Greening the CAP

– why and how?

STOCKHOLM 8 FEBRUARY 2002

Nordic seminar

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Introduction

PETER EINARSSON *Agricultural policy analyst, Ekologiska Lantbrukarna, Sweden*

Over the last few years, events such as the BSE epidemic and the introduction of GMO food crops have created a strong public opinion for returning European agriculture from its highly industrialised forms of production to a more natural approach.

For the organic farming movement, this development is very encouraging. Since long before either BSE or GMOs, organic farmers have tried to use natural ecosystems as a model for agriculture, thus avoiding most of the industrial production methods which are now being questioned.

But what *kind* of changes to the CAP would really help the transition to more natural methods? This was the question which was addressed at a one-day seminar jointly organised by four Nordic organic organisations in February 2002.

FUNDAMENTAL CHANGE

It is sometimes claimed that simply reducing the support levels would automatically reduce questionable practices and bring environmental benefits. There is little to support this view. It should be assumed that the de-industrialisation of agricultural production, just like any other policy objective, will require specific measures designed for this purpose.

Since the 1992 reform, some environmental measures in agriculture have been included in the CAP. Notably, conversion to organic production has been increasingly supported. But so far, these measures have had an insignificant budget, and they have been designed to complement rather than to replace or reform the core support systems. Consequently the impact has been limited.

What must come on the agenda now are more fundamental changes to the CAP as a whole. Its objectives need revision. Environmental sustainability must become a mandatory requirement, rather than a voluntary commitment. Animal welfare and food safety need to be seriously addressed. This will require a further increase in the rate of organic conversion, but simultaneously the baseline of what qualifies as "good agricultural practice" must be raised for European farming as a whole.

The CAP certainly has the economic power to effect this kind of change. But it needs to be systematically remodeled to convey the message that future farm support will be conditional on sustainable and ethically acceptable management practices.

SEMINAR FORMAT

In the morning session of the seminar four invited speakers presented formal papers providing in-depth background on some key issues such as the misguided quest for "efficiency" through agricultural policy and the damaging effects of the CAP on developing country agriculture.

The afternoon session was spent exploring options for reform of the various elements of the CAP: its objectives, the border control and export subsidy system, the direct support schemes for crops and animals, the agri-environment and rural development measures.

The basis for this discussion were short informal presentations by agricultural policy staff from the Nordic organic organisations and by some of our European colleagues, reflecting reform options under consideration in the organic farming community.

The seminar formed part of a Europe-wide process which later resulted in a substantial position paper on CAP reform by the IFOAM EU Group, the European umbrella organisation of the organic agriculture movement. This paper, finalised in April 2002, is available in PDF format at www.ekolantbruk.se under *In English*. ¶

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Discussion with panel and audience

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Why "back to nature" is the way forward for European agriculture

PER KØLSTER *Agronomist and farmer, Fuglebjerggaard, Helsinge, Denmark*

Thank you for the invitation. I am honoured to be here being able to share my thoughts and visions for the future of agriculture in Europe with you.

My background for this is that for many years I worked at the agricultural university of Copenhagen with organic farming in teaching as well as research. I left the university 5 years ago because I needed to challenge and face real world potentials of organic agriculture. I became a farmer, instructor, and teacher etc, on my own farm. Together my wife and I have established a farm that is producing, processing and serving all our own produce. We look upon organic agriculture as a gastronomic as well as an agronomic challenge. Quality and diversity are our major keywords. During all these years I have participated in different committees and projects concerning development and conversion to organic agriculture at a national level.

The topic of my talk, "Why 'back to nature' is the way forward for European agriculture" is a rather comprehensive issue, which I should like to address asking the following questions:

- What does the expression 'back to nature' cover?
- What is 'nature' or 'natural'?
- Is this the same as organic agriculture?

To me 'natural' refers to principles of nature that may be used as a guideline for management of human dominated systems. Only Nature is natural. Even a human being may be natural. Agri-culture is the result of human management and attempts to control Nature in order to serve mankind. The system is not natural. However, agri-culture may be more or less managed according to the principles of Nature. This, I think, is what we all mean by organic agriculture: a food production system which increasingly should be productive based on the principles we gradually learn from the secrets of Nature.

The essential principles of organic agriculture, can they apply to a common agricultural policy for the EU?

Is it a relevant perspective to state that organic agriculture becomes the conventional mainstream food producing system of Europe in the future?

What is required and necessary to achieve such an ambitious goal?

And very specifically, is certified organic agriculture the common agriculture in the future?

Are the principles of organic agriculture acceptable for people in general and are they compatible with the democracy of the EU and its member states? How could the principles of organic agriculture significantly influence the European policymaking?

These questions are too many to be answered here. Therefore, I shall limit myself to discuss what has come to my mind as the most important issues.

THE MAJOR PROBLEMS AND CHALLENGES OF AGRICULTURE

The number of farms and of people working in farming are diminishing. Services are disappearing. Rural areas become stratified and divided into industrial farms and spare time farms or deserted areas. Rural areas are destabilised due to the loss of local activities and economics. Conflicts between the interests of full time farmers and other people living in the rural areas are increasing.

The culture of the food producing system is similar to the culture of urban communities: total dependency on external resources, specialised, industrial processes, employment and anonymous ownership, etc. Farmers feel that they have lost their freedom to the financial system and to the state.

The traditional history, heritage and culture of rural areas and farms are disappearing and conserved in museums. Values and knowledge strongly related to natural resource based farming disappear.

An ever-increasing part of economics in the food system is concentrated among the processors and other so-called middlemen. Although economically significant, agriculture only plays a minor role in

the macroeconomics of Europe. This is even so in Denmark where agriculture is exporting a significant part of the production.

The European subsidies to farming have caught all parties in a Gordian knot. Farmers wish to have an income security without being dependent. The society needs stability, productivity and control, which so far is paid for by the subsidies. Any attempts to obtain more radical changes are met with strong lobbying and even riots. Farmers, politicians and the society are locked up in this conflict. All parties are losing, including the environment, the food quality, the welfare of animals and the civil society. Moreover, nature, natural resources and nature within agriculture is continuously demolished due to general industrial and urban pollution and to agriculture's own production methods, in spite of the subsidies.

Management and protection of nature should be part of any food producing system and be integrated in the production methods. Protective methods of farming are based on the natural potentials built up within the system and on the site-specific resources. A productive agriculture, which is also sustainable, depends on methodology and processes which are internal to the system. The more internalised the processes are, the more self-control, stability, autonomy and freedom. An economic surplus created should be used as insurance against uncertainty and to overcome threats to the system. However, today a surplus is converted to an investment into increased growth. The never-ending demand for growth is an uncontrollable treadmill.

