, Hirvonen 2000).

Agenda 2000 policy reforms and changes in national support in agricultural sector have been studied at the MTTL by means of the Dynamic Regional Sector Model of Finnish Agriculture (DREMFA) (Ala-Mantila, Lehtonen et al. 2000). The medium term results of the Agenda 2000 scenario are compared with the medium term results of pre-Agenda 2000 policies scenario from 1999 to 2006. The results indicate that

production of the main agricultural products will slightly decrease mainly due to decreasing product prices for the Agenda 2000 policy reform. Furthermore, the results show that the annual total agricultural income will increase about 4% under the new policy regime. The economic impacts are not equally distributed among different production lines and regions. In the model farm income is expected to decrease in Southern Finland, which is excluded from the northern permanent support scheme. Next time national aids for animal husbandry and horticulture in Southern Finland will renegotiated in 2003.

4.2. Farmers' income in different farm groups

During last ten years the real value of agricultural income of an average farm has not changed in the whole, although the farm size has nearly doubled. The level of total income of farmers has increased mainly by means of wage income outside of the farm. The development of the total income in 1990-97 on the basis of the before mentioned EISAF+PT data is presented in the figure 2 according to the farm size. For the inflation the data is corrected into the level of year 1995 by means of the consumer price index. In the figure we can notice that on the smallest farms, farmer and spouse have been able to keep or slightly increase their income level by means of wage income outside of the farm. In the farm groups of 30-100 hectares field, total incomes have varied on the same level, and on the farms over 100 hectares, a half of which are plant production farms, the yearly income variation has been especially great partly due to the changes in farm income. The development of farm income or total income of biggest farms doesn't show any increasing trend. The latest year 1997 in the figure 2 was so called normal year, the weather conditions in 1998 and 99 were considerably worse, and that is why farm income in average has further decreased (EISA 1999).

Income differences between southern and northern parts of the country are quite small in agriculture. It has been possible to influence farm incomes through support so that, despite the considerable differences in production conditions, regional income disparities between farms engaged in same production line remained small already during the national income policy, and the income differences have been relatively small also in the late 90s in the EU-support scheme. This can be seen, e.g. in the results of dairy farms in the same size group. Permanent national northern aid scheme has guaranteed about the same income level also on the most northern farms than in the other parts of the country (Figure 3). In the farmers' income composition share of forest income has been more considerable on the farms of South and Middle Finland, where the forestry is more productive, whereas in West Finland wage incomes from outside of the farm are more significant.

The impacts of Agenda 2000 are examined on farm level in different production lines by means of the Farm Models of the MTTL, which are based on the results of the Finnish FADN-farms (Ala-Mantila et al. 2000). In the scenarios for 1999-2006 only the probable change in the income aids is calculated into the farm income, and not estimates of the inflation of input prices, e.g. in 1999-2002 about 2% (PTT-katsaus 1/2002). Thus, the results indicate quite positive income development; the average income increase at the farm level in the first years of the Agenda 2000 policy would be around 14-23% on dairy farms, 20-25% on pig farms, and 24-33% on cereal farms. In terms of different support regions, there are no major disparities in income development between the regions. The only exception is dairy farms, where income increase in Southern Finland is clearly smaller than in other regions. The results show also that the profitability of different production lines will be largely dependent on the direct support measures, and the estimated development in South Finland depends firstly on the decisions of the national support in 2003. In all the examined production lines farm income would be zero or negative without any direct support over the Agenda period.

In the income studies made at the MTTL (Väre 2000, Puurunen 1990) farmers are grouped also according to their income sources into the farms named free time-farms (share of agricultural income is under 25% of the total income), part time farms (25-50%), subsidiary farms (50-75%) and full-time farms (over 75%). In the long run the share of full-time farms has decreased and free time farms increased; in 1999 groups of the free-time farms and the full-time farms are about same size, both over one third of the farms. Most of these free time farms are specialised in plant production, e.g. in southern and western parts of the country their share is 40 % of farms, and in the whole country in the farm groups smaller than 20 ha field over half of the farms. The groups of part time farms and subsidiary farms each have been about 15% of all farms owned by natural persons.

