

# **IMPRESSIONS OF SWEDEN**

Robert O'Connor Pat Mangan

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#### IMPRESSIONS OF SWEDEN

#### Robert O'Connor

As one flies in over Sweden it is difficult to see any cleared land, there is forest everywhere. Coming closer however, one sees small patches of farm land obtruding through the forest with red farmhouses tucked away in the trees. I understand that an earlier king of Sweden held the franchise for red paint and the custom, introduced by edict at that time, has remained.

As one travels through Sweden one is immediately struck by the quality of the highways. They are easily on par with those in the USA and Canada. The density of motor traffic on the roads, however, is low and particularly in the cities, where one would expect very heavy traffic. This can be explained on two grounds.

1. The density of population in the country as a whole is low and

2. Bicycle traffic in the cities seems to be as heavy as it was in Dublin during war years. There are bicycle parks everywhere.

The Swedes are very worried about road accidents. Most cars travel in the daytime on full lights. All bicycles have luminous painted flags sticking out behind, while a person who has imbibed more than one bottle of beer may not drive a car. The penalties for driving after drinking are very severe.

The laws relating to drunken driving spring as much from historical circumstances as from road accidents. Down the years, Sweden has had a drink problem. The potato was introduced into that country in the 18th Century, not as a food crop, but as the raw material for the making of spirits on practically every farm. Indeed it took many years to make the eating of potatoes widespread because they were not mentioned in the bible. The drink problem persists in Sweden even to this day despite punitive taxation of alcohol of all kinds. A bottle of beer in Sweden now costs  $\pounds 1$  and a whiskey and soda over  $\pounds 2$ . This compared with  $\pounds 8$  for bed and breakfast in a Class A hotel and  $\pounds 4$  in a Class B hotel. Indeed prices generally in Sweden are not much higher than here, while as will be shown later, incomes generally are much higher. A secondary teacher's salary is  $\pounds 6,000 - \pounds 8,000$ , while a university professor earns about £12,000 per annum.

### Pat Mangan

#### Introduction

Sweden with an area of 174,000 square miles is the largest Scandinavian country and fourth largest in Europe. It is almost a thousand miles in length. Over half of its area is covered by forests and less than one-tenth is arable land. About one-sixth of its area lies within the arctic circle.

As can be seen from Table 1 its population is 8.2 millions, of which 4 millions are in the labour force. The birth rate has been low and the rate of population increase slow. In fact about half of the population increase has been accounted for by immigration. About two-thirds of immigrants are from other Scandinavian countries. Immigrants number about 7 per cent of the total population.

Table 1: Facts about Sweden

•	1965	1970	1974
Population at end of year, (1,000)	7,772	8,081	8,177
Number of inhabitants per km <sup>2</sup>	17	18	18
Gainfully employed, (1,000)	3,740	3,850	3,960
Percentage Distribution of GNP by Sectors		Per Cent	
Agriculture, Forestry, Fishing	11.3	Per Cent 8.1	6.7
Agriculture, Forestry, Fishing Mining and Manufacturing	11.3 33.8		6.7 29.6
Agriculture, Forestry, Fishing Mining and Manufacturing Construction	33.8 9.0	8.1	
Agriculture, Forestry, Fishing Mining and Manufacturing Construction Trade	33.8	8.1 28.8	29.6 7.4
Agriculture, Forestry, Fishing Mining and Manufacturing Construction Trade Transportation	33.8 9.0	8.1 28.8 9.6	29.6
Agriculture, Forestry, Fishing Mining and Manufacturing Construction Trade	33.8 9.0 15.0	8.1 28.8 9.6 14.4	29.6 7.4 14.1

Population density is about 52 persons per square mile (20 per square km.), but this is very unevenly distributed, with about 90 per cent of the total population being located in the southern half of the country. The percentage distribution of GNP by sectors is also shown in Table 1.

#### The Standard of Living

Wage levels in Sweden are high, as can be seen by looking at Table 2.