The challenge is to create conditions for the development of sustainable, healthy and active rural communities which both care for the heritage, productivity, and for the dynamic development of a future culture – bridging between past, present and future.

WHAT ARE THE POTENTIALS OF ORGANIC AGRICULTURE?

Historically organic farming was the idea of a minor group of pioneers. They were concerned about the health of humans and the role of agriculture and food. They all came to the conclusion that soil, plant, animal and man is a continuum of health. Health at all levels influence the others, they are mutually dependent. Later this lesson became the basic idea for the growing concern for the environment in the late sixties and the seventies. It soon became an accepted principle that health and environment are two aspects of how we manage agriculture and the whole food system. Few of us could imagine in the beginning of the eighties that today we have achieved what we 20 years ago looked upon as a vision.

All across society organic farming is now accepted. Organic methods have proven to meet the demands for a food producing system. Organic farms are productive, friendly to environment and animals, incomes are competitive, products are healthy and often of outstanding gastronomic quality. Organic food is widely distributed and is becoming a more common part of daily shopping in most European countries. It is becoming a part of the mainstream food market.

Today, organic is the trend.

The major factor determining the development of organic farming until now is the market and specific government schemes for conversion subsidies. A pressure on the politicians from advanced consumer groups have resulted in this pluralism within agricultural politics.

However, organic farmers are competing in a situation where consumers compare prices. The surplus price limits the potential for a further development. A strong tendency and motivation to reduce costs and increase productivity forces the organic food system to become more and more similar to the conventional food systems. Today we see large, specialised organic production systems, which become more and more dependent on inputs and extremely vulnerable to changes in the market.

Organics is a vision of internalising processes and knowledge at a local scale. Today's rules of the market are the opposite. Market regulations of the EU and WTO do not seem to be on their way to choose the organic path.

Organic farmers, companies and institutions carry out comprehensive experimentation with new ways and means in order to meet the wider principles and goals of the organic visions and to minimise dependence on the mainstream food market.

Examples could be direct marketing, farm shops and processing at farms, conversion of public kitchens, nature conservation projects etc. It is striking that such initiatives often are initiated in order to involve wider parts of the community than only farmers and retailers. Such examples may be very significant signs of a development of alternatives to the usual food system and market.

I will give one specific example. During the past

12 years the conversion to organic food in public institutions has been carried out systematically in Denmark. It started with kindergartens, continued with schools, nursery homes and is now also covering hospitals. Interestingly, there have been two different approaches.

The first approach argued that organic produce is more expensive. Therefore, a successful conversion must be based on an increased budget and on the development of organic, convenient pre-processed food easily handled in the professional kitchens. I do not need to tell you that this model clearly has demonstrated that it is not possible to convert large, professional kitchens.

The second approach was and still is based on the philosophy that conversion is a process of changing mindsets, attitudes and skills among all participants in the food system and the institutional staff involved. Money has to be invested in education while the daily budgeting should be neutral. The involved parties are trained in changed cooking methods based on seasonal and cheaper raw materials, less meat, more starch and vegetables. They are certainly also given a deeper understanding of why organic food is the way if both human health and the environment should be best safeguarded. The participants are encouraged to cooperate with local farmers, wholesalers and shops in order to achieve confidence, transparency, identity and acceptance of the food used. In kindergartens the children are involved in preparing food, food becomes a challenging part of their life.

This model has demonstrated to be extremely successful. Several hundred institutions are today converted and more are coming. One hospital has been converted, others are just beginning the process.

It is our experience, that the staff involved are very open to changes if they understand and accept the arguments, if they become the owners of the organic vision. However, a great resistance is met where individuals or groups feel that they are threatened in their positions. In this situation, it is important to have the necessary support from leaders who insist on a further progress of the conversion. In this perspective the model is both a top-down and a bottom-up action. I think there is a very normal concept for that: it is *democracy*!

The food market is limited by the prevalent conditions for competition. It is not based on common sense and only partly on democratic decisions.

There is a great potential for changes in the food producing system if the democratic system is taking political action.

The example given is an example of an initiation of conversion due to democratic processes in spite of the opposite rationality of the market. Political actions happen at many levels and unexpected alliances are one major reason behind the initiatives and their success.

Another force is the common sense of ordinary people. They are against GMOs because of common sense, and they are supporting the conversion to organic food due to common sense. This common sense is brought into action by personal initiatives and cooperation across traditional system boundaries.

In a wider European context this example may seem very insignificant. However, think about how organic farming was treated in the public debate as being ridiculous 20 years ago. Think about how significant the role of the retailers has been at least in Denmark. And think about how urgent the needs are for new policies, which may change European agriculture from a system on drugs into a self-regulating and healthy system within the communities. This is why I believe that the new trend is an increased political activity based on the experiences and practice of organic agriculture.

This approach to the future of European farming is presented and summarised in Table 1.

ORGANIC FARMING: THE EXCEPTION OR THE RULE FOR FUTURE FARMING?

I should like to finish my presentation by making my statement more complex. In Figure 1 different characteristics of the future for the kind of food are listed.

The characteristic of mainstream food is that it should be ever more cheap, convenience is growing, functional food and the use of GMO is forced on the consumers, products are imported or sold globally irrespectively of their origin, season, social values etc. Quality food is exceptional together with the special demands for environmental and ethical concerns. It is evident that the food market is strongly influenced by the change of lifestyle everywhere. People are cooking less at home, they use more prepared or fast food, more singles, more parallel cultures or multiethnic societies, a stronger influence of media, less of income spent on food etc. Organic food represents an alternative. However, all the characteristics of mainstream food have a threatening influence on

Table 1 **ORGANIC AGRICULTURE - Development from utopia to norm**

Concepts	**Force**	**How?**	**1970s**	**1980s**	**1990s**	**2000s**	**2010s**	**2020s**
Health Belief Ethics	Pioneering Private	Steiner Balfour ...	Utopia	Vision	Trend	Norm	History	History
Niche Environment Welfare Large scale Quantity	Idealism Pluralism Profession Market	Farmers *Consumers*	-	Utopia	Vision	Trend	Norm	History
Quality Local Fairness Networks Learning	Politics Lobbyism Integrated goals Democracy	Organisations Companies Politicians	-	-	Utopia	Vision	Trend	Norm

the development of organic food producing systems. If too many compromises are made with discount organic food, organic convenience, heavy imports, lack of an outstanding clearly better quality, less consideration to environment etc, time is running out for organic farming. From the point of view of the market the difference disappears and organic farming is losing its justification.

Organic farming has to be a spearhead.

I hope and believe that the coming 20 years will show that organic farming itself will continue to grow. To which degree depends on the political agenda and on the ability to position both the products and the system as increasingly outstanding compared to the mainstream.