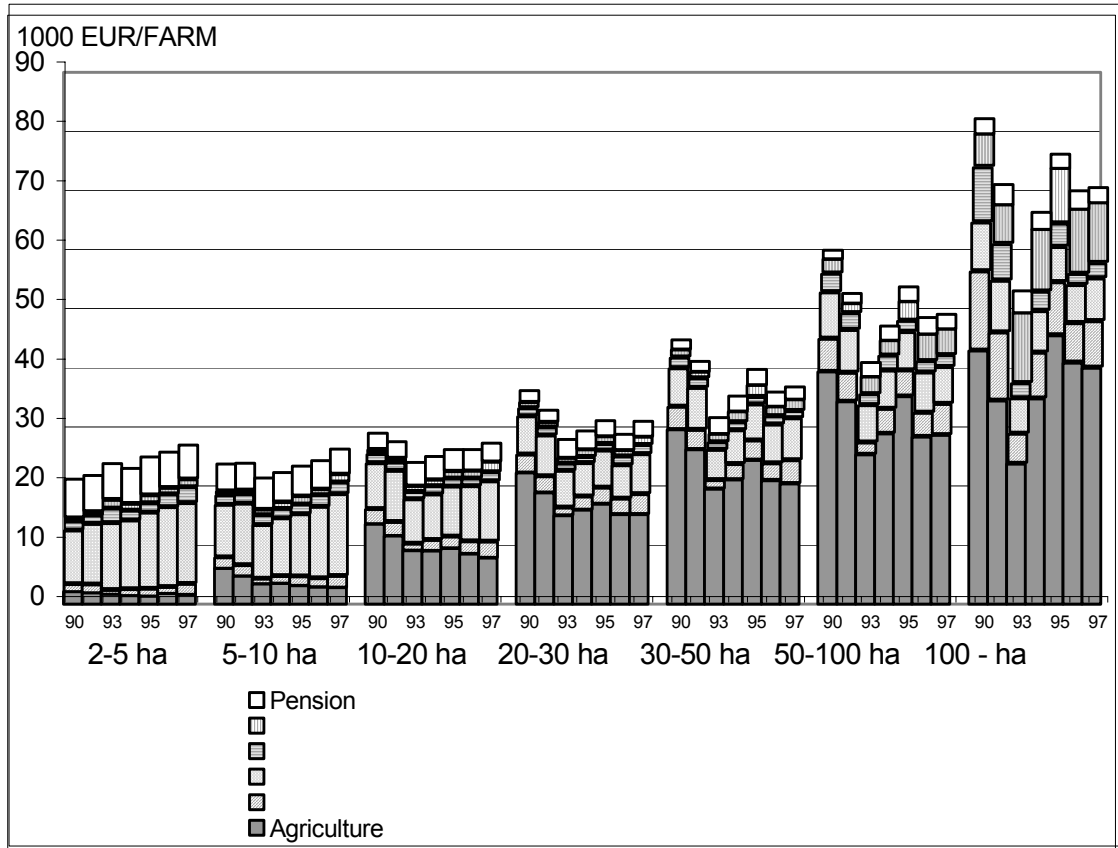


Figure 2. Income development (eur/farm) according to the farm size in 1990-1997. (Väre 2000).