-	in Swedish Kroner			
	1960	1965	1970	1973
Sweden	6.50	9.90	15.60	21.90
Federal Germany	4.60	7.60	12.60	20.20
U.K.	4.70	6.40	8.70	10.90
France	4.40	6.40	9.00	13.70
U.S.A.	13.90	16.40	22.00	22.70
Japan	1.40	2.80	5.70	10.70
Ireland	1.67	2.46	4.15	6.63

Table 2:	Total wage cost per working hour in manufacturing for men and women	
	in Swedish Knoney*	

This table was based on an exchange rate against £ sterling of £1 = S.Kr. 10.40. A division by 10 will give a rough sterling equivalent. Present exchange rate is £1 = 9.04 S.Kr. (10 October 1975).

Women's average earnings had by 1973 reached an average of 84 per cent of male earnings in industrial employment. A distribution of employees by income group is given in Table 3.

Table 3:	Distribution of	employees	by income a	group 1973

	No Income Registered	Under £1,000	£1,000 - £2,000	£2,000 - £3,000	£3,000 - £4,000	£4,000 - £6,000	£6,000- £10,000	£10,000 H
				Per (	Cent	<u></u>		
Male	3, 6	6.4	11.2	18.8	31.1	21.0	6.4	1.6
Female	<b>6.</b> 3	24.3	26, 5	23.8	13.5	4.8	0.6	0.1
Total	5.0	14.6	18.0	20.9	23, 1	13.7	3.8	0.9

A comparison of GNP reveals that in 1972 Sweden had, according to the World

Bank, a per capita GNP of almost \$4,500 compared with figures of \$5,590 for the

United States, \$3,390 for West Germany, and \$1,580 for Ireland. (see Table 4).

Country	Per Capita GNP US\$ 1972	Percentage Growth Rate 1960–72	Percentage Growth Rate 1965–72
Sweden	4,480	3.2	2.5
Norway	3,340	4.0	3.8
Denmark	3,670	3.8	3.7
Federal Germany	3,390	3.7	4.1
France	3,620	4.7	4.8
United Kingdom	2,600	2.3	2.0
United States	5,590	3.0	2.0
Switzerland	3,940	2.9	2.9
Japan	. 2,320	9.4	9.7
Ireland	1,580	3.5	3.7

Table 4: Per Capita GNP at market prices (1972) and growth rates, 1960-1972

Source: World Bank Atlas, 1972.

Indicators of economic standards also reveal the high standard of living enjoyed by the average Swede. This must also be taken in conjunction with the high social welfare standards set in that country. See Tables 5,6 and 7.

Table 5:Indicators (consumption)1972

Country	Energy tce <sup>1</sup>	Steel kg.cse <sup>2</sup>	Calories per capita
	<u>per capita</u> p	er annum	per day <sup>3</sup>
Sweden	7,535	686	2,792
Norway	8,593	451	2,937
Denmark	5,629	442	3,261
France	4,550	456	3,202
Federal Germany	5,753	648	3,247
United Kingdom	5,496	406	3,115
United States	11,440	663	3,345
Ireland	3,372	156	3,398

1. Tons of coal equivalent

2. Kilos of crude steel equivalent

3. 1971.

and 1965-1972.

Country	Doctors (1971)	Pharmacists (1971)	Hospital Beds (1972)
Sweden	136	34	1,495
Norway	146	34	1,119
Denmark	1.46	41	915
France	134	63	941
Federal Germany	178	37	1,126
United Kingdom	129	31	944
United States	155	61	789
Ireland	104	57	1,260

# Table 6: Indicators (medical per 100,000 population)

# Table 7: Indicators (per 1,000 population)

Country	Passenger Cars	Telephones	Televisions
	1 January 1973	1 Januar	ry 1972
Sweden	302	557	323
Norway	<b>216</b>	307	229
Denmark	240	356	283
France	268	185	226
Federal Germany	264	249	270
United Kingdom	234	289	298
United States	460	604	449
Ireland	146	109	166

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#### Reasons for Economic Growth

Sweden's economic growth has been long and sustained and can be attributed to a number of factors:-

- 1. She has extensive natural resources of ore, timber and water power, all of which give her a natural advantage.
- 2. Her rapid population growth in the nineteenth century was alleviated by massive emigration to North America. Thus there was no serious overpopulation problem.
- 3. The country has been at peace since 1815 and through her neutral stance avoided the destruction of both world wars.
- 4. There has been an absence of serious social problems. Productivity has continued to rise and labour unrest has been kept at a minimum through centrally negotiated wage agreements.
- 5. There has been a sustained demand for Sweden's produce on the export market, especially as her production became more specialised.

