

Reidar Almås

Agricultural history of Norway 1945-2015¹

Introduction

Norway has slightly above 5 million inhabitants and 40 558 registered self-employed farmers. Norwegian agriculture consists mainly of family farms and the main farm size is 23 hectares of operated farm land. Agricultural employment constitutes around 2 % of the country's total workforce. How can it be, that in a country with little arable land, a low sun and a long winter, there you find a gorgeous cultural landscape, agricultural production is prevalent all over the country and rural people seem to fare well? Compare this picture to some other countries in the world where you find poverty in rural areas created for wealth. There may be richer agricultural resources than in Norway, but they are less developed and less shared. Can the explanation be found at the organisational- institutional level? Can it be that the agricultural population of Norway has organised, compromised, and allied themselves in such a way that they have been able to counteract their comparative disadvantages?

To explore this agricultural puzzle, I want to focus on the political and institutional development since 1945. Who were the important actors, how did they argue and how did they act? What groups were mobilised, what organisations have been active and grew strong and what institutions have been built? What kind of alliances and compromises were formed? Farmers in Norway still speak with a powerful political voice. Why do Norwegian legislators vote for big subsidies to farming every June, when they mostly with a big majority favour the Agricultural Agreement between the farmers' organisations and the government?

What is the distinctive Norwegian experience from the modernisation process of agriculture after World War II? It may be argued that the process went on more or less in the same way in all the advanced economies, from the US to Europe, from France to Norway. On the other side, there are huge differences, because of differences in natural resources, farm structure, and political culture. Why is Norwegian agricultural history interesting for an international audience? Because the interplay between the land and the people took on quite distinctive traits here, which later became part of what might be called the Norwegian model. The cultural landscapes of Norway, with little arable land but plentiful of fjords and mountains, may explain why pluriactivity has been a dominant form of production. Even with the "death of peasantry" (Hobsbawm 1994), part-time farming prevail, but why?

What are the turning points in Norwegian farming and farm policy after WWII? Some of them would be the same as in the agricultural histories of other industrialised countries, like the rise and fall of productivist agriculture. However, there are many traits and tendencies you will find in Norway, which will not be so prevalent in other of the advanced capitalist countries. For instance: why were the agrarian co-operatives so successful in Norway and why do they prevail? Why does the Norwegian parliament, supported by a majority in the public opinion, give so much economic support to agriculture? Compared to other European nations, the interests of farmers and rural inhabitants have an important say in decision making at the national level. Turning back to our main puzzle, how can it be, that in a country with little arable land and a long winter, there you find a beautiful cultural landscape and a flourishing agriculture all over the country? Plants have a short growing season in most of the country,

and it is only small parts of the lowlands and coastal areas of South Norway that have similar possibilities for farming as our neighbouring countries. Explanations must be sought elsewhere than in soil, landscape and climate.

The «dream of the family farm”: 1945-75.

It was a slim and hungry but not a starving nation that experienced the liberation of May 8th 1945. At the end of WWII, 3 million people lived in Norway, half of those lived in sparsely populated areas and 950 000 lived on farms. During the war years few investments were made in agricultural buildings and equipment. Nevertheless agriculture had to wait, because priority was given to those manufacturing industries earning foreign currency through exports. In addition the Northern Provinces were devastated because of the scorched earth tactics during German withdrawal, and needed everything from farm animals and living houses to ports and hospitals. Imported agricultural machinery was rationed. Credit was scarce, and the Government channelled financial aid through agricultural credit associations and encouraged the farmers to join tractor co-operatives.

The Labour Party now started a period of 20 years in power. The main policy goal was increased public welfare based on economic growth. To reach that goal, labour force and investment capital was channelled to the most productive industries. The primary industries; agriculture, forestry and fishing had accumulated a surplus labour force during the crisis and war times. Towns and suburbs grew quickly and rural areas were depopulated. Between 1945 and 1950 the numbers of working hands in the manufacturing industries passed the numbers of those working in agriculture. This was a symbolic event, showing that Norway had entered the era of social democratic industrialism.

A technological and social revolution in agriculture

Although agriculture was not given first priority by the Government, farmers were quite optimistic in the first post war period. Investments were made, production increased and new markets were opened. Lack of labour force now employed by the manufacturing industries pushed farmers to invest in labour saving technologies. The first to leave agriculture were relatives and hired farm hands, and women left before men.² This exodus of agricultural labour force changed the gender system of agriculture, starting a process of masculinisation of agriculture, which has lasted up to this day. Both push and pull factors were strong. Incomes in the urban industries were higher and social benefits, like vacation, were also drawing cards. Urban housing was well organised in the first post WWII years, offering a completely new life for rural migrants. When labour became scarcer in rural areas, demand for wage increase to urban standards triggered farmers to invest in timesaving technologies. To find seasonal helpers in labour intensive summer weeks also became more difficult. Consequently intensified mechanisation was a logical solution. In the 1950s when credit and import regulation was eased, *mechanisation* went on at a forced rate and pushed labour out of agriculture.