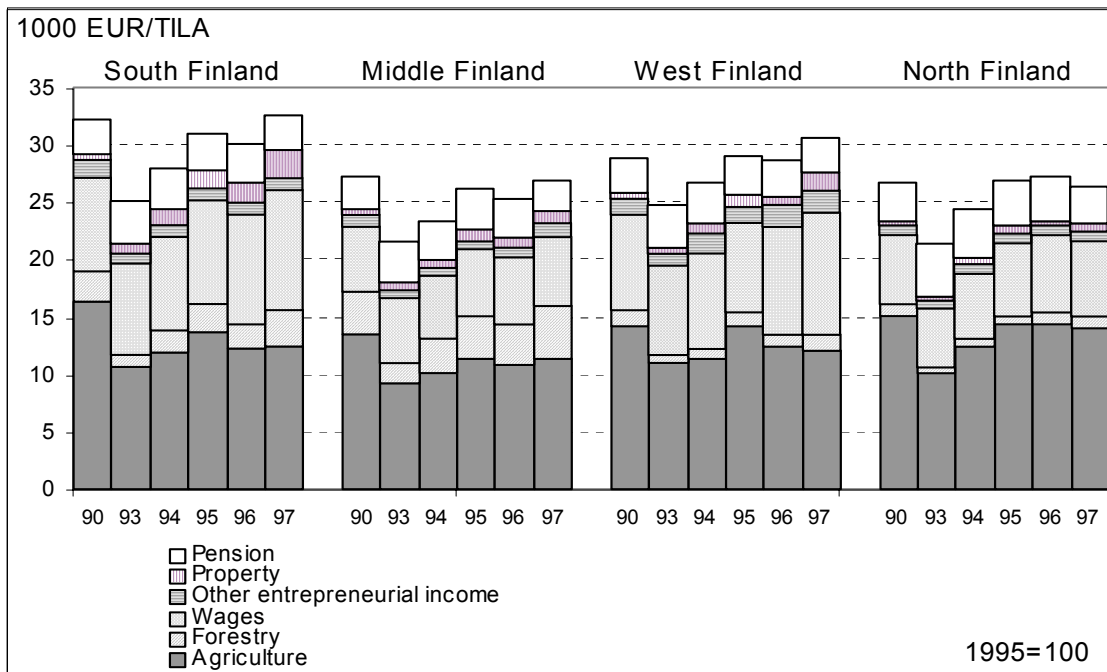


Figure 3. Income development (eur/farm) according to the production area in 1990-1997. (Väre 2000).

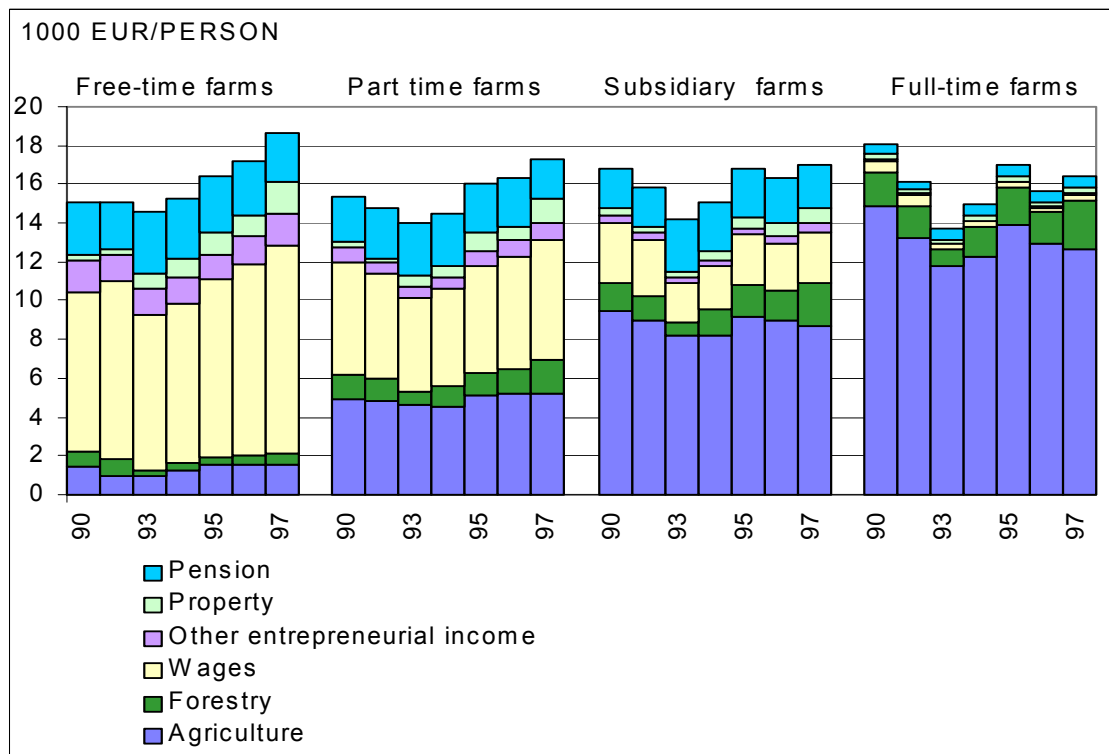


Figure 4. Income development (eur/farm) on part time and full time farms in 1990-1997. (Väre 2000).