To which degree this more natural way of farming may have an influence on the general agricultural policy of the EU may to some extend depend on our willingness to work for changes which do not necessarily increase the area with organic farms, but lead to a more organic agriculture. I believe there is a very strong need for our participation but also that we sometimes politically should emphasise more to fight for initiatives which indirectly give organic farming more competitive advantages.

What these are is worth another presentation. ¶

Per Kølster is an agronomist and farmer. Together with his wife Camilla Plum he manages FUGLEBJERGGAARD. The farm has an organic garden and orchards, cereals, flour milling and baking, beefcattle, sheep, hens, farm shop, restaurant with dining, cooking school, teaching courses and writing. See www.fuglebjerggaard.dk

Figure 1
Importance of different characteristics within conventional and organic food systems or food trends as "Real World Analysts" could present them.

Characteristic	**Conventional**	**Organic**
Cheapness	xxxxxxxxxxxx	xx
Convenience and functional	xxxxxxxxxx	xxx
Transnational and global	xxxxxxxx	xxxxx
Quality	xxx	xxxxxxx
Environment and ethics	x	xxxxxxxxxxxxx

The emerging consensus on ecological sustainability in agriculture

HILLEVI HELMFRID *Agronomist and consultant, Vimmerby, Sweden*

Can we talk about a consensus concerning sustainability in agriculture? To what extent? How can we understand the nature of disagreements about sustainability of agriculture?

To highlight these questions I will in this article refer two of my own experiences of consensus work.

The first one was in 1992-93. The Swedish foundation *The Natural Step* had taken the initiative to gather stakeholders in the agricultural sector to write a consensus document on sustainable agriculture. When I was invited to be the secretary of the group in the fall of 1992 the process had already started and the well known conflicts between conventional and ecological farming were making it difficult for the group to find a common ground. During one more year of process work we managed to develop common concepts. The *ecocycle perspective* put forward by The Natural Step was used as a platform.

Finally the group agreed upon a document called "Den livsviktiga näringen" ("The vital sector")[1]. All the main stakeholders were represented: the farmers union (LRF), the ecological farmers union (ARF), and the organic certification body (KRAV); and researchers from the Agricultural University as well as representatives from government authorities and from NGOs.

The second experience was in 1999. One of the participants in the above mentioned consensus process invited to a one-day expert conference on "Agriculture and the Baltic Sea". I was invited to moderate the expert conference and to summarise the outcome. The summary was presented at a larger conference the following day and also in a conference report.[2] This conference gave me a good opportunity to analyse *the nature of disagreements* in the debate of sustainability of agriculture.

I will first give a slightly restructured summary of the consensus document from 1993.

Choice of perspective

Within the environmental debate, there is often an emphasis on disagreements, in such a way that matters on which there could be collective agreement become invisible. The aim of this document is to articulate a common platform, on which representatives from all backgrounds could agree. Using the ecocycle principle as our starting point, we have found an analytical model which emphasises the long-term perspective over the short-term one.

Ranking of environmental problems and relevant counter-measures is a difficult task wich involves political considerations. An attractive political strategy would be to rely on tolerance limits derived from natural sciences. It is however impossible to irrefutably establish what nature can tolerate. Medical science, with the help of statistics on deceased patients, has been able to arrive at approximate limits for what the human body can tolerate in terms of pollution and by-products. The tolerance limits for the survival of the biosphere can for obvious reasons not be estimated in the same way.

The difficulty in establishing tolerance levels and ranking of symptoms is aggravated by *time-lags*, *spatial displacement* and *complexity*.

We can disperse certain pollutants continuously over a long period of time without noticing any harmful effects. Problems often appear suddenly. When problems become apparent, stabilising mechanisms may have been exceeded. For example in many acid soils, the chemical buffering capacity has already been exhausted when visible effects on fauna and flora become obvious. Another example is the global system of climate regulation. By the time visible effects appear, things may have gone to far to implement appropriate counter-measures.

Spatial displacement means that there is often a long distance between cause and effect, which makes it difficult to predict and control damage.

[1] The report is available in Swedish only at The Natural Step in Stockholm, +46 8 789 29 00.
[2] The report is available at Biodynamiska Forskningsinstitutet, +46 8 55 15 77 02.

For example the dispersal of pollutants over large areas means that damage is not easily connected to its source and that long-term and large-scale effects remain invisible.

It can be demonstrated in computer simulation that a complex system is always to some degree unpredictable. However much knowledge we have about the properties of the system, not every consequence of events, and not every causal chain set in motion by change, can be foreseen. This is particularly true for the complex interactions of the lithosphere, hydrosphere, biosphere and atmosphere, i e the systems that support life on earth.

As a consequence of the difficulty to rank environmental measures by studying apparent