Socially WWII was in many ways an end to 2000 years of peasant tradition.³ Alongside with the industrialisation of farming, social relations at the farm and in the countryside changed fundamentally. From being a large labour unit with several farm helper hands, most farms in a few years reduced to a household operation. Running water and electricity had revolutionised the working life of rural women. Reduced number of children and fewer working people on

the farms, as well as less home processing and consumption, decreased the female labour burden drastically. The labour force on many farms was also reduced to the ownership nucleus family. This modernisation of the working role of the farmer's wife also changed her social relations. Farmwomen became more active in social life, establishing for instance a national association of farmers wives in 1946. Soon voluntary associations or municipalities started to build elderly homes to take care of people in old age. Cultural habits deeply embedded in the community crumbled. Social habits around weddings, funerals and other family events were simplified. Welfare policies were also extended to rural areas, like old age pension (1936) and children's allowance (1946).

The farm structure also started to change in the 1950s, as it became difficult to make a decent living matching the demands for income at the time. Many small farms were depopulated, or the family members started to work off the farm, just farming part-time or renting away the land. Some of those farms had been established as crofter homes of as new farms in the 1920s and 1930s. Out of 195 000 units owned by the farm family, 75 per cent had less than 5 hectares of arable land. Only 41 per cent of units had farming as the only source of living. Now, as the family farm was the ideal unit of farming according to Government plans, agricultural policies gave investment priority to units that had the possibility to expand. By most politicians of the time, the sustainable family farm was meant to be a permanent and central part of the rural social system. A new agricultural law in 1955 prohibited farm partition and gave the government first right to buy when cultivated land came on sale. Such land should later be sold to neighbouring farmers, as a way to strengthen their economic sustainability. This structure rationalisation, partly created by market mechanisms and partly induced by government policies, led to the liquidation of 44.000 small farms during the 1950s. The production, however, increased, made possible by tractorization and raising productivity in animal and plant production. Cheap fuel and state funded agricultural research spurred this emergence of productivist agriculture.

Within the governing Labour Party, there were cleavages and conflicts over agricultural policies. On the one side were the national economists and their allies within the Government, who wanted to transfer labour and financial capital quickly from the primary industries to the fast growing export sectors. After WWII these people took a firm hold of the economic policies of central party and government apparatus, and remained in power up to 1965 when the Labour Government resigned. Agrarian and rural groups in the party tried to mobilise support for small scale agriculture, without success. Their power base was the Smallholders' Union and the labour group in the Parliament. As agriculture itself, this group had to fight on the defensive in the party, and lost a decisive battle in 1962 when the majority of the Parliament chose to close the Smallholders' College, following a recommendation from the labour minister of agriculture.

One way to increase the size of small farms was by the use of cheap concentrated feedstuffs and chemical fertilizer. In this way it was possible to increase the production without adding much land to the farm. From the early 1950s a policy of canalisation was introduced, which in principle paid grain better than milk and meat in relative terms. The goal was to promote a regional specialisation, in which the lowland Eastern Provinces mainly produced grains, while animal production based on grass was canalised to the fjords and valley regions and the north.

Partly because of better cultivation and use of fertilizer and chemicals and partly because of better plant material, the yields increased quickly during the first post-war decades. A network of agricultural college institutes, experiment stations, and co-operative trial rings made it

possible to do applied research and spread the results to practical farming at a fast pace. This knowledge system, partly inspired by the US Land Grant Agricultural College system, became famous for the close ties between researchers and practical users. As a part of the Marshall Plan, 60 grants were given to promising young scholars in the years 1950-56. From 1956 and two decades onwards, the W.K. Kellogg Foundation also gave from five to six grants every year to further education within agriculture, forestry and veterinary science. Many of those receiving Kellogg grants became leading figures within their fields later, and their US experiences were published in popular booklets.⁴

In animal husbandry take-off came in the 1960s, as modern breeding techniques and semen freezing technology became available. Professor of animal breeding Harald Skjervold became at a young age a leading figure in the field, as he combined the latest knowledge in genetics with computer science and well-organised animal farmers. Not least his ability to explain the breeding principles and mobilise farmers to participate in breeding programmes, gave him legendary status. In a couple of decades new synthesized races of cows and pigs were created, based on large breeding programmes and centralised research on offspring databases. The best males by heredity were chosen for semen banks, and after insemination was applied in a mass scale to all females in the programme, it was possible from characteristics of their offspring to choose new males for breeding. The same principles from the *Norwegian breeding model* were later applied to establish breeding programmes for salmon in fish farming.