In 1990s free-time farmers as well as part-time farmers were able to rise their total income by means of wages and salaries, but the income level of subsidiary farms and full-time farms has varied from year to year depending on the farm income, which has varied in turn according to the production conditions and the income supports (Figure 4). Also in this figure the data is presented in the price and cost level of 1995. In the first part of 90s the farm income of subsidiary farms and full time farms has decreased from the level of the top year 1990, the new price and support schema in 1995 raised it slightly, but after that the farm income has continued its decreasing till the year 2000. Thus, the real incomes of these farms have not changed during the whole decade.

Increase of input prices and reductions in aid system will threaten especially the income development of subsidiary farms and full-time farms. They are mainly farms of animal husbandry, whose income development is most dependent on agricultural income (Figure 4). Many of them have invested heavily to their production, and although they have got financial aid for the investments, they have to keep care of paying back their debts. In 1998 the debts for agricultural production of full-time farms were about 1.25 times the total net income of farmer and spouse. On part-time farms agricultural debts was 60 % of the total net income. From the year 1995 ratio of the debts compared to the total net income has decreased on the part-time farms, but due to the investments and stagnated income development it has increased on the full-time farms. On the full-time farms amortisation of debts can only be done from the agricultural income or from the forestry income, if there is still some timber left for sale in the forest. - In the whole, managing the enlargement season and the production after that, reorganising works of the farm and getting over all financial affairs; that is a very demanding challenge for a normal farmer and spouse. Recently more attention has been paid to the burden of cattle farmers and their possible stress feelings, and some studies for that are going on also at the MTTL.

4.3. Incomes of the farm population in relation to incomes of other population groups

Before the EU-policy farmers income development was compared with the income development of other population groups. One comparison was made between the farm income of an average full-time farmer and spouse per person and the salary income of a full-time industrial worker. The comparison was based on the

data from farmers' taxation (EISA+PT) and industrial statistics (IS). In the middle of 1980s to the middle of 1990s the comparison figures varied between 65-80%, but after that development of the salary income of industrial workers continued its steady rise and farmers income has varied on its lower level. In the comparison the whole agricultural income has been in focus, although it is compensation not only for the agricultural work of farmer and spouse but also for the capital needed in agricultural production (Väre 2000, Puurunen 1990).

In addition to the former comparisons between farm income and salaries of wage earners, it is possible to compare primary income and available income on the basis of the Income Distribution Statistics (IDS). IDS bases on a sample of about 11,500 households, in which farm families represent about 1,000 household. Part of the sample is reformed every year, which makes some inconstancy into the time series of such smaller groups with big yearly variation in the statistics as in the group of farmer households. Most of the income data of IDS has been taken from different registers and rest of the data needed is collected by interviews. Formation of income concepts in the IDS is not similar with the EISA+PT and that is why e.g. the primary income is different, although it is available from both of these sources. Because the size and composition of the households to be compared vary a great deal, e.g. farm families use to be bigger than salary workers' families, the incomes per household have been calculated per consumer unit.

If the ratio 100 is used to mark the available income of the households of industrial workers per consumer unit, the corresponding ratios for farmer households were in the beginning of 90s in average slightly under 100, and in the later part of 90s the ratio varied 100-108. Correspondingly on the animal husbandry farms comparison ratios were closer 90 and on the plant production farms ratios varied between 101-112. In available income all the income transfers have been taken into account, thus the comparison figures of available income refer to the taxation, which has levelled out a part of the income differences between the population groups.

In the income studies of MTTL (Väre 2000, Puurunen 1990) a comparison was made also between farmer households and other entrepreneurial households per consumer unit, whose available income was correspondingly marked as 100. Average figures of farmer households varied in the beginning of 90s between 81-98 and decreased then to 77 in 1997. Also here farms with animal husbandry had lower comparison ratios than farms with plant production. Plant producers are more part time farmers and they can utilise the better income development possibilities outside of the farm. In the whole, farming is not as productive income source than other small scale entrepreneurial business seems to be. Thus, the income comparison figures leave much room and need for the structural change and other measures in agriculture and we can notice, that on the long run the present support levels of agriculture are insufficient to guarantee the same consuming possibilities for farmers as other population groups can reach outside of agriculture.