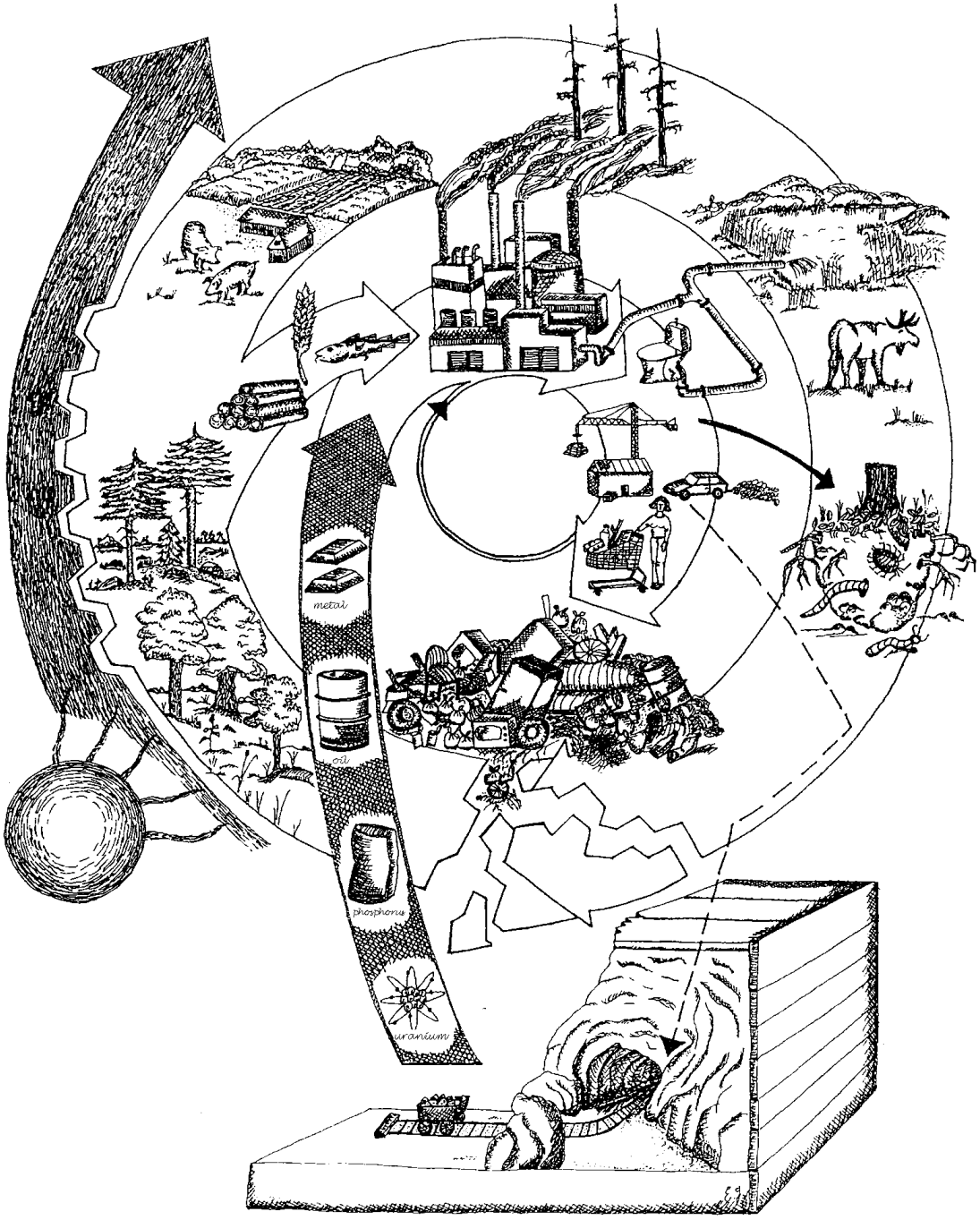


Figure 1 **Present unsustainable situation** *Finite deposits are being depleted. Residue from production (using raw material both from the lithosphere and from the ecosphere) in the form of molecular waste and tangible waste, are being dispersed into air, soil and water. The long term productivity of ecosystems is threatened. Can human needs be met more efficiently with less impact on nature?* ILLUSTRATION EVA JÄRNEROT

symtoms, or defining tolerance limits, we must go "upstream" to find fundamental principles for sustainability. The ecocycle perspective offers such an "upstream" analytic model, focusing on the sources of environmental degradation and the fundamental principles of integrating human activity into functioning natural ecocycles.

The choice to use the ecocycle principle strictly as the common analytic tool means that some related issues, although important, are not looked at in this document. These are animal ethics, genetic engineering, health, quality of food products, working conditions and quality of life for farmers, landscape ethics, care and maintenance of national monuments.

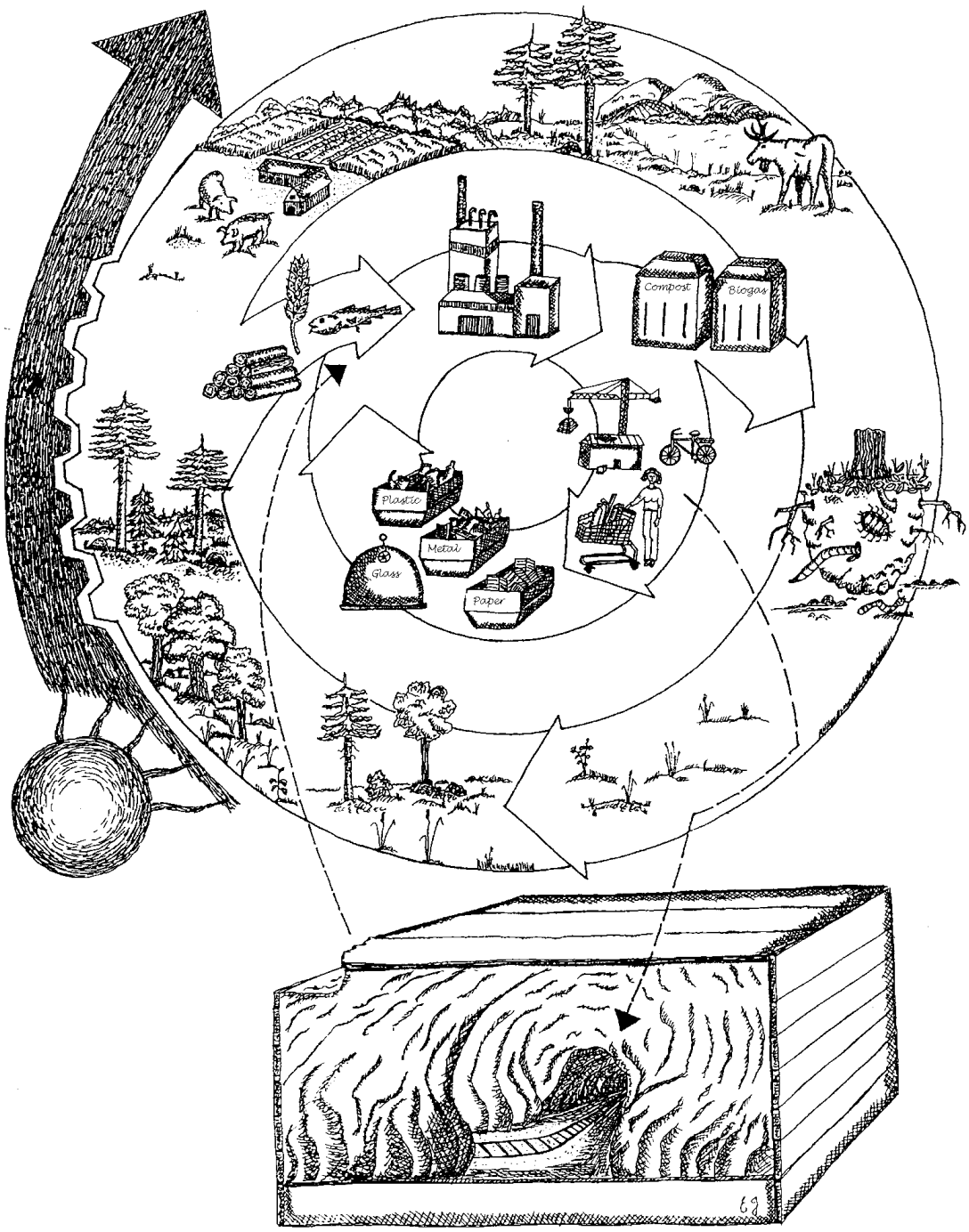


Figure 2 **Sustainable situation** *The ecocycle society recycles the already extracted matter in closed, human-managed cycles. The ecosystem provides all the necessary matter for society and there is a balance between extraction and renewal. Long-term productivity of ecosystems is kept intact. Human needs are met with low impact on nature*. ILL EVA JÄRNEROT

The ecocycle perspective[1]

The ecocycle perspective considers three systems:

- The human society
- The ecosphere (biosphere, atmosphere, hydrosphere and pedosphere)
- The lithosphere (core, mantle and crust)

Human society depends on the ecosphere. By studying the flows between these three systems, four non-overlapping principles of sustainability can be derived.