The cultural landscape of Norway was drastically changed in this period. From WWII to the early 1970s the rural face was given its present form. Because of mechanized cultivation, trees and bushes were cleared away and brooks and creeks were put in pipes. Because of the closure of small farms, small plots were amalgamated and old farmhouses were taken down. The landscape became regionalised because of the canalisation policy, as grain production was predominant in the Eastern Provinces and animal husbandry was more common elsewhere. Where agriculture was marginal, as in some parts of the Northern Provinces, in the mountainous areas and in the fiords, the land was not cultivated anymore and became gradually covered, mainly by deciduous forest. This process of forestation slowed down when agriculture experienced better times in the 1970s and 1980s. All through these years, the Government financially stimulated the cultivation of new agricultural land from forestland and mores, and new machinery like bulldozers and ditch diggers made it possible to increase the area of fully cultivated land. The total agricultural area decreased, however, as meadows and pastures were abandoned because of specialisation and mechanisation.

In forestry the same modernisation was taking place as in agriculture. More than 80% of the farms have their own forest, which is used as building materials and sold in times of investment on the farm. A farm forest used to be and still is a “bank”. Because of the outbreak of the Korean War in 1951, prices on forest products increased rapidly, and stayed at a rather high level for several years. The long-time development however, was a decrease in the price of timber, as is the case with most raw materials. The association of farmer forest owners (Norges Skogeierforbund) wanted to build their own processing industry to give them a better bargaining position against timber buyers. This motive coincided with Government industrial policies to modernise the pulp and paper industry, which was structurally scattered and financially weak. After almost two decades of fruitless efforts, the paper mill Nordenfjeldske Treforedling was opened in 1966 at Fiborgtangen in North Trøndelag. The forest owners, the state, and private capital owned the shares jointly. This was a typical “social democratic deal” of that time. The forest owners through their association had at first a

majority of the shares, which they later lost when the firm became a trans-national paper company: Norske Skog. The farmer forest owners succeeded to build their own industry, but lost control in the 1990s, when Norske Skog went into global acquisitions and the financial muscles of the forest organisations were too weak.

Post WWII Norwegian productivist agriculture was built to serve the internal Norwegian market. Experiences from war times led to the conclusion that it was important to have national self-sufficiency of meat and milk products, and as high production of food grains as possible. The national market was mainly developed by farmers' co-operatives, which grew rapidly and extended their links to all regions. In the Agricultural Agreement, which from 1951 was made every year between the State Government and the two Farmers' Unions, the co-operatives were given an important semi-public role as price regulators and stock keepers. In the poultry industry, which grew rapidly from the early 1970s, both private and co-operative businesses took their share of the processing industry.

On several occasions in the 1960s, discussion on the entrance of Norway to the European Common Market came up. French president Charles de Gaulle, however, ended the discussion at both occasions, by using his veto to potential entrants. In 1971-72, however, there was no veto, and real negotiations were held. When a majority of 54 per cent voted no in the referendum of September 1972, one important reason was concerns for Norwegian farmers and their problems to compete with more efficient farmers in continental Europe. The mobilisation against membership in the Common Market was based on a "green wave" in the early 1970s. This mental shift in favour of rural groups and their interests, also gives a context in which to understand the Parliamentary decision three years later to give farmers equal incomes with industrial workers. The dream of the sustainable family farm, which was dreamt by farmers and leading politicians in the post WWII decades, was farther away than ever. Like in other industrialized countries, the economic treadmill forced the farmers to run faster the faster they ran.⁵

From state guaranteed equity to market based diversity: 1975-2000

In the beginning of the 1970s, Norwegian agricultural policy came to a crossroad. The policy of structural rationalisation, supported by dominant political parties, as well as the farmers' organisations and co-operatives, came under pressure from different social groups. "Fewer and stronger" as the chairman of the Farmers Union had formulated his vision didn't materialise.⁶ Instead farmers and rural interests lost ground concomitantly with structural changes in agriculture and rural population decline. The growth of manufacturing industries in rural areas came partly at the expense of agricultural labour force and farmers' arable land. Farmers' income was slightly more than half the income of industrial workers. Women were leaving agriculture for the growing rural labour market in the public service sector, mainly in health care and education. Farmwomen at the same time criticised their low income and marginal status, demanding a greater say in on farm and off farm decisions.