5. Conclusions

The adjustment of the Finnish agriculture in the EU has meant an accelerated change of the farm structure and for farmers increased dependence on different supports in agriculture. Enlargement of the farm size has been the most concrete strategy especially for many younger farmers in the new competition surroundings. Many cattle farmers have doubled or tripled their number of animals in the end of 90s; such an enlargement boom has not earlier happened in Finland. Managing the enlargement season on the farm and the production after that is a very demanding challenge for a normal farmer and spouse. The decrease of the number of farms will make the Finnish rural problem more difficult especially on the vast sparsely inhabited rural areas. An increasing number of farmers try to get a part of their economic livelihood from sources outside of agriculture. Thus, the other rural small and medium size enterprises have got more and more essential role in development of vast rural areas (Rantamäki-Lahtinen 2000).

Research results on Agenda 2000 policy reforms and changes in national support in agricultural sector (Ala-Mantila, Lehtonen et al. 2000) indicate e.g. that the annual total agricultural income will slightly increase under the new policy regime. The fact that support decisions for the national aid of animal husbandry and horticulture of South Finland have covered only a few years period in each time, and next time they have to be renegotiated with the Commission in 2003, courses an essential uncertainty into the scenarios. Agricultural production is not possible even in southern parts of the country solely with the EU

support for the national support scheme forms an essential part of the farmers income. The uncertainty on the support decisions makes it also very difficult for farmers to develop the production and to implement longstanding investments.

Development of total income in different farm groups during 90s refers clearly to the better possibilities out side of the farm to reach the income development of other population groups. Total income has increased on small part time farms, while on full time farms, most of which practise laborious animal husbandry and have heavily invested to the production, income level have not changed during the whole 90s, probably their investments, supported mainly by the Finnish taxpayers, will produce better income development later on. But in any case, these farmers are most dependent on the agricultural aid and policy decisions, and that is why their success ought to be a matter of common interest in the Finnish society.

References

- Ala-Mantila, O., Lehtonen, H., Aakkula, J., Knaapinen, P., Laurila I.P. & Niemi, J. 2000. Agenda 2000:n vaikutus Suomen maatalouteen. (Abstract: The impacts of Agenda 2000 on Finnish agriculture). Agricultural Economics Research Institute. Research reports 244:7-103. Helsinki.
- EISA 1999. Maatilatalouden yritys- ja tulotilasto 1999. (The Agricultural Enterprise and Income Statistics). Statistics Finland. Agriculture, Forestry and Fishing 2001:22. Helsinki. 67 p.
- Finnish Agriculture and Rural Industries 2002. Agricultural Economics Research Institute. Research publications 101a. Helsinki. 95 p.
- Hill, B. 2000. Farm Incomes, Wealth and Agricultural Policy. Third Edition. Ashgate Publ. Ltd. Aldershot. England.375p.
- IDS 1999. Tulonjakotilasto 1997. (Income Distribution Statistics). Statistics Finland. Income and consumption 1999:15. Helsinki. 78p.
- Kirjanpitoiltojen tuloksia. Tilivuodet 1996 ja 1997. (Abstract: Results of bookkeeping farms in 1996 and 1997). Agricultural Economics Research Institute. Research reports 240. Helsinki. 201p.
- Lehtonen, H., Pietola, K. & Niemi, J. 2002. Maatilojen lukumäärän muutos Suomessa 1995-2000 ja arvio vuoteen 2010. (Abstract: Change in the number of farms in Finland in 1995-2000 and outlook for 2010). MTT Economic Research, Working papers 5/2002. Helsinki. 24p.
- PTT-katsaus 1/2002. Suhdannekuva (Economic trends). Pellervo Economic Research Institute. Helsinki. 64p.
- Puurunen, M. 1990. A comparative study on farmers' income. Agricultural Economics Research Institute. Research publications 62. Helsinki. 114 p.
- 1998. Adjustment of the Finnish agriculture and horticulture in the first years in the EU. Final report of the MATEUS research programme. Agricultural Economics Research Institute. Research Publications 89a. Helsinki. 176 p.
- Rantamäki-Lahtinen, L. 2000. Maaseudun pienyritysten rakennekehitys.(Abstract: The structure of small rural enterprises in Finland). Agricultural Economics Research Institute. Research reports 245. Helsinki. 126p.
- Väre, M. 2000. Viljelijöiden tulotasovertailu. (Abstract: Farmers' income comparison). Agricultural Economics Research Institute. Research reports 242. Helsinki. 168 p.