



The role of the Royal Swedish Academy of Agriculture and Forestry is, with the support of science and practical experience, to promote agriculture and forestry and related activities, for the benefit of society. The Academy was founded in 1811 at the initiative of Karl XIV Johan and started its work on 28 January 1813.

The Academy's 203rd Commemorative Meeting

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Academy President Kerstin Niblaeus

The Commemorative Meeting of the Royal Swedish Academy of Agriculture and Forestry on 28 January 2015

Our indispensable agriculture

Your Excellencies

Honourable Minister

Esteemed Fellows

Ladies and gentlemen

In the beginning there was no agriculture. Our earliest forefathers lived by hunting and fishing, they gathered berries, fruits and seeds from wild plants and moved to new hunting grounds when there was no longer any game to hunt in the old grounds.

Some five thousand years ago perhaps, on the threshold of the Early Stone Age, man began to poke a few grains of wheat into a field and then harvest the crop. He grazed his cattle and domesticated pigs and horses. Instead of hunting animals, he could slaughter them when need arose.

This was the start of a revolutionary change, not just in the way man acquired food, but also in the way he lived and how society was organised. Homes and utensils. Stanchion houses and funnel beakers were replaced by long houses and iron ploughs. Production increased, and so did the number of people. Surpluses made trading possible. Means of transport developed and new means of payment led to an economic system. Societies became organised, laws were made and new forms of governance were drawn up.

Therefore, the development of what we usually call modern civilization is based on agriculture; its foundation was laid by the very first farmers.

Some 250 generations have since succeeded each other and agriculture has undergone a breathtaking change, as has society in general. Life expectancy has risen sharply as have living standards.

Science and technology have created new opportunities to supply nutrients and control diseases and insects. Plant breeding and irrigation are other aspects of the Green Revolution, which has raised production so that today we can now feed six billion people on our planet.

Well, not really. We must not forget that approximately 800 million people are still undernourished. The Millennium Development Goal of halving the number of undernourished by 2015 is unlikely to be achieved before 2040, according to FAO estimates.

The demographic trend suggests that there are likely to be around nine billion on the planet in 2050. It will be a massive challenge to produce enough food for everyone – and to do so in a way that protects our natural resources and respects the limits set by nature.

It is not impossible; the equipment and the expertise are available, and research will give us the additional means to raise production further. Not least, it is a matter of organizing production and distribution so that food waste, which is now around 40%, is reduced. Forceful measures are needed; but this problem will not resolve itself. It requires action in every country on earth. What role can and should Sweden play in this test of mankind?

Where in the world should food be produced – is agriculture needed in our small country in today's world of global free trade? And does Swedish agriculture actually stand a chance in this competitive global environment?

More than ever Swedish agricultural production is dependent on events on the global market. The dairy farmer who invests in a modern automatic system sees the price of milk going up and down, depending on how much milk the Russians and the Chinese consume. Meat producers compete with South American countries where the cattle can graze outside all year round, and with European Union neighbours who do not take jointly determined laws and regulations for livestock, for example, as seriously as we do. All the while, we consumers consider it a matter of course to have access to products from all corners of the world on the shelves of our grocery stores. Competition is stiff and far too many curves are pointing downwards.

But there are reasons to promote and develop Swedish agriculture, good reasons.

One reason is our natural resources. We have plenty of land and water in particular, which scientists predict could become a limiting factor for agriculture in many countries. The fertility of the soil varies but with research we can develop new crops that suit our soils and the future climate.

A second reason is our high level of expertise. We have highly educated, capable farmers. We have prominent researchers; the Swedish University of Agricultural Sciences is one of the top universities in Europe. Things could be even better if we concentrated more on stimulating innovation and developing the dialogue between researchers and practitioners. We also have an impressive array of top chefs who have created a magical glow around locally produced ingredients in their recipes and menus. Not least, we have knowledgeable consumers who are appreciating the quality of Swedish production more and more.