Productivist agriculture, now at the peak of its performance, was met by criticism from scientists and environmentalists, claiming that the present system lead to pollution of waterways and loss of biodiversity. The struggle against Common European Market membership in 1971-72 had created a new understanding between centrist rural movements and urban intellectual radicals and environmentalists. For the first time since 1945, an opposition to the productivist regime of agriculture was formed. The short grain crisis in

1973, after the formation of the OPEC oil cartel and following oil embargo, was one of the decisive factors behind. Another catalyst was the 1974 UN food conference in Rome, which concluded that every country had a responsibility to produce its own food. Norwegian self-sufficiency was at that time 40 per cent, and the UN decision came timely for those who wanted a more agricultural friendly policy in Norway.

Structural changes and populist political response 1976-1982.

In the early 1970s, Norway still had relatively small farms with an average size of 6 hectares. Compared to our Nordic neighbours, only Finland had the same small-scale structure. The structural changes were rapid, however, peaking in the late 1960s and early 1970s, mainly because the rest of the economy was booming. Agricultural productivity was also increasing as a consequence of mechanisation, specialisation and growing use of inputs like chemicals, artificial fertilizers, and concentrated feed. Increasing yields in plant production as well as higher yield per animal as a result of the new scientific breakthroughs in agronomy and animal breeding, also contributed to the increased productivity. The new national division of agricultural labour contributed to increased productivity, with specialised grain production in the Eastern provinces and specialised animal husbandry in the uplands, fjords, and valleys. This increased animal production on small farms in marginal agricultural regions was partly based on grass production on new cultivated land and partly based on imported feedstuffs.

Milk production in combination with meat production was the main production outside the best grain producing areas in South Norway. The cattle races most common in Norway have been dual-purpose breeds, suitable for both milk and beef. This combined breeding policy was followed up in the 1950s and 1960s through the scientific breeding programme to create a new synthetic cow, "Norwegian Red Cattle" (NRF). This new race was more suitable for concentrated feed and cultivated grazing land, while most traditional Norwegian races have been adapted to summer pastures in the woods and mountains. In the 1960s most farmers in Norway gave up many-sided husbandry. They specialised themselves, either in plant production, in combined milk and meat production, or in specialised production of eggs, pork or broilers. The latter productions were based on use of concentrated cheap feed, of which 52 per cent was imported in 1973.⁷

Two
milk
races

The modes of production were quickly transformed into larger units in the 1960s and early 1970s, which raised a farm policy discussion on the issue of regulation of the surpluses. In 1974 the Parliament passed a concession law, which stated a maximal number of how many pigs, hens and broilers each unit was supposed to have. The urge for this law came both from the Farmers' as well as from the Smallholders' Union, who were afraid that the rapid structural development threatened their very existence. They also got support from concerned environmental groups, which were afraid that the big units would pollute air and waterways.

From the late 1960s, summer livestock pasturing in the mountains (setring) was gradually given up, partly because of lack modern equipment and roads, and partly because of fear that animal yields would decrease with traditional methods. Later in the 1980s and 1990s, however, roads were built into the mountain valleys. The land of the valley bottoms was cultivated with mechanised methods and modern milking and cooling equipment was installed. A government subsidy to stop the decline of summer mountain pasturing was put in place, which for the time being has stabilised the number of summer pastures at around 1300 units. At the same time there are 1000 farms participating in co-operative summer pastures of the modern type, which originated in the late 1960s as a response to lack of modern

||

equipment in the old mountain barns. With hired hands to take care of the summer milking, the farmer could concentrate fully on the harvest chores.

However, from the 1970s and onward, free roaming sheep herds were consuming most of the grass production in the mountainous regions of Western and Northern Norway, as well as in the upland valleys of the Eastern provinces and Trøndelag. Previously holding sheep was usual on most farms, but in the 1970s specialised sheep meat production grew as in other productions. Artificial insemination was not successful as it has been in cow and pig breeding. Instead sheep owners joined rings cooperating to hold the best rams. Recently this sheep meat production based on summer pasture in the woods and mountains is threatened by a growing number of large carnivores (bear, lynx, wolverine and wolf), mainly in the border counties with Sweden. From the mid-1990s it has been a deliberate national policy in Norway to reintroduce these animals, because they were supposed to be endangered species.