FIRST PRINCIPLE

Today large quantities of matter are removed from the lithosphere and dispersed into the ecosphere. Mining is of much greater magnitude than the natural flows (volcanic activities, weathering and sedimentation). This imbalance leads to dispersal of lithospheric matter in the biosphere, for example carbon dioxide into the atmosphere from burning of fossil fuels; metals accumulating in soils; and phosphorus accumulating in lakes and rivers.

The first principle can be formulated:

1. **Sustainability implies that the ecosphere is not subject to increasing concentrations (globally or locally) of substances extracted from the Earth's crust.**

This can be achieved in three principally different ways:

- Safe final deposits (heavy metals)
- Human-managed ecocycles (recycling of iron etc)
- Upstream-solution: reduced input (fossil fuel etc)

SECOND PRINCIPLE

In addition to the tangible waste which is accumulating in the dumps and elsewhere, today "molecular waste" accumulates in the air, water, soil and in our bodies. This waste results from human production processes, using raw materials extracted both from the biosphere and the lithosphere. This is a problem of:

- Production volume
- Degradability

The second principle can be formulated:

2. **Sustainability implies that the ecosphere is not subject to increasing concentrations (globally or locally) of substances from human production.**

THIRD PRINCIPLE

The productivity and diversity of the ecosphere today is threatened not only by pollution (1+2), but also by physical manipulation, displacement, mismanagement, etc.

The third principle can be formulated:

3. **Sustainability implies that the productivity and diversity of the ecosphere is not reduced by displacement, mismanagement or other forms of ecosystem manipulation.**

FOURTH PRINCIPLE

From the human point of view, sustainability is to meet human needs everywhere, today and in the future. To make this possible while at the same time conforming to the first three principles, it is necessary to use the resources efficiently, in a wide sense. This implies improving the capacity of society to meet human needs while at the same time decreasing impact on nature. It also implies to give everyone a fair share, and the capacity of society to deal with social issues like population growth, equity, conflict resolution etc.

The fourth principle can be formulated:

4. **Sustainability requires efficiency and fairness in meeting human needs locally and globally, not exceeding the level of impact on nature given by principle 1+2+3.**

[1] What I here call "the ecocycle perspective" is a way of understanding sustainability put forward by The Natural Step. The scientific basis goes back to the research of John Holmberg at Chalmers University, Gothenburg. See: Holmberg, J and K-H Robèrt, "Backcasting – a framework for strategic planning", *International Journal of Sustainable Development and World Ecology*, 7 (2000) 291-308.

Agriculture in an ecocycle perspective

Agriculture is directly connected to the productive capacity of the green cell. The green cells are uniquely responsible for large-scale and systematic reconstruction of ordered structures from dispersed and worthless matter, without degrading any resources or spreading any pollutants. Other organisms, including humans, depend on these structures.

Therefore, when we within a few decades will have to rely on renewable energy, our dependence on the green cell will be very much clearer than today. In a sustainable society agriculture will play a much more central role than today for production not only of food, but also industrial raw materials.

But while converting society, agriculture too has to change a lot to adapt to the four principles of sustainability.

The following text refers to the situation of agriculture in Sweden, unless otherwise stated.

1. SUBSTANCES FROM THE EARTH'S CRUST

Today agriculture depends to a very high degree on substances from Earth's crust. Fossil fuel and electricity from nuclear power are used both directly in farming and indirectly for the manufacturing of chemical fertilisers, transport, etc. Metals used in machinery are not satisfactorily recycled. Plastics and lubricants are also produced from non-renewables. In this aspect the agricultural sector resembles the society as a whole.

The outstanding feature of agriculture in relation to the first principle is the dependence on a continuous supply of mineral fertilisers from Earth's crust.

Of all the phosphate extracted from mines around the world, about 80% is used in agriculture. About 60% of this is used in the industrialised world where only 35% of the planet's agricultural land is situated. In spite of the fact that the supplies are expected to be depleted in a few decades, the extracted phosphorus is used very inefficiently: only one third of the added phosphorus can be found in agricultural products, and 80% of the phosphorus in agricultural products ends up in sewage sludge which is not recycled, because of its content of other pollutants.

Although the average use of phosphate in agriculture has declined in the 1980s the balance is still unsatisfactory. The regional specialisation between livestock production and crop production has led to accumulation of nutrients in some areas

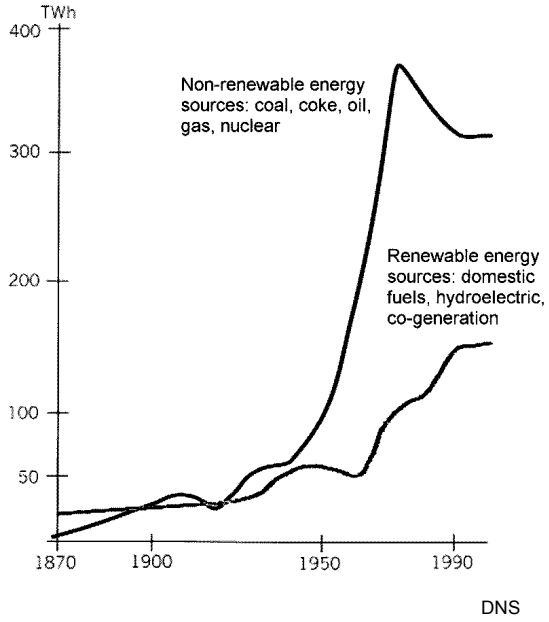


Figure 3. *The figure shows the use of non-renewable and renewable energy respectively in Sweden. Source: National Atlas of Sweden.*