A third reason is the high quality of our products. For example, in terms of animal husbandry, we are among the best in the world. Our use of antibiotics is record low. If we compare Sweden to other countries in Europe, Germany uses 15 times more, Denmark three times more, and a country such as Cyprus uses 29 times more. In the United States, antibiotics are used to promote growth, a totally different approach. High consumption of antibiotics in livestock farming is not just a question of meat quality; it is a serious matter since it increases the risk of resistance to antibiotics, which is a real threat.

Our productivity is also high. A Swedish cow can produce 15,000 litres of milk per year; this is among the best yields in the world. Breeding has been a success and when a country such as China is in the market for cows, they choose Swedish ones. And in the USA they buy Swedish bulls.

A fourth factor is the environment. Swedish farming shows greater concern for the environment than many of the countries with which we compete.

The impact on the climate is less; for example, Swedish cows release 30–40% fewer greenhouse gases than cows in South America.

In relative terms, our use of pesticides is very low, partially due to the fact that our climate deters insects, but mainly due to our conscious efforts. As in other countries, the use of chemical pesticides rose in the 50s and 60s, when our confidence in technology was great. Eventually research revealed the harmful effects on soil and water, birds and fish, and thus the risk to mankind. Wise farmers embraced the new findings and the use of chemical pesticides more than halved. Needless toxic substances were taken off the market, and now new EU regulations are being introduced with a similar aim. And, technology is helping with new machinery that can identify individual weeds and only treat these, rather than an entire crop.

The use of synthetic fertilizers has been instrumental in increasing production, but has also led to problems through seepage into watercourses, which has contributed to the eutrophication from which many of our lakes and, not least, the Baltic Sea are suffering. We often hear that agriculture and farmers bear the brunt of the blame for this problem. Few are aware of the efforts that our Swedish farmers have taken to reduce emissions; for instance, through buffer zones adjacent to watercourses, catch crops, autumn sowing and spring ploughing; through better handling of manure, through campaigns for the dissemination of knowledge as in the “Focus on Nutrients” which has also spread to the other side of the Baltic. In the Swedish Environmental Protection Agency’s reports on the marine environment we read that: “increased awareness among farmers has resulted in concrete action having the desired effect”. Obviously, this is not enough; eutrophication is still a major and serious problem. However, our farmers deserve recognition for the efforts they have made.

And it will get better. Again, new technology; thanks to GPS control systems spreading can be carried out with greater precision, adapted to what is really needed, thereby becoming more cost effective and with less leakage as a result.

We can note that conventional farming has become more environmentally friendly in recent decades. Meanwhile, the type of farming, which is now known as organic, without chemical pesticides or synthetic fertilizers, has increased to upwards of 10% of the volume.

Obviously, this is positive and it is very encouraging that consumer interest in these organic and locally grown products seems to be increasing steadily, even in the public sector in the local authorities and regions.

In the longer term we can hope for truly sustainable agriculture, as award-winning Peter Sylwan describes so well. But we have a long way to go.

A *fifth reason* for Swedish agriculture is to secure our food supply. The trend has been for us to import more and more; today 50% of the food we eat in Sweden is produced within the country. Twenty years ago it was 75%. Compared to other EU member states, Sweden is one of the countries with the lowest degree of self-sufficiency. Events can occur in our world that affect the scope and the conditions for the imports that we now take for granted.

We have a substantial food industry – our fourth branch of industry, which has the potential to grow in terms of Swedish consumption as well as in terms of exports.

These are a few of the reasons for Swedish agriculture. There are more. For example, what would the landscape look like without agriculture? And what would happen to the countryside?

My conclusion is that we will still need Swedish agriculture in the future.

The question must then be asked whether our agriculture will be able to survive in the competition associated with global free trade? That is not only dependent on the efforts of the farmers, but also on the conditions and the frameworks drawn up by means of political decisions. It is a good thing that the government has announced a food strategy and called for an increase in the relative consumption of Swedish-produced food. The Royal Swedish Academy of Agriculture and Forestry has a range of activities in the pipeline, which we hope will be of use in the work that lies ahead.