As the pace of structural development was escalating, the number of part-time farmers increased. In 1970, only 1/3 of the farmers were fulltime farmers. However, this was not a new situation in Norway, as farmers also have been fishermen in the coastal districts and loggers and hunters in the forest and mountain areas. In addition, four out of five Norwegian farmers had their own forest land, which gave additional income opportunities in winter time. The new labour situation from the 1970s and onwards, was the increasing number of farmers and farmers' wives who took up full-time or part-time wage labour in the manufacturing industries and in the services. By doing so, most farm families started to scale down and simplify their agricultural production. Many even rented away their land, and in just a couple of decades neighbours rented one third of the cultivated land. Those who had land suitable for plant production grew grain or hay for sale. Other family members than the farmer left many family farms to enter the labour market. Left at home and working alone was the farmer, generally a man, who in this way became what I call a "one-man farmer".⁸

In 1975, there was an increasing unrest in rural areas, partly in response to the quick structural changes and partly in despair of low incomes and less public welfare arrangements compared to other social groups. A public commission (Øksnesutvalet) had evaluated the Norwegian agricultural policy, and in their recommendation before the Parliament in 1974 they proposed increased Norwegian food self-sufficiency. The main goal of the new policies was to target measures to small farms in marginal areas where there were few alternative income opportunities. One of their proposed policy measures were subsidies neutral to production, recently known as decoupling in European Union jargon on Common Agricultural Policy (CAP) reforms. Even though the proposed decoupling was not implemented in a big scale, one tenth of the subsidies were decoupled in the years to come. For the first time in the history of Norwegian agriculture, nutrition policy was mentioned and measures to the betterment of people's health were developed.⁹ Most attention during the parliamentary debate of the fall of 1975, however, was given to the income goal.

During the summer 1975, a farmers' strike had broken out on the island of Hitra in Mid-Norway. 70 farmers lead by a milk producing smallholder formulated 8 demands, of which the most important was higher producer prices, equal tax benefits and social welfare arrangements. The farmers put their tax payment on a bank account, threatening to withhold the sum until their demands were met. For the first time in recent Norwegian history farmers' demands drew intensive media coverage, with the new television medium as the leading actor. The Hitra farmers directed their demands at the Government, which they both looked upon as their main opponent and their sponsor.

The tax strike got support in wide agrarian circles, being also an indirect criticism of the efforts of the two farm unions to improve farmers' livelihoods. When the two unions understood that the strike had wide support within their own ranks, they tried to take over the most popular demands and to co-opt the leaders. A couple of months into the strike, the regional leaders of the Framers Union proposed a time limit of four to six years for an income guaranty, which stated that **the income of a farmer should be the same as the income of an industrial worker**. In the late fall of 1975 the tax strike was stopped, after a promise from both farm unions that they would end their support for the structural rationalisation policy. Farmer friendly groups in the parliament, led by the influential politician Berge Furre from the **Socialist Left Party**, lobbied for a time limit to the income equity claim. On December 2 1975 the Norwegian Parliament made an almost unanimous decision that **the income for one year of work in agriculture should be the same as that of an industrial worker within 6 years**.

How should such a radical decision be explained? One obvious external reason was the international situation, which had put food self-sufficiency on the agenda. It has been obvious for the urban opinion in Norway that a nation that produced less than 50 per cent of its consumed calories was very vulnerable. Secondly there has just been found oil in the Norwegian sector of the North Sea, which was supposed to ease the financial pressure on the state budget. Thirdly the tax strike had drawn wide support and spurred heated debates in many circles, which influenced the political agenda in the Parliament. This political mobilisation in favour of the countryside had not least touched young, idealistic generation with social conscience, who wanted their own country to be in use, instead of importing grain and beef from third world countries with hunger.

Gender issues and welfare reforms

In the following six years of farm income escalation, agricultural production increased rapidly, thanks to cultivation of new land, increased use of fertilizers and concentrated feedstuffs, and investments in more efficient equipment and buildings. Farm income also rose at a quick pace, and in 1982 the Agricultural Agreement actors agreed that the equity goal was reached. The result of the escalation policy was very visible in the rural areas, both on farms and off farms. In addition to investments in land, buildings and machinery, new living houses were built or the old houses renovated. Farmers bought tractors and cars, hired carpenters and entrepreneurs and went on holidays with their family.

One of the new reforms in the escalation package was a farm relief service, which gave animal farmers Government money over the Agricultural Agreement to hire farm helpers during sickness, weekends, and vacations. This generous welfare arrangement was at the time the most advanced farmers' social welfare scheme in the world. In many cases, however, the "farmer" on paper was the male owner, while the spouse and female owner was not eligible for welfare and health benefits. The farm wives mobilised and lobbied to have equal rights as women working in other industries. Over a number of years, from the mid-1970s and up to 1990, women in agriculture were granted a fair share of the farm's income, as well as they gained compensation for vacation, sickness, and pregnancy leave.

