

**Abstract of thesis: 'For a handful of pennies'
Working, earning and spending: the standard of living of farmers,
labourers and the middle class in the Groningen clay area, 1770-1860
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Abstract:

From 1770 to 1860 and especially after 1790, the Groningen clay area experienced population growth accompanied with a slowly declining agricultural production per capita. Nevertheless, the standard of living of most groups in this non-industrializing, capitalistic, agricultural region did not fall. Real income per capita even increased thanks to the favourable development of the terms of trade (rising agricultural prices) after 1825. In particular, the economic welfare of the farmers rose. The poorest part of the population (paupers and a minority of the working class), however, spending most of their budget on foodstuffs, was unable to reap the benefits of the fall in prices of industrial products, which were a result of the industrial revolution elsewhere.

The Groningen clay area is a part of the coastal province of Groningen situated in the north of The Netherlands. Around 1770, the Netherlands were still the richest country of the world in terms of national income. In the following century the Dutch economy fell behind, because it experienced hardly any growth per capita at all. In the Groningen clay area with its highly capitalistic agriculture, the production structure also remained largely untouched by the 'industrial revolution'. Nevertheless, The population of the Groningen clay area nearly doubled between 1770 and 1860 from 47.400 to 92.700.

Much has been written on the consequences of the 'industrial revolution' for the standard of living in the industrialising countries (especially England). However, the influence of the rising supply of relatively cheap industrial products on the standard of living in the non-industrialising parts of Europe is largely neglected. By exploring the economic history of the Groningen clay area some light can be shed on these consequences for a highly capitalistic agricultural economy.

The development of the standard of living in the book is not, contrary to the English 'standard of living debate', restricted to the working class. Within the population of the clay area three more or less homogenous groups are distinguished: farmers (households exploiting at least 5 hectares of land), labourers (mainly working on farms) and the 'middle class', which name is used for a rather heterogenous group, consisting of small shop-keepers, artisans and others with non-agricultural and skilled jobs.

With 'standard of living', I mean economic welfare. To trace developments in economic welfare, the development of population, firm-size and labour input, production, wages and incomes, purchasing-power, consumption per capita and poor-relief are analyzed, using an economic and quantitative approach. The division in topics roughly corresponds with the measures for the standard of living employed. These measures are: real wages and real incomes (purchasing-power); (food) consumption per capita; labour productivity; and finally the share of paupers in the population.

Consistent annual time series were constructed of prices of 39 products, seven different wage groups, interest and the value of the capital stock for the period 1770-1860. Employing these series, annual estimates are produced for real income per capita, and for real family-income of labourers,

'middle class', and farmers in the clay area. Time series for the other measures of the standard of living are also constructed for part or for the whole period.

The clay area of Groningen already had a market economy in the 18th century, with agriculture being the most important sector. In addition, about forty percent of the heads of households occupied jobs in manufacturing, handicrafts and services. This is indicative of the large-scale specialisation that had taken place before the 18th century. These artisans, shop-keepers, skippers, school-masters, and others took care of the needs of the local population or served as suppliers for the farmers. Agriculture was the economic engine of the clay area. With the sale of agricultural products outside the region, money was earned to buy imported products, such as textiles, timber, iron and colonial goods, or to pay taxes. The labourers and the 'middle class' depended largely for their income on the farmers. So money earned by farmers spread to the whole population of the clay area.

A process of proletarianisation took place in agriculture during the period 1770-1860. The share of unskilled labourers among the heads of households rose from 25% in 1770 to 40% in 1860. Meanwhile the share of farmers decreased from 32% to 16%. Population growth - caused by a fall in the death-rate in the second half of the 18th century - manifested itself mainly in a growing working class. The number of farms remained quite stable, while the number of wage-workers on each farm rose. In manufactures, however, there was no shift towards firms operating on a larger scale. In the first half of the 19th century, the average firm-size in rural Groningen even decreased for the majority of the handicrafts.

Agricultural prices rose in the second half of the 18th century, but due to the population growth nominal wages lagged. The resulting decrease in real wages stimulated intensification in agriculture in the Groningen clay area. In the long run, in any case after 1817, labour-productivity in agriculture slowly dropped because of the rise in labour-input per hectare. This decrease in labour-productivity had no dramatic consequences in the clay area, because the terms of trade developed favourably between 1825 and 1860. Industrialisation and population growth in areas outside Groningen stimulated demand for food stuffs and other agricultural products, which resulted in higher food

prices. Industrialisation elsewhere also made industrial products, such as textiles (important import products for the clay area) relatively cheap.

The changes in the price-ratios after 1825 obscure changes in the standard of living and changes in the way people spent money. People bought more industrial products as they became cheaper. Because of this, they sometimes were inclined to cut down expenses on food, especially when their purchasing-power remained constant. So the development of purchasing-power and food consumption did not have to move in the same direction. There were also important differences in the development of the standard of living of farmers, labourers and the 'middle class'. The rapid increase in prosperity among the farmers contrasted sharply with the modest rise, or decline, in real income for the rest of the population.