The last government set up a committee to inquire into the competitiveness of Swedish agriculture and horticulture. We look forward with great expectations to the report the committee will present in a few weeks' time. Our academy has been active in providing a basis for the committee's work, for example in terms of describing the role of research and its potential.

It is no longer the case that Swedish political decisions alone determine the conditions for production. Sweden is a member of the European Union, which has a Common Agricultural Policy, CAP. Member states' agriculture ministers meet regularly in Brussels or Luxembourg to make decisions, as does the European Parliament. Recently, CAP 2020, which outlines the options for the future of CAP, was decided. Meanwhile, preparations are being made for the next CAP 2030. If you wish to make your voice heard, you should start early, and the Royal Swedish Academy of Agriculture and Forestry's aim is to start thinking now about the preliminaries of this CAP. We believe it is important to provide a scientific basis for the discussions that will take place. We are also in contact with other European agricultural academies that have similar interests to ours. We are part of a network that is currently led by the Czech Republic and France.

Swedish agriculture faces serious challenges. It will require maximum mobilization of the resources we have, the expertise that is available and the expertise we must invest in for development.

The Royal Swedish Academy of Agriculture and Forestry will continue its 200-year mission to develop Swedish agriculture by means of research and practical experience.

Kerstin Niblaeus



Academy Secretary Carl-Anders Helander

The Commemorative Meeting of the Royal Swedish Academy of Agriculture and Forestry on 28 January 2015

Your Excellencies

Honourable Minister

Honorary Fellows

New Fellows

Laureates

Fellows of the Academy

Distinguished Guests

2014 was the 202nd year of the Royal Swedish Academy of Agriculture and Forestry (KSLA) since its foundation in 1813. In the aftermath of our bicentenary in 2013 we organised a total of no fewer than 50 activities and events during the past year. Of course I cannot account for all of them here and now. Instead you will have to make do with a selection. I will begin with an example from each of our sections;

The General Section hosted the Academy meeting in March on the theme of *Power over the land – who shall decide on the use of our farmland?* A highly topical issue, given that so much fertile, arable land is used for building purposes and is therefore in principle taken out of production for all time.

The Agricultural Section organised a seminar entitled *Food fraud, misunderstanding and corruption*. One of the reasons for arranging this seminar was the various meat scandals in Sweden and Europe, which exposed serious irregularities within the international food trade. The seminar was financed by the fundraising foundation "KSLA for Future Harvests", which also financed Framtidsprojektet, "The Future Project", phase 2; what we now call Unga i KSLA, "Youth in KSLA".

The Forestry Section was responsible for an Academy meeting in November entitled *How has Sweden come to be a forest industry superpower?* At this seminar it emerged clearly that Sweden's prominent position in the forest industry is by no means assured in the future, but that the prospects are favourable if the sector focuses on development and growth in new markets.

From **The Unit for Forest and Agricultural History** (ANH) I would like to mention the launch of the “Tenancy book”, *To work the land but not own it: Leases and other land tenancies in Swedish farming from the Middle Ages until today*. The book provides a historical account, but is highly topical, given the link with the current review of the tenancy laws.

During the year, two trips abroad were arranged for and by our fellows.

One trip was the Forestry Section’s study visit to Russia, which included visiting Saint Petersburg and the Komi Republic, which borders on the Ural Mountains. Among other things, delegates studied how well the Russian forest industry is doing in comparison with that in Sweden; the conclusion was that so far the Russian forest industry does not pose a major threat to the Swedish forest industry. Many Russians in the forestry industry even want to see the “Swedish model” adopted in Russia.

The Agricultural Section arranged a trip to Brussels and Paris and their environs. The focus was on the EU’s future common agricultural policy (CAP). Those of us who took part in the trip noted that most French people we met were not particularly prone to change in terms of the EU’s common agricultural policy. Or rather we noted a certain reluctance even to discuss any type of change that could jeopardise France’s status or the benefits it derives from the existing agricultural policy.

For the past two years the Royal Swedish Academy of Agriculture and Forestry (KSLA) has chaired the Union of European Academies for Sciences applied to Agriculture, Food and Nature (UEAA). We handed over the presidency to the Czech Republic at a conference in Prague in the middle of September.