All those social welfare reforms were embedded in the important parliamentary decision of 1975 to grant the girls equal inheritance rights with boy.¹⁰ Originally the Norwegian Allodial Act had given the oldest boy the right to inherit the farm before older female siblings. This *óðal* principle dated back to the middle Ages, when this was a common arrangement for farm freeholders in the Norse area around the Atlantic.¹¹ Some of the agricultural organisations,

also the Union of Farmers' Wives, were originally against this gender reform of the Allodial Act. This must be seen as a defensive act to protect the old way of life, more than a betrayal of their own daughters. Later, when the new Allodial law was implemented all the organisations in agriculture supported the government efforts to get more girls to take over farms. This is an interesting case of Norwegian "state feminism", where reforms are developed from above, later being embraced by the people affected.

Although women in Norwegian agriculture made big leaps forward as far as income and social welfare rights were concerned, they had still a diminutive role in agricultural organisations. In 1986 Gro Harlem Brundtland formed her second Labour government with 8 women out of 18 ministers, later called "the women's government". For the first time Norway got a female minister of agriculture, Gunhild Øyanger. At the outset she pushed a gender equality agenda, which gave her both friends and enemies in the sector. But soon most of the farming community changed attitude and took advantage of government initiatives to train women in agriculture for their new and more influential roles.

Environmental turn and internationalisation and in the 1980s and 1990s

A Government Rural Commission proposed in 1984 to divert some of the agricultural subsidies to off farm investments and training. This scheme was at first met by opposition and resistance in farm circles, but later in the 1980s rural development became a catchword for all rural interest groups. The Norwegian Smallholders' Union was the first organisation to support the idea of state supported rural development. Being by far the smallest of the Farm Unions, this organisation has been more radical in its approach to agricultural policy during the last part of the 1980s. Originally the Smallholders Union was formed (in 1913) by farmers in the Liberal Party (Venstre). Later, in the 1930s, this union moved towards the left of the political landscape, while the larger Farmers' Union formed their own Farmers' Party (1920). After WWII the Smallholders' Union became a firm supporter of the Labour Party, which ended in the early 1980s when a group of radicals and environmentalists took over the union. After WWII, the Farmers' Union gradually became more independent of the Farmers' Party, which changed name to the Centre Party in 1959.

Being the largest and most pragmatic of the two, the Farmers' Union has always tried to influence through negotiations more than following a line of class struggle. However, during the early 1980s, this pragmatic line came under pressure. Under the third Harlem Brundland government, she gradually changed her policies in neo-liberalist direction and started to adapt Norwegian policies and laws to EU regulations and policies. Two important lines of conflict were drawn, one internal and one external. The Government wanted to give up the income equity policy, stressing that farmers were self-employed tradesmen, who were themselves responsible for their income. In a parliamentary decision in the fall of 1992, the income and structure policy of the escalation years in the mid-1970s was turned around. Although the income equity was given up earlier in practical policy, this was the first time it was stated in a formal decision.

Concerning international relations, the Harlem Brundland Government wanted take part in the General Agreement on Trade and Tariffs (GATT) agreement, opening up the Norwegian food market for foreign competition. The 1993 results of the Uruguay round were better than expected for Norwegian agriculture, thanks to creative use of the Blair House agreement between the EU and USA. For the first the Norwegian protection of its own food production was based on legal bases in the World Trade Organisations (WTO). However, the tariffs were

supposed to be reduced further in future WTO rounds, and Norwegian agriculture for the first time experienced real competition from abroad since the 1930s.

Gro Harlem Brundland also started negotiations with the European Union, which ended in the European Economic Space (EES) Agreement of 1992. This was by her and her allies supposed to be one step towards the final Norwegian membership in the Union. The 1994 referendum, however, showed a majority against Norwegian membership. Both Farmers' Unions mobilised against Norwegian membership, mostly because a price harmonisation from day one would have been a great shock to Norwegian farmers and food industry. The new food scares of Europe had also entered the debate, leading many urban consumers to support the "no" side.¹² The agricultural reforms of the 1990s may be summarized by the following: marketization, adapting to new international frames and a waiver of the ambitious income target.

Climate change adaptation, policy reforms and neo-productivism after 2000

At the turn of the century, Norwegian agriculture is internationalised. This internationalisation has been a long process, from the mechanisation and scientification in the 1950s, via industrialisation and environmentalisation in the 1980s, to the liberalisation with the WTO and EEA agreements in the 1990s. There is no way that this spirit may be put back into the bottle, or behind closed borders for that matter. On the other hand, Norwegian agriculture is shaped by its ecological, cultural and socio-political environment. In a long period, farming in Norway was done on the margins. Without the catch from fishing and hunting, without the lumber from the forests, without the system of pluriactivity, living from the arable lands would have been impossible. Grain imports, still necessary in this country after decades of increasing yields, had to be financed by foreign trade. Paradoxically, you will both find reasons for protection and for keeping an open economy in food production. There is a delicate balance in Norwegian politics between those forces, and so far no Government has sold out agricultural interests completely. A strong co-operative movement and strong farmers' unions may explain why agricultural interests are listened to.

Political regulations have played and are playing an important role in Norwegian post WWII agriculture. The institutional thickness of the agricultural sector has so far been a protective cocoon against further liberalisation. However, the outcome of the present Doha round of the WTO negotiations may be the toughest test for Norwegian agriculture so far. The formula of multifunctional agriculture, which is stressing the non-trade functions like cultural landscape, biodiversity and rural employment, may not be enough to secure Norwegian farmers a competitive capacity on the home market. Even with the diversification into internal niche markets and export strategies of special products like the Jarlsberg cheese, the home market for standard meat and milk products is essential for Norwegian farmers. Jarlsberg cheese export, however, will now be phased out, as the export subsidies will not be legal in WTO after 2020. After that time, farmers' dairy cooperative Tine is going to produce Jarlsberg abroad.

In the first decade after 2000, only small reforms were undertaken in the Norwegian farm policy model. Both the centre-right government (2001-2005) and the centre-left government (2005-2013) made only small regulation adjustments: The farm subsidies were maintained at a high level and the import restrictions with relatively high customs were kept in accordance with WTO obligations. But the annual negotiations on the agricultural agreement could not prevent farmers' income fell down to two-thirds of the income of industrial workers and self-sufficiency of food dropped to below 50 percent. Despite the highly regulated and subsidized

agriculture, the number of farms fell by three to five percent each year, and the remaining farmers were better off than before but worse off than the majority of the population.

In this situation, two most right-wing parties in Norway won the election in 2013 and formed a cabinet with a neo-liberalist minister of agriculture and food. The present Government wants to make fundamental changes in agricultural laws, lowering subsidy payments to farmers, and reduce import tariffs on agricultural goods. The present government's desire is that these changes should lead to larger farms and cheaper agricultural products. This rather radical policy shift to the neo-liberal right has attracted wide opposition in rural areas, as well as in centre-left policy groups in urban areas. In 2013 there was no agreement in the negotiations between the farmers' organizations and the Government, but in Parliament the farmers got 200 mill NOK extra after intervention from two centre parties. However, these important negotiations ended with an agreement with the Norwegian Farmers Union in 2015 and 2016, while the Norwegian Smallholders Union refused to sign the agreement.

Several proposed law changes, like abolition of farm price control and deregulation of concession laws will be discussed in the Parliament in this and next year. A new farm policy white paper to the Parliament will be presented to the Parliament, and important negotiations are going on with the EU and WTO. The proposed liberalisation and deregulation of the farm policy proposed by the Government is met by resistance both in the Parliament and in the public opinion. At the rural grass roots, as well as in the Norwegian public, there still is a popular support for a small-scale, multifunctional agriculture all over the county, not just big, commercial farms in the central valleys in the south.

Conclusions

During the last 70 years both the Norwegian society and the Norwegian agriculture has gone through major changes, where the present structures within agriculture and the framework that constitutes their agricultural business and work environment are different from the past years. As we move up to get an overview, **ten great changes may be highlighted**. First of all, the agricultural society as the Norwegian society in general has been through a profound *individualisation*. Secondly, there has been a *scientification* and *technification*, both of Norwegian society at large and of agriculture. Thirdly, agriculture has been through a period of social, economical, and political *organisation*. After World War II most farmers at the regional and local level became members of dairy and meat co-operatives. Fourthly, Norwegian agriculture went through a *politicisation* and *regulation* from the 1950s and onwards. From the Agricultural Agreement in 1951 and environmental regulation in the 1970s and 1980s, until today's extensive food safety regulation, the role of the national state in Norwegian agriculture has increased. Through all those profound and broad changes runs a fifth process of change, which is a strong *integration* of farmers and rural societies into the society at large. During WWII, even though most of the agricultural production was commodified; a major part of the production was processed further and even consumed on the farm. Around 2000 all these specialised processes are gone from the farm and the farmer is an ordinary consumer.