Given the increasing proportion falling in the poorer strata, namely the labourers and the poorer artisans and tradesmen, one might assume increasing poverty. However, most measures for the standard of living do not show such a rise in poverty in the long run for the majority of the inhabitants, although there are signs of impoverishment of the poorest part of the population after 1825. Their real incomes stagnated or decreased a little. More people had to rely on poor-relief, and the number of boys who were too short for military service, because of their poor diet, rose after 1845.

Increased winter unemployment after 1820 was accompanied by a more unequal distribution of work on the farms among the married labourers. Each year, many casual labourers were unemployed for some months. This poor group was hit hard by higher food prices. They also did not profit from the lower prices of imported industrial products, because they did not have enough money to buy much of these products. The failure of their own small potato-harvests after 1845 made the poor casual labourers even more dependent on expensive purchases of food on the market. Poor-relief only modestly supplemented the earnings of healthy poor labourers, just enough to help their families through the winter. At the same time the improved employment for women in summer made life easier for them. Single women (with or without children) and old-aged could earn higher incomes by weeding. However, the poor-relief boards on which they often depended, did take this increase in

work into account. The real value of money distributed per pauper was considerably reduced during the first half of the 19th century.

Before 1818, the rise in number of the wage-owners kept pace with the rise in demand for labour. The intensification of agriculture, resulting in an increasing amount of arable land, provided work up to 1818. In first instance, this intensification was stimulated by the cattle-plague around 1770. Later the increasing supply of labour, falling real wages and high agricultural prices were a stimulus. Work was spread over the year quite evenly, so unemployment was low. Meanwhile, lower real wages were a sign of the impoverishment of the whole labour-class until 1818, especially around 1800.

After 1818, falling prices of agricultural products forced farmers to cut down expenses on labourers in winter. During this season labourers used to do less important work (maintenance) or work which increased the value of land (investments). In the decades before 1818, differences in incomes between labourers and farmers - which were quite small around 1750 - increased enormously. Relations between farmers and labourers became more formal and business-like. These developments made it easier for farmers to discharge their labourers. Possibly, high real wages of the labourers in the twenties of the 19th century were also of importance. As a result many labourers were better off after 1818 than before, in spite of the higher unemployment.

Starting somewhere around 1835, demand for labour again grew faster than supply, because of further intensification of agriculture and the rise in the acreage of arable land. Once more, this process was caused by wages which increased far less than agricultural prices. Seasonal unemployment was a persistent phenomenon for casual labourers, although it diminished somewhat. The ties between labourers and farmers weakened and the latter group lost interest in a well supplied poor-relief. In the 18th century poor-relief had functioned as a kind of social insurance system. At that time, the farmers and their families also sometimes had to turn for help to the poor-relief boards in hard times. In the 19th century with the increasing affluence of the farmers, their personal interest in good collective provisions disappeared. As a consequence farmer's gifts to the boards decreased and local governments had to support poor-relief more and more.

Because of the high food prices after 1845, it became difficult for some labourers to tide over the long period of unemployment in winter. Many societies were established to organize work in winter. The poor-relief boards also started to help families of young and healthy labourers and in expensive years large-scale distributions of food were organized. However, for the labourers who had a job for the whole or nearly the whole year, purchasing-power did not decrease. Probably this was the case for the majority of unskilled labourers. Increased demand for labour, stimulated by high agricultural prices, caused nominal wages to rise considerably after 1853.

The economic welfare of the artisans and tradesmen could only be studied closely on the basis of the incomes of independent construction-workers (some 10% of the 'middle class'). Their purchasing-power decreased only little during the period of the French occupation (1795-1813). Because of the intensification of agriculture the demand for their services remained high, and most of the rise in prices was compensated for in their wages. Around 1820 their position had become so strong that their wages decreased far less than prices. Their purchasing-power increased considerably. They were able to retain this gain throughout the following forty years. A further improvement of their purchasing-power was not possible in the period 1820-1860, because of rising competition between the numerous small shops and artisans. They profited less than unskilled agricultural workers from the boom in agriculture around 1855. However, if they were not subjected to competition of cheap imported industrial products, and most were not, tradesmen and artisans could uphold their economic position quite well. The poorest part of this group, however, was affected by rising food prices after 1845, just like the poorest part of the labourers.

The farmers were the clear 'winners' of the period 1770-1860. After 1790, a steep rise in their economic welfare began. During the French occupation, a group of rich farmers arose which dominated the economy of the Groningen clay area for the whole 19th century. The difference in standard of living between farmers and the rest of the population increased rapidly. Although the farmers were severely hit by a prolonged agricultural depression after 1818, differences between them and other population groups remained considerable. Around 1835, the growth of the farmers' prosperity took off again, and went on until after 1860. The purchasing-power of the farmers rose

tremendously and they increasingly could afford luxury products. The farmers reaped the benefits of the rising supply of labour. Land became relatively scarce and the rate of return on land rose fast. In the second half of the 18th century, most farmers received an everlasting right to use their land for fixed rents, never to be changed in the future ("vaste beklemming") . So only the users of land (the farmers) benefitted from the rising capital-returns on land and not the land-owners. These land-owners were a heterogeneous group of among others nobles, city-regents, institutions, and rich and retired farmers.