#### Some Important Industries

The volume of industrial production has risen an average of 4.7 per cent per annum between 1950 and 1960, by 7.6 per cent between 1960 and 1965, 5.4 per cent in the period 1965 to 1970 and back again to 4.7 per cent in the years 1970 to 1974. The highest average growth rates have been in the wood, engineering and iron and steel industries. Productivity also rose by an average of 7 per cent during the 1960s.

Today the importance of industries based on raw materials and semi-finished goods has declined and emphasis is on technologically advanced industries, including engineering and chemicals. About 46 per cent of total production in industry is in the iron, steel and engineering sectors. Pulp, paper and publishing accounts for 15 per cent while furniture, food and chemical sectors contribute about 9 per cent each. Mining and quarrying account for 7 per cent while textiles, clothing and leather make up the remaining 5 per cent. Now for a look at some of the main industries:-

#### Mining

Sweden produces 5 per cent of the world's iron ore and is responsible for 10 per cent of all exports of the ore. Some 90 per cent of total deposits are in the North of Sweden and they include not only iron ore, but also zinc, copper, gold, silver, lead and manganese.

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# Engineering

Production in engineering has increased more rapidly than in other manufacturing industry during the period 1950-1974 - by 7.3 per cent - as against 5.3 per cent for all manufacturing. In 1950 it accounted for 25 per cent of exports by value and by 1974 this figure had risen to 44 per cent.

The main divisions of the industry are (1) iron, steel and metal; (2) electrical; (3) motor vehicle; (4) machinery and (5) shipbuilding. Machinery accounts for about 30 per cent of added value in the industry, though the motor vehicle section has been expanding.

Native hydro-electric power has given the incentive for the production of heavy electrical equipment, while the forest industy has helped spur on the development of heavy machinery. Sub-contracting has become very important and a quarter of engineering output is of products for further processing.

# Forest Industry

Sweden has about 1 per cent of the world's forests. Her importance in the timber industry springs from the ease of exploitation of her forests. The main advantages include a small variety of species, a long fibre and favourable conditions for growth and cutting. Forest products account for 25 per cent of exports. Sweden's share of world production is 4 per cent and, of world exports 14 per cent. Growth for the industry in the Long Term Survey 1972–1974 is projected as 7.4 per cent per annum.

#### Paper Industry

There has been a very great expansion of the industry in recent years. In 1974 there were 96 pulpmills producing a total of 9.8 million tons of chemical and mechanical pulp. This accounted for 8 per cent of total world production and placed Sweden as the fourth largest world producer after USA, Canada and Japan. About two-thirds of the production of paper and board is exported, though domestic consumption of paper and board is very high, running at over 470 lb <u>per capita</u> each year. As an exporter of paper she ranks third after Canada and Federal Germany.

### Chemicals

A chemical industry did not really develop in Sweden until World War II. Growth has been most noted in organic chemicals, plastics and pharmaceuticals. Petro-chemicals were given a special boost in the 1960s by large capital investment. After petro-chemicals the most expanding sector is pharmaceuticals, which is a section whose products are largely the result of product development in the companies' own research laboratories in Sweden. About 25 per cent of total chemical production is exported.

#### Textiles

The textile industry is characterised by being highly mechanised and capital intensive, with the exception of the clothing industry, which is more labour than capital intensive. Since 1950 the volume of production has shown a downward trend due to stagnating demand and increasing competition from imports. In the period

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1965-1974 production declined by 3 per cent per annum, investment by 1.5 per cent and employment by 7 per cent, while there was an increase in productivity of 7 per cent per annum.

#### Energy Production

Sweden is rich in timber and hydro power but lacks native supplies of oil and gas. Oil products supply 70 per cent of her energy needs and so makes Sweden heavily dependent on imports of oil (petroleum accounts for 16 per cent of total imports by value). Hydro-electric power accounts for 16 per cent of total energy produced, which is about 80 per cent of all electricity production. Oil produces about 15 per cent of electricity. Consumption of electricity has increased by 7 per cent per annum in recent years, while the increase in total energy use has been 5 per cent. Industry uses 42 per cent of all energy, transport 16 per cent and households, etc. the remaining 42 per cent (see Table 8).