In addition to those five processes mentioned above, which also were present before WWII, a *centralisation* and *urbanisation* process began in the late 1940s, which still is going on. This meant both a geographic and a social mobility, people moving from the North, from the inland and from the countryside and mainly to Oslo and some of the other cities along the coast. Strong pull factors were tempting rural youth to leave the countryside for the industries and services in cities. Secondly a steady *increase in the level of living* started, which also gave

farmers and rural people a better life and well-being. In 1975 the Parliament decided that farmers and industrial workers should have equal income within six years (1976–82). In that period the welfare state was opened to the farmers as they got government payment to hire farm helpers during sickness, vacation and leisure time. *Women in agriculture also got equal rights* with men from the 1970s and onwards. The change of the Allodial Act in 1975 was of high importance, both substantially and symbolically. Sickness and maternity leave as well as leisure benefits were granted women in agriculture. Four marked women may illustrate this feminisation of agricultural politics: Gunhild Øyangen became Minister of Agriculture in 1986, Anne Enger Lahnstein was elected chair of the Centre Party (former Farmers' Party) in 1991, Aina Bartmann (Edelmann) became leader of the Smallholders Union in 1992 and Kirsten Indgjerd Værdal was elected leader of the Farmers' Union in 1997.

In spite of progress in the struggle for gender equality, women left agriculture to a larger extent than men all through the period after WWII. This process of *masculinisation* may be explained both by factors internal and external to agriculture. Internal factors like labour saving technologies, specialisation and outsourcing of processing of farm products left fewer working opportunities for women on the farms. As mentioned above, care for children and elderly was institutionalised to a large extent, and rural women “followed the jobs” out of the household and became waged workers

Eventually there has been a fifth tendency of *downward socio-economic mobility* for the farmers as a social group. Just after WWII most farmers were still employers, at least in cultivation and harvesting seasons of the year. Both their lifestyle and cultural capital were comparable to the middle class in towns, even with distinct differences. Lifestyle and type of social life varied though the country, the class differences being most visible in the richer eastern provinces. Most full time farmers today have a low income and as a group they have rather low social status. Through their spouses' income, however, farmers may have an average household income.

To answer our main question, why Norwegian farming has been thriving since 1945, in spite of its competitive disadvantages, there are two factors to highlight above all. Because farmers have been able to organise strong production and marketing co-operatives, in order to gain market power at the national level, they have been able to gain more value added out of food consumption than would have been the case with a completely private food industry. Secondly, the Norwegian food markets have been strictly regulated up to the 2000s. This regulation regime was founded on a political compromise between farmer' and workers' interest in the 1930s. Without this compromise between rural and urban interest, in order to protect a national food production, the Norwegian rural landscape would have looked quite differently from what it looks today. However, because of the recent changes in national and international agricultural regimes, Norwegian agriculture may experience huge structural and social transformation in the years to come.

Literature

Almås, R. (2002) *Norges landbrukshistorie IV. Frå bondesamfunn til bioindustri. 1920-2000*. Oslo: Samlaget.

Almås, R. (2004) *Norwegian Agricultural history*. Trondheim: Tapir Academic Publishers.

Cochrane, W.W. (1958) *Farm prices- myth and reality*. Minneapolis: University of Minnesota Press.

Furre, B. (1971) *Mjølk, bønder og tingmenn. Studiar i organisasjon og politikk kring omsetninga av visse landbruksvarer 1929-30*. Oslo: Samlaget.

Furre, B. (2000) *Norsk historie 1914-2000. Industrisamfunnet- frå vokstervisse til framtidstvil*. Oslo: Samlaget.

Haugen, M.S. (1998) *Women farmers in Norway*. Dr. polit. thesis. Trondheim: Centre for Rural Research.

Hobsbawm, E. (1994) *The Age of Extremes. A history of the World, 1914-91*. New York: Pantheon Books.

Notes

¹ This text is for the period 1945-2002 largely based on Almås, R. (2004). Norwegian Agricultural history. Trondheim: Tapir Academic Publishers.

² Almås 2002 123

³ Bull 1978 237

⁴ Almås 2002 197

⁵ Cochrane 1958

⁶ "Færre, men sterkere" or "Fewer and stronger" was formulated by Hans Haga, the chairman of the Norwegian Farmers Union. See Almås 2002 232

⁷ Almås 2002 257

⁸ Almås 2002 253

⁹ Almås 2002 270

¹⁰ Haugen 1998

¹¹ See I. Øye in chapter two of Norwegian Agricultural history

¹² Almås 2002 352