The Academy has been actively involved in the inquiry on competitiveness, set up on the initiative of the Ministry for Rural Affairs. Academy fellow Annika Åhnberg is KSLA’s representative on the panel of experts assigned to the committee. Several of our committees have been and are still engaged in various ways in producing background material for the committee.

If you would like a more detailed account of our activities in 2014, I would refer you to our annual report, which will be published in April.

The Academy’s activities are funded in large part by the income from our capital and from some of the foundations we manage. Sound asset management is essential if we are to be able to carry out our activities successfully.

During the year we hired two different external auditors who carried out an evaluation of our asset management. The audit consisted of both a quantitative part and a qualitative part and the result was favourable on all counts. During the six-year period that the audit covered our assets have grown at least on a par with other funds with comparable yield requirements. The qualitative audit, which covers organisation and distribution of responsibility, confirmed that our financial control committee fulfils its important role in a highly competent manner.

Given the prevailing situation on the capital market, with extremely low yields, active capital management will continue to be of great importance for the Academy in the future. It is essential that we retain a good balance between a relatively high yield and not excessive risk-taking.

The Academy's need for sound long-term finances requires us to maintain close control over costs and income.

During the year we focused on finding ways to save; without for that reason compromising on the extent or quality of our activities.

The Academy council has also decided to launch a process of finding external funding for some of our activities – without compromise on our position as an independent and self-sufficient organisation. Independence is one of the cornerstones of KSLA. We will continue *to be that independent forum for the green industries.*

The past year has also been characterised by various projects undertaken to develop the Academy and its activities in the future. So, if we take a brief look at the immediate future, what do we see?

Our Unit for Forest and Agricultural History (ANH) runs many of KSLA's projects. During the year, and on the initiative of the ANH advisory committee, the Academy council, our Board, set up a committee of inquiry to outline proposals on the future direction of the Academy and how to organise our archives/historical section, including our unique library.

The background to the review is that after many years with us our chief librarian Lars Ljunggren will retire in 2015, and that the archives absorb a large part of the Academy's funds. It is also important to strengthen the scientific foundation of the archives section, as well as adapting it to changing demands and integrating it more into the Academy's other activities.

The Academy Secretariat plays an important role in the implementation of the projects that the Academy fellows initiate and actively participate in. During the spring we will be taking steps to further improve our managerial processes.

Communication, both internal and external, is an area that we constantly need to develop so that the active work of the Academy and issues of current interest reach our target groups in an effective way. We are working on finding ways to make use of the expertise that exists among our fellows and which is an obvious resource in improving the efficiency of our communication.

The Academy has the sound basic organisation needed to carry out active fellow-driven projects. The activities are controlled by the four-year strategic plan that the chairmen outlined for 2013 to 2016. The Academy council organised a planning conference last spring to draw up the guidelines for our annual activities plan, which is largely based on the plans that our three sections have outlined for the coming year. The strategic plan for 2015 was adopted at the council's meeting in December. The practical tasks will be carried out within the various committees as proposed by each section.

At this point I would like to take the opportunity to thank all of the fellows who give so much of their own, unpaid time to serving on the committees, advisory committees, sections, the council and in many other ways. I would also like to thank everyone else, non-fellows, who contribute with their time and capabilities for the good of the Academy.

Finally a couple of activities worth noting for 2015:

- This autumn we will for the first time arrange a Håstadius seminar. Dave Servin, this year's laureate, will participate in the planning and implementation of the seminar, which will most likely be held at the Swedish University of Agricultural Sciences (SLU) in Alnarp.
- Our first KSLA holder of the Wallenberg professorship, Ian Fleming, will be responsible for the Wallenberg seminar on aquatic ecology, which is planned to take place in Gothenburg, in collaboration with the University of Gothenburg.

As everyone is aware, there will be many interesting events on our agenda for 2015, so there is reason to check our website from time to time to see what is going on. I wish to recommend all of you to participate in the various activities of the Academy, and choose the ones that interest you most!

Carl-Anders Helander