#### Table 8: Energy 1973

Sources	Percentage	Uses	Percentage
Oil Hydro-electric power Lyes and firewood Coal and coke Nuclear power	$71.0 \\ 16.0 \\ 7.5 \\ 4.0 \\ 1.5$	Industry Heating Transport and communications	42.0 42.0 16.0

A number of companies are carrying out research into nuclear energy. Two new plants with a capacity of 760 MW and 820 MW are expected to come on line this year, with a projection that by 1980 nuclear power will be producing 8,300 MW in capacity. (In 1973 nuclear capacity was about 500 MW - 1.5 per cent of total energy sources or about 8 per cent of total electricity.)

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#### The Labour Force

Some 40 per cent of the labour force is composed of women and more than half of married women work, part-time at least. About 5 per cent of the labour force is composed of immigrants.

The labour scene is characterised by strongly centralised organisation, both for workers and employers. National agreements have been negotiated at central level since 1956. These agreements usually last for one to three years and they exclude the right to strike to settle disputes as to the validity or construction of the agreement. Most unorganised employers also subscribe to the agreements. Other types of agreements have also been negotiated by unions and employers, e.g. Works Council Agreement of 1946. Government has generally adopted a "hands off" policy, though it does interefere occasionally with legislation, as it did in 1972 to pass a law to allow worker representation on boards of directors of companies with more than 100 employees. A labour court also exists since 1929 to mediate disputes.

Wages are high in Sweden (see Table 2). This is to be expected, given the high taxation and high cost of living there. Non-wage labour costs for employers are also high, including such items as insurance and pension contributions and a payroll tax. In 1975 they have been calculated as effectively costing 29 per cent of wages and 34 per cent of salaries.

Perhaps most notable of all is the minimal loss of working days due to industrial disputes. In 1972 and 1973 the figure was 3 days per 1,000 employees and even at an average of 62 in the period 1969–1973 it was still very low by European and world standards, at least within the free enterprise system (see Table 9).

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Country	<b>1</b> 964–1973 Average	1969–1973 Average	1972	1973
Sweden	43	62	3	3
Federal Germany	· 43	80	3	40
United Kingdom	633	1,036	2,160	570
France	277	288	300	330
United States .	1,247	1,372	870	770
Japan	217	238	270	210
Ireland	476	551	187	187

#### Table 9: Working days lost per 1,000 employees due to labour disputes

# Social Welfare

Social welfare began in Sweden in 1899 with the Worker's Protection and Labour Welfare Act. In 1913 old age pensions were introduced and in the 1930s reforms were introduced concerning government housing, family and labour market policy.

The basic aim of their social welfare system is to provide help when it is most needed, espcially to the old and young. With growing numbers of old people and rising costs, the burden for the active population has become more difficult to bear. The result has been higher and higher taxation (see Table 10), though an increasing share of revenue is being paid by employers. The high levels of social welfare have brought criticisms on two levels. (1) of the high taxation and (2) the increasing levels of dependence by people on the state for aid.

Gross income for year S. Kr. <sup>2</sup>	Tax <sup>3</sup> as percentage of income	Marginal tax rate (percentage)
4		
5,000	_	- *
20,000	26.4	32.6
25,000	28.8	38.6
30,500	31.6	44.6
34,250	34.0	53.2
53,000	44.6	64.0
61,250	47.1	63.6
70,500	49.1	62.0
100,500	55.6	71.0
150,500	61.4	73.0
200,500	65.5	78.0
300,500	69.7	78.0

 Table 10:
 Aggregate income tax for individual earnings in 1974

Rate of tax between 5,000 and 20,000 S.Kr. gross income.

Notes: 1. Earnings for 1974 are taxable in 1975.

- 2. 1 Swedish Kroner =  $\pounds 0.1$  approximately.
- 3. Includes national income tax, local income tax (average rate of 24%) and health insurance.
- 4. Personal individual allowance of S.Kr. 4,500 and expense deduction of S.Kr. 500.

In the estimates for 1975/76, 19.6 per cent of the budget is devoted to public insurance (pensions, health service etc.), 6 per cent for support of families, 4 per cent for health and social services and 14 per cent for education and research.