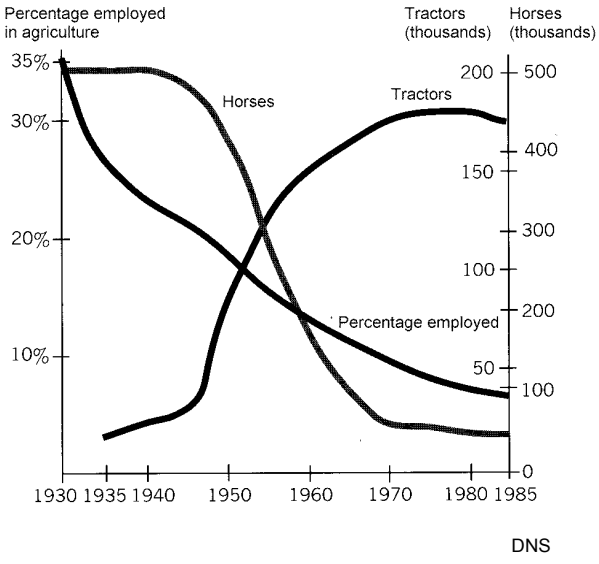


Figure 4. *The transition from bioenergy agriculture to fossil fuel agriculture took no more than a few decades. The tractor replaced the horse and a large part of the labour force. This change occurred simultaneously with urbanisation. Source: National Atlas of Sweden*

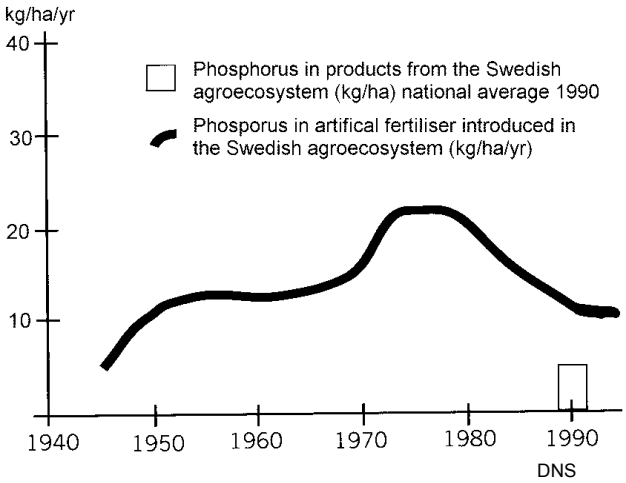


Figure 5. *The graph shows average quantity of phosphorus in fertilisers added to the Swedish agroecosystem (kg/ha/year). The column shows the amount of phosphorus leaving agriculture in the form of products (kg/ha) 1990. Source: Associate Professor Artur Granstedt, Swedish University of Agricultural Sciences.*

and a dependence on mineral fertilisers in others.

Linked to the use of unrefined phosphate is the problem of cadmium and arsenic which are being dispersed in the biosphere along with the phosphate. Already, cadmium levels in some soils do exceed tolerance limits and the concentrations increase by 0.3% per year.

Today agriculture is also being supplied with potassium, lime and trace elements from Earth's crust. For potassium and lime the stocks are estimated to last longer than the phosphate deposits. For some of the trace elements scarcity problems are expected in a few decades.

Conclusions:

- In a sustainable agriculture organic residue from animals and humans must replace the mineral fertilisers extracted from mines, as the source of nutrients in plant production.
- A sustainable agriculture must depend solely on renewable sources of energy.
- A sustainable society recycles machinery, tools, plastics etc.

2. SUBSTANCES FROM HUMAN PRODUCTION

There are substances accumulating in the ecosphere that can be called "molecular waste". Some of these human-made substances are alien to nature and accumulate in the biosphere because of their non-degradability. These substances must be abandoned in agricultural practices. But the fact that a substance is biodegradable does not necessarily mean that it becomes harmless. Certain pesticides are broken down relatively quickly, but their constituents are long-lived and alien to nature. Even though some of the pesticides are our most researched and tested chemicals we know so little about their ecological, combined and side effects that the idea of "a controlled use of pesticides" is impossible to realise in practice.

Natural substances also accumulate as molecular waste if the turnover exceeds the ecosystem capacity of reprocessing them into new resources. For agriculture the most significant substance is nitrogen in its different forms. Of all the nitrogen available in plant production only 20% ends up in the product. And only 5% of the nitrogen in the agricultural products is returned back to agricultural production. The rest leaks into air and water.

The graph shows only nitrogen added as chemical fertiliser. The agroecosystem is also supplied with nitrogen through imported feedstuffs, biological fixation in the field, and atmospheric

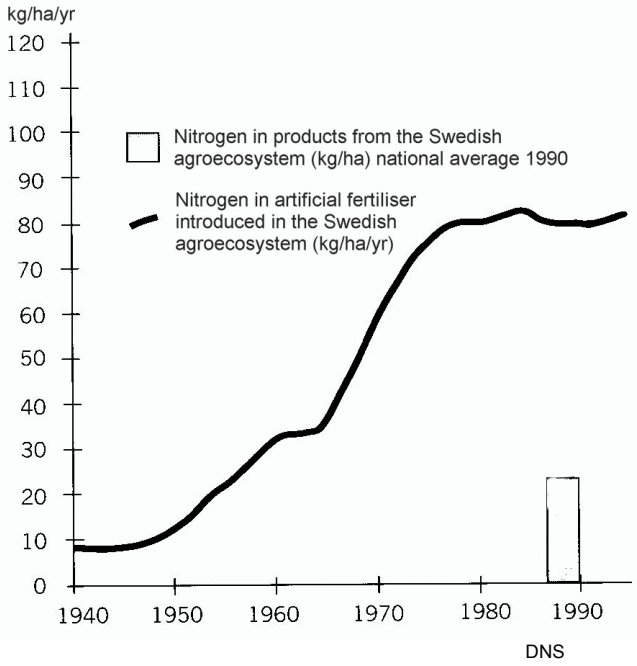


Figure 6. *The graph shows the average quantity of nitrogen in chemical fertiliser added to the Swedish agroecosystem (kg/ha/year). Source: Associate Professor Artur Granstedt, Swedish University for Agricultural Sciences.*

deposition from industry and vehicles. The specialisation between livestock and plant production results in great losses of nitrogen in the regions dominated by animal production and a dependence on industrially produced nitrogen fertilisers in regions dominated by plant production.

Conclusions:

- Sustainable agriculture must develop non-dependence on substances which are alien to nature.
- Nutrients added (or produced in-situ) must not exceed local capacity for biological assimilation into new bio-mass.
- The flows of nutrients from agriculture to society must be balanced by a flow returning to agriculture.

3. THE CAPACITY OF THE ECOSYSTEMS

The productive capacity of ecosystems depends on complicated chemical, physical and biological interactions. Today human impact on ecosystems is significant and the long-term global consequences are, to a great extent, unforeseeable. But we can already observe losses of biodiversity and ecosystems becoming more vulnerable all over the world.

This principle can be divided up into three levels:

a) Biologically productive surfaces

Globally the loss of "solar catchment" areas is extensive and serious. Some of the major causes are desertification, salinization, soil erosion and the expanding technosphere. In many parts of Europe construction on arable land is substantial. Relatively speaking this problem is of a lesser magnitude in Sweden, due to our sparse population. Anyhow we should be watchful with the trend to locate buildings, motorways, airports etc on the most fertile agricultural land. In practice this land is irreversibly lost for agriculture, and in a few decades land will be a scarce resource.

b) Habitat for biological diversity

During several thousand years, agriculture in Sweden has created new habitats, often rich in species. This trend, however, has been reversed in the last half century as important biotopes like meadows and open grazing areas are being converted into tilled land or forest.

Chemical pesticides (both intentional and incidental effects) and airborne pollutants also threaten the flora and fauna of the agricultural landscape.

One historical example of the consequences of physical manipulation is the extensive drainage of wetlands during the end of the 19th century and the beginning of the 20th. In some areas 80-90% of the wetlands were drained which resulted in reduced water storage capacity in the landscape, a degradation of drinking water quality, reduced self-purification of surface water, as well as the loss of habitat and species. Costly efforts are now made to try to restore some of the values lost.

c) The productivity of agricultural land

In many soils there is a continuous loss of humus. This leads to a reduced capacity to retain humidity and nutrients, a reduced presence of micro-organisms, and deteriorating soil structure. The effect is a loss in long-term productivity. Loss of humus is caused by simplified crop rotations with a reduction of leys and an increase of annual crops, and by the division of livestock and plant production into separate specialisations.

Compaction of soil by heavy machinery is one of the most serious threats to productivity of agricultural land in Sweden. About 30% of the arable land area has compaction damage corresponding to a 10-20% reduction in productive capacity. Measures such as extra-wide tractor tyres only alleviate the compaction effect in the upper soil layers. Compaction which reaches deeper than winter frost may be irreversible. With the present heavy machinery, continued reduction in productive capacity must be expected in large areas.

Globally, wind and water erosion as well as a sinking water table and salinization are major factors of physical depletion of agricultural land.

Conclusions:

- A sustainable society must guarantee natural ecosystems enough space and protect them from stress in the form of pollution or climate change.
- A sustainable agriculture employs farming methods that support biological diversity, including microbial biodiversity in soils.
- Sustainable farming methods do not cause physical deterioration such as soil compaction, loss of humus, changes in the water table and erosion.

4. EFFICIENCY AND FAIRNESS

In a world where about 20% of the population consume about 80% of all resources, we confront a double challenge: on one hand to conform to the principles of sustainability and on the other to ensure that the needs of all people can be satisfied. Neither is the case today. In this context, we must set ourselves the following goal: to bring down per capita consumption to a level where it can be sustained, long-term, across the whole planet. Until we get to this point we are withdrawing resources from people who need to meet their basic needs and at the same time putting continued human existence on earth into question.

When we violate ecocycle principles we postpone our problems and curtail our future freedom of choice. Reducing freedom of choice increases the risk of war over resources, unscrupulous scrambling for power, injustice, disrespect of human rights, with further violations of ecocycle conditions as a result, in a vicious circle.

To meet the double challenge we need to increase efficiency of resource use and also change our lifestyles.

Efficiency

The measure of efficiency in agriculture has been maximum yield per hectare, per hour of work and per capital invested. Efficiency in this narrow perspective has lead to the substitution of land and labour by non-renewable energy sources. The result is overproduction and environmental damage.

Efficiency in the framework of sustainability means satisfying human needs without violating the principles 1+2+3. For agriculture this requires the development of diverse and robust systems and farming methods which maximise the take-up of solar energy without accumulation of molecular waste.

Efficiency in this wider sense will mean that the resource base must be as local as possible. There are several reasons for this:

1. The consumption of energy for transport has to be justified against alternative uses.
2. In human-managed ecocycles of nutrients it is easier to prevent losses and to maximise energy-efficiency if cycles are short.
3. Present long-distance trade means that agricultural land in countries where people are suffering from chronic malnutrition is being used for the production of animal feed which is exported to rich countries.
4. Supply of basic resources by long-distance trade is in many ways vulnerable.
5. Local cycles makes it easier for people to understand cause and effect in production and consumption.

Another overriding principle for efficiency in this wider sense will be “to let nature work”. For instance, nitrogen fixation driven by solar energy must be utilised to the full, reliance on natural behaviour of livestock will mean more grazing, plants/weeds that are known hosts to natural enemies of particular pests can substitute pesticides, encouraging micro-organisms in the ground gives a more fertile soil and healthier plants, avoiding excess fertilising diminishes the need for pesticides, etc. Furthermore crop-rotation, mixing perennials and annuals in the field and minimising soil exposure are examples of measures that contribute to robust systems.

A third overriding principle is to find “solution multipliers”, i e measures which solve many problems at the same time.

Lifestyle

There is a great potential for the rationalisation of our economy in a way that reduces the squandering of resources and pollution while at the same time increasing the quality of life. A change of lifestyle does not necessarily mean making sacrifices in terms of satisfying fewer needs. The potential for this transition lies in realising that our social, intellectual, psychological and spiritual needs can be satisfied without extensive consumption of natural resources.

Conclusions:

- In the framework of sustainability, efficiency means to better meet human needs with less impact on nature. Today there is a large potential for rationalising the economy in this sense.
- Overriding principles for efficiency in sustainable agriculture are: closing ecocycles locally, “letting nature work” and finding solution multipliers.
- A prerequisite for a sustainable world is that we in the industrialised countries bring down our per capita consumption to a level which can be sustained, long-term, across the whole planet.

What needs to be done?

The conversion to sustainable agriculture will require changes on three levels: on farm level, in the structure of the agricultural sector, and in society as a whole.

FARM LEVEL

On farm level some measures have already been introduced and need to spread to other farms. Education and information must be used, but is not enough. To bring about the necessary change economic and administrative measures also have to be applied, to encourage:

- a higher proportion of winter-green fields to counteract the leakage of nutrients. Examples are autumn-sowing, ley, and perennials;
- that habitats for the fauna and flora of the agricultural landscape are defended and recreated;
- that heavy metals do not accumulate in agricultural soil;
- an improved management of manure;
- a higher proportion of nitrogen fixated by solar energy;
- appropriate crop rotations, counteracting the propagation of weeds and pests, with the ultimate aim of substantially reducing the application of pesticides.

THE AGRICULTURAL SECTOR

The structural changes may require several decades to realise and therefore it is important that the direction is pointed out clearly as soon as possible. Systematic, consequent and gradual reforms are needed to encourage:

- a lower use of external energy inputs (fuel, chemical fertiliser etc) and a systematic conversion to renewable fuels;
- an integration of livestock and plant production for the best possible balance within each farm as well as on a regional and national scale. (This means, among other things, that present limits on livestock density per hectare must be tightened.);
- shortening the food chain (from production, via processing to consumption) and organising it so that nutrients can be recycled and less transport is needed.