In the short run, even the Groningen clay area could not escape from the pre-industrial fluctuations, dictated by flexible prices and relatively sticky wages. However, the consequences of the sharpest fluctuations in agricultural prices were mitigated by changes in employment and by the industrial prices, which fluctuated far less and slowly decreased after 1825 as a consequence of the industrial revolution. Nevertheless, good times and bad times alternated. Unfavourable both in terms of purchasing-power of wages and food consumption were the years 1794-1796, 1799-1806, 1812-1813, 1816-1818, 1830-1831, 1845-1847 and 1853-1856.

Especially the period of the French occupation (1795-1813) was disastrous. In this period the increases in wages did only partly compensate for the high prices and many labourers and small tradesmen impoverished. The rising food prices in this period were accompanied by high prices of industrial products. The higher productivity of factories elsewhere had not yet resulted in a fall of prices of industrial products. The price of linen rose, for instance, 50% between 1770 and 1790. Wrought iron sold for a price 50% higher in 1800 compared with 1770.

The capitalist farmers were also confronted with pre-industrial fluctuations, but in an opposite way, compared with the labourers and most of the 'middle class'. High prices of food stuffs were favourable. The French period, therefore, was not such a bad time for them. Other 'expensive' periods were also golden years for farmers. In the short run, their demand for labour and capital goods remained quite stable, and depended only in a limited way on the agricultural price-level. Therefore, prices fluctuated more than wages, and the expenses of farmers were more stable than their yields. So in the short run the fate of farmers and labourers were completely opposite. One could say that the

well-to-do farmers defended the rest of the population against the worst consequences of the agricultural conjuncture.

Looking at the period 1770-1860 as a whole it is the stability that catches the eye rather than the changes. The economy managed to absorb the doubling of population without many difficulties. Radical changes in the economic structure did not occur. Although population growth perhaps caused a slight fall in total labour productivity (including industry and services), this setback was completely offset by favourable developments in the terms of trade. In this way, the development of the standard of living was not troubled by the slow decline of productivity in the long run. The purchasing-power of farmers increased tremendously, while the 'middle class' experienced a more modest improvement. Even the purchasing-power of most labourers remained rather stable, although for a part of the labourers the situation got worse. In spite of the rising share of low-income groups in the population, real income per capita grew after 1830, thanks to the enormous increase in prosperity for the farmers.

Because of this rise in real income per capita, it seems very unlikely that population growth in the Groningen clay area had any 'Malthusian' effects. This can be illustrated by the development of food consumption. Thanks to the potato, the nourishment in the first half of the 19th century in terms of calories was as good as in the second half of the 18th century. However, for the lower strata of the population, their food consumption declined in the first half of the 19th century and their meals became more and more dominated by the potato. Many people ate potatoes three times a day. The proportion of the population who received charity more than doubled in the period 1820-1850. But for the majority of the labourers the standard of living did not get worse. Thanks to favourable terms of trade, high prices of food were fully compensated for the declining prices of various industrial products, even for most of the labourers. The standard of living of the 'middle class' rose, while the farmers became very prosperous.

The marked orientation on capitalist agriculture - compared to other regions in the Netherlands - made the Groningen clay area relatively successful in the period 1770-1860. Especially in two shorter periods this successful development stood out. Around 1800 a large increase in wages signified a favourable development in the regional economy and in particular of the agricultural

sector, which resulted in a shortage of labour. Elsewhere in the Netherlands wages remained sticky. Agriculture in Groningen was not troubled as much by the disturbances during the French occupation as were industry, manufacture and trade in the rest of the Netherlands. The impoverishment of a large part of the population in the Groningen clay area in this period was caused by a redistribution of income in favour of the farmers. Only part of the gains resulting from the wage-increases were lost after the agrarian depression of 1818. The increase in wages around 1855 which occurred early by Dutch standards, can also be seen as a relative improvement compared to other parts of the Netherlands. Again the agricultural sector, flourishing because of the high prices of agricultural products, caused this general increase in wages.

So in the Groningen clay area two developments were of utmost importance, both related to its agricultural character. On the one hand, population growth was a continuing threat for labour productivity in agriculture. The result, decreasing marginal returns to scale, could only be partly offset by small technological and organisational innovations during the period under study. On the other hand, industrialisation elsewhere was stimulating the clay economy in two ways. Firstly, the accompanying high population growth stimulated demand for food, which resulted in high agricultural prices. Secondly, because of the fall in production costs of industrial goods, the imports of the clay area were becoming cheaper.

Beginning with the second agricultural depression of the 19th century (around 1878 until 1895) the weaknesses of an economic development based mainly on a capitalistic labourintensive agriculture and on favourable terms of trade became quite clear. Farmers were increasingly troubled by the negative consequences of large productivity rises during the agrarian revolution. The former advantages of agriculture, the low price-elasticity and income-elasticity of agricultural products (especially food), turned into disadvantages. Although some favourable periods for the farmers were still to come, in the long run the relative fall of agricultural prices and the continuous expulsion of labourers became the most important characteristics of the once famous commercial and progressive agriculture on the Groningen clay soil.