Social welfare is mainly financed by direct taxation; and the high levels of welfare demand high taxes (see Table 11) Between 1969 and 1974 spending on social welfare has doubled, which if we remove the effects of inflation amounts to a real increase of 45 per cent. The proportion of GNP allocated to social welfare purposes was 16 per cent in 1969 and 20 per cent in 1974 (The closest comparisons are for EEC countries in 1972 – Germany 18.7%, France 16.4%, United Kingdom 14%, Denmark 20.4% and Ireland 11%).

Country	Direct Taxes			Charges	Indirect	
	Firms	Persons	Total	for social insurance	íaxes	Total
	***************************************			%	Miles	<del>199 - La constanta, a con</del>
Sweden	1.5	18.4	19.9	7.9	12.6	40.4
Norway	1.5	12.9	14.4	9.4	16.0	39.8
Denmark	0.9	15.1	16.0	1.8	17.2	35.0
France	2.0	4.8	6.8	14.5	15.9	37.2
Federal Germany	2.5	8.3	10.8	10.8	14.3	35.9
United Kingdom	2.4	11.4	13.8	4.9	17.2	35.9
United States	4.5	12.1	16.6	5.6	9.3	31.5
Ireland	1.0	6.8	7.8	2.3	19.0	29.1

# Table 11: Taxes and social insurance charges as a percentage of GNP, 1969

Most social welfare benefits are available regardless of income. An indication of some levels of payment can be had from the chart below:

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Children's allowance	£180 p.a each child under 16 years
Unemployed	£2.5 per day – for seven months
Old age pension (Age: 67 years but 65 from July 1, 1976)	£855 p.a. – single £1,395 p.a. – married
National Supplementary Pension	Approximately 65 per cent of average pension bearing income during best 15 years. (see below)
Sickness benefit	About 90 per cent of regular income up to £6,750 p.a.

There are two types of old age pension - basic and supplementary. The basic pension is payable when people reach 67 years of age. Special requirements govern the payment of supplementary pensions. The supplementary pension is linked to a sum of money called the "basic amount", which in December 1974 was S. Kr. 9,000 (£900). This amount is revised monthly to take account of inflation. Only those whose earned income over three or more years exceeds the basic amount are eligible.

The amount of the pension is calculated on the basis of pension bearing income which is any income greater than the basic amount. Such pension bearing income cannot total more than 6.5 times the basic amount (i.e. not greater than £5,850 in December 1974). By dividing the pension bearing income by the basic amount certain points are allocated for each year.. (A person with a pension bearing income of £2,250 in 1974 would accumulate 2,250/900 = 2.5 points.)

To calculate the final pension, the average of the points over the best 15 years is calculated and multiplied by the basic amount for the month in question. The basic pension for a person with an income above the basic amount for 30 years (i.e. 30 years service) is 65 per cent of this figure. Thus a person retiring in 1974 with an average of 3.0 points over 15 years and having 30 years service would get  $\frac{3.0 \times 900 \times 65}{100} =$ £1,755 per annum. Supplementary pensions are reduced by 1/30 for each year of service less than 30.

Pension contributions of employees are paid by employers, self employed persons must pay their own contributions. Husbands and wives who have separate incomes get separate supplementary pensions. The contribution in all cases is now 10.75 per cent of pension bearing income. (1975)

There are also widows' and children's pensions which are too complicated to describe here. Details of these and other social welfare payments are published in "Social Benefits in Sweden" available from the Swedish Embassy.

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#### AGRICULTURE IN SWEDEN

#### Robert O'Connor

The area of Sweden is 174,000 square miles which is approximately the size of California or twice the size of the United Kingdom. The area of agricultural land however, is relatively low, being only about 7.5 million acres, compared with about 12 million acres in Ireland. In addition to the arable area 95 per cent of the farmers own about 16.5 million acres of forest land from which they earn a significant part of their income. Actually farmers own more than half the total productive forest area of the country, the remainder being divided equally between stock companies and the Church.

The proportion of GNP produced in agriculture, forestry and fishing is about 7 per cent of which about 3 per cent comes from agriculture and the remainder from forestry and fishing. The proportion of the total labour force employed in these occupations is about 7 per cent also. This proportion has declined from 20 per cent in 1950.

In 1971 there were approximately 150,000 farmers in Sweden with more than 5 acres of agricultural land. Of these, only 44,000 had more than 50 acres of farm land. Of the agricultural land in Sweden 68 per cent is devoted to tillage crops, mainly grain crops and the remaining 32 per cent to grassland. The number of grazing livestock is therefore relatively low, total cattle being only 1.9 million and sheep 370,000, compared with about 7.0 and 4.0 million in Ireland respectively. A growing number of small farmers in Sweden are selling off their cattle and at present 30 per cent of farms have no cattle compared with less than 10 per cent in Ireland.

	Acres ('000)	Per Cent
Wheat	850	11.3
Rye	274	3.7
Barley	1,595	21.3
Oats	1,170	15.6
Mixed Grain	192	2.6
Leguminous Plants	23	9.3
Oil Plants	401	5.4
Green Fodder Plants for Silage	58	0.8
Hay and Grass Silage	1,828	24.4
Pasture	536	7.2
Potatoes	119	1.6
Sugar Beet	117	1.6
Other Crops	76	1.0
Fallow	157	2.1
Arable land not used in 1974	81	1.1
Total Arable Land	· 7,478	100.0

Table 12: Use of arable land in Sweden, 1974.

Unlike other European countries the number of dairy cows in Sweden has been falling steadily over the years. In 1939 the number of cows was 1.9 million and milk production was 1,000 million gallons per annum. At that time there were heavy exports of milk products. Since then production has declined to about 600 million gallons. Cow numbers are now only 755,000 and Sweden is barely self sufficient in milk and milk products. Indeed the Swedes are now having difficulty in maintaining cow numbers even at a milk price to farmers of over 50p per gallon.

The decline in milk production is attributed to the declining labour force, climatic conditions suitable for grain growing and the opportunities for off-farm work engendered by the high prices ruling for timber of all kinds. The output of grain is now twice as great as it was 10 years ago and there are considerable exports. Sweden is just self sufficient in beef production and eggs but she has a considerable surplus of pigmeat. Pig numbers were 2.4 million in 1974 compared with less than one million in Ireland.

#### Co-operative Membership and Farm Prices

Some 98 per cent of the 150,000 Swedish farmers and forest owners are members of one or more agricultural co-operative societies which include co-operative banks, mortgage societies and marketing organisations. The total membership is more than one million, which is an average of five memberships per farmer. About 80 per cent of sales of agricultural products are handled by the co-operatives and through these the farmers own a significant part of the Swedish food industry, thus exercising an important influence on market prices.

Prices for certain farm products in Sweden as a percentage of average EEC market prices for 1972/73 were as follows:

	· ·	-			
				1980-1970-1970-1970-1970-1970-1970-1970-197	
$\mathbf{Crops}$			Livestock		
		%		%	
Wheat		81	Milk	137	
Rye		84	Cattle	106	
Barley		85	Pigmeat	100	
Oats		<sup>′</sup> 83	Eggs	81	
Sugar Beet		93	Poultry	136	
Potatoes		128	All Livestock Products	115	
All Crops		86	All Products	109	
-		* ·			

 Table 13:
 Swedish prices for certain farm products as a percentage of EEC

 market prices

As can be seen from these figures, grain prices are lower in Sweden than in the EEC countries generally. Prices for animal products on the other hand are higher in Sweden than in the EEC. When all products are weighted together, Swedish prices are 9 per cent higher than those in the EEC. Food subsidies however, are paid on a number of commodities in order to keep down consumer prices.

#### Farmer's Organisations in Sweden

The Federation of Swedish Farmers is the central co-ordinating body of which the individual farmers, the branch organisations and the larger co-operative societies are all members. This organisation also includes the Auditing Bureau of the Federation of Swedish Farmers; the shipping concern – Agro Shipping (part owned); the advertising firm – Landia; The Swedish Agricultural Economies Research Institute; the Swedish Laboratory Service (part owned); the Sanga-Saby School for Farmers and the Swedish Seed Company.

The Federation looks after the interests of Swedish farming and agricultural co-operatives within the community at large. It negotiates with the Government regarding farm produce prices, and all matters relating to agricultural price regulation and national food reserves. It takes account of foreign trade in agricultural goods, and looks after Swedish farming interests abroad through its membership of international organisations. It provides training for farmers, and services them with a flow of information through the various journals which it publishes. It produces films on agriculture and gives advice on business economy, taxation and legal affairs. Its scope and influence is enormous, performing many of the functions of our Department of Agriculture and Fisheries.

## Combined Forestry and Agricultural Enterprises

In 1971, more than 70,000 of the 150,000 Swedish farmers had part-time work outside their own farms. In addition to this, 75 per cent of the total 150,000 spent 40 – 50 per cent of their remaining time working in their own forests. This combination of farming and forestry is of great importance in Sweden for spreading the work load over the whole year. The growing season is only about six months per annum and after that, outdoor farming has to be suspended. During the remaining period the forestry work is performed, so that the farming and forestry

Farmers in Sweden pay the same level of taxes as all other persons.

are entirely complimentary operations. In Spring and Summer the farmers seldom visit their forests, but in Winter they take off with their tractors and motor saws and spend practically all of their working time cutting, planting and improving the timber stands.

The financial returns from a combined farm and forestry operation visited during the Conference are given below. On this farm, 20 two-year old beef cattle and 400 pigs are produced annually. The farmer contributes about 1,400 man hours of labour per annum, while the other family members contribute about 600 (farmer's wife mainly).

	Agriculture	Forestry	Total
Area (acres)	72	315	387
Man hours worked	1,400	600	2,000
	۰.	£	
Output	22,200	7,780	29,980
Non-labour Costs	20,330	1,220	21,550
Labour Income	1,870	6,560	8,430
Imputed Wages	3,560	1,440	5,000
Profit	-1,690	5,120	3,430
Capital Invested	66,700	111,100	177,800
Labour Income per acre	26.0	20.8	21.8
Labour Income per hour	1.3	10.9	4.2

Table 14: Financial statement from a combined farm and forestry operation

As can be seen from this table, the forest area is much greater than the farm area and so the income from the timber production is considerably in excess of that from the farm. The surprising element however is the relatively high labour income <u>per</u> <u>acre</u> from the forest. This means that as a user of land, forestry is now almost as productive as farming. The current high prices for timber of all kinds is responsible for this situation.

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### Part-time Farming

The importance of part-time farming in Sweden, and indeed in many European countries, is causing agricultural economists to take a new look at traditional ideas relating to family farms. At out meeting in Uppsala this question was discussed in some detail and it was concluded that part-time farming is likely to increase considerably in future years. Such a development is a useful means of stemming rural depopulation and should be encouraged in every way possible, even though it might be an inefficient method of producing food. To date, part-time farming has received little official support either from the EEC Commission or from member Governments. It was hoped that this policy would be changed shortly. It was agreed that research was needed to determine the factors which lead to an increase in part-time farming, and particularly the type of off-farm work which is most suitable for these farmers.

In Ireland, Bord na Móna is probably the largest single employer of part-time farmers. But despite this, turf work is not particularly suitable for such people since the two types of work must be done mainly at the same time of the year. Forestry work, either in State or private forests, would appear to be much more suitable in this connection, and research is needed to determine the potential of this enterprise for providing off-farm work and rural employment generally. Brendan Walsh's projections of the number of jobs which must be provided over the next 10 years has created a new urgency in this direction. We must now take a hard look at the type of industry we have been fostering and compare the cost, and permenancy of the jobs created, with what could be produced from an extension of our forest areas. I refer here not alone to the work of producing and cutting the timber, but also to the subsequent processing operations.

It is my opinion that the climate of opinion in favour of the expansion of our forest area is better now than at any time in the past. Heretofore, it was argued that on marginal land the return per acre was much greater in agriculture than in timber production, and that forestry should be confined strictly to non-agricultural land.

Experience however has shown that farmers are no longer interested in carrying out farming operations on marginal land. Each year more and more of this type of land is going derelict and there is no reason why the work of the forestry division should not be stepped up considerably. The cost of acquiring the land will of course be more expensive than in the past, but the cost per potential job created might not be any greater than that from more conventional industry. I feel confident that the production and processing of timber could be used to provide many of the jobs required over the next twenty years and I suggest that the research needed to test the feasability of this idea should be undertaken immediately. In this connection the potential for increasing the area of private forest should also be investigated. If farmers are unwilling to sell their land at the prices which the Forestry Division can pay, some experiments should be undertaken to determine the incentives required to stimulate private plantings. A drive in this direction with funds from the Underdeveloped Area Scheme and accompanied by a strong publicity campaign might well prove more successful than past efforts.

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