SOCIETY

The transition to a sustainable agriculture must be accompanied by transformation of society as a whole into sustainability. This includes:

- conversion to renewable energy use;
- a better integration of cities and countryside;
- that long-distance trade must be limited mainly to goods and services that cannot be produced locally or regionally.

In the interaction between society and agriculture the following targets for society are of importance for the sustainability of agriculture:

- Arable land must be preserved as a resource.
- Sewage systems must guarantee that nutrients can be recycled into agriculture without the pollution of heavy metals and other harmful chemical substances.
- Recycling of minerals and plastics must be improved.

The nature of disagreements[1]

In January 1999, one of the participants of the 1993 consensus process, Associate Professor Artur Granstedt, invited to a two day conference about agriculture and the Baltic Sea. The first day an expert seminar was held and I was invited to moderate it. The participants represented a wide spectrum of scientists, representatives from government authorities and from conventional and ecological farmers organisations.

The objective of the expert seminar was to see if we could find a consensus about the practical implications for agriculture and policy of two principles for sustainable agriculture:

- A higher proportion of winter-green fields.
- An integration of livestock and plant production.

To better understand the nature of disagreement was an equally important objective. Artur Granstedt's model for ecocycle-agriculture was used as the starting point. The model will not be

[1] This part of the text is based on the conference report *Jordbruket och Östersjön. Hur kan jordbruket bidraga till att förbättra Östersjöns miljö?* (Agriculture and the Baltic Sea. How can agriculture contribute to improving the ecological quality of the Baltic Sea?), Hillevi Helmfrid and Artur Granstedt, 1999. The report is avaliable at Biodynamiska Forskningsinstitutet, +46 8 55 15 77 02

further described here because other reports are available. [1]

My point here will be to discern the nature of disagreement. After discussing the model everybody could agree on the two principles, but a lot of objections remained to the practical implications of the principles.

The group discussions among participants resulted in the clarification of:

1. *The merits of the model.* Some participants could see solution multipliers within the model, such as: recycling of microelements, less problems with weeds and pests, less transport and possibilities for locally produced food, defended biological diversity and ethically sound cattle-keeping.
2. *Weaknesses of the model.* Some participants wanted to add to the model: local variations must be taken in to account; we must not forget the extensive leaking of nitrogen fixated in the field under certain conditions; the density of cattle must be counted on the content of phosphorus in the manure; there is also a need for technical improvement on the farm level.

As far as I understand it the above mentioned arguments can not be seen as objections to the model, but as complements.

The only strong objection against the model that came up in the discussions was the monetary argument: to change the structure of agriculture will be too costly. Therefore some groups looked for "cheaper solutions", including the proposal that reduction of leakage should primarily be done in other countries. Many of the proposed "cheaper" solutions were regulations that already exist and which have proved to be insufficient.

A systems perspective

Due to limited time for the experts conference we did not manage to come to a final statement, that is, we did not agree on what we disagreed on. My conclusion, though, is that the disagreement can best be understood in terms of systems perspective. This is illustrated in Table 1 with some examples from the conference.

As I see it, the differences in standpoint can be explained by the following three dimensions. I also think that it may be useful to talk about degrees of a systems perspective.

Time scale

What time scale do we apply when deciding if certain agricultural practices are sustainable or not? For how long do we want agriculture, human beings, life on Earth to be sustained? The longer the time scale, the larger the systems perspective.

Spatial scale

Where shall sustainability be realised? When analysing the sustainability of certain agricultural practices, how large is the system included in the analysis? Do we only look at one hectare of field, or do we study the whole agricultural sector of one country, or do we include the possibilities for sustainability on the whole planet, including all of humanity? The larger the spatial scale the larger the systems perspective.

Conditions

What are the conditions which are given by nature, and what conditions are in the hands of human beings to be changed? Do we feel free to propose changes in conditions that were invented by humans, even if we know that change will not happen easily? Do we respect conditions which cannot be changed by man? To achieve clarity in a systems approach we must be able to differentiate between conditions which are inherent to nature itself and conditions which are set by humans. ¶

[1] Granstedt, A, "Increasing the efficiency of plant nutrient recycling within the agricultural system as a way of reducing the load to the environment – experience from Sweden and Finland", *Agriculture, Ecosystems & Environment* 80 (2000) 169-185, Elsevier. Also, in Swedish: Granstedt, A, *Växtnäringens flöde genom jordbruk och samhälle – vägar att sluta kretsloppen*, Centrum för uthålligt lantbruk, SLU, 1999.

Hillevi Helmfrid holds an M Sc in agronomy from the Swedish University of Agricultural Sciences, where she has worked with the concept of sustainability, its different interpretations and underlying principles. Today she works as an independent consultant with processes of change in a sustainable direction.

Table 1 **Choice of perspective**

Non-systems perspective	**Systems perspective**
"Plant production with chemical fertiliser leaks much less nutrients than plant production using manure. So the problem of leaking is located to the livestock producing farms."	"The problem lies in the specialisation. The farms specialised in plant production are exporting their environmental problem to the farms specialised on livestock, together with the feedstuffs."
"Even with rigorous efforts to counteract leakage of nutrients, every hectare will leak. Therefore the best way to counteract leakage will be to use less land."	"Sustainability requires that we rely less on finite resources (e g chemical fertilisers) and more on renewables (e g solar energy harvested in the field). This implies that more land will be needed. Phosphate remaining in the mines will be needed better in other parts of the world. More land will also be needed in a near future when global scarcity can be expected."
"Specialisation has proved to be the most efficient and productive mode of production in agriculture."	"Specialisation is the result of economic optimisation within a framework where finite resources are heavily subsidised (by nature and future generations). Economic optimisation within a sustainable framework would automatically bring together plant and livestock production. It is a fundamental principle of ecology that ecosystems where decomposition and restructuring processes are located far from each other, productivity is low (e g deep sea). On the other hand, systems where decomposition and restructuring processes are integrated (e g coral reefs) are the most productive ones we know."

The efficiency myth

JAN HOLM INGEMANN *Economist, Aalborg University, Denmark*

The evolution of the Common Agricultural Policy (CAP) in EEC/EU and the evolution of the Danish agricultural policy in the last four decades can be seen as complementary. That is the case because the European community as a whole could not originally supply itself with foods while Danish agriculture could supply a market around four times the size of its domestic one. Simultaneously agricultural policies in EEC and Denmark from the late 1950s were based on the same measurement, that is efficiency, and the same means, that is industrialisation of agricultural production. This common but complementary origin is the basis for the following analysis where the aim is to reflect present double-bindings related to the CAP by means of a brief historical sketch of the evolution of Danish agriculture and agricultural policy in the 20th century.

FROM THE CLASSICAL PERIOD TO EMERGING SATIETY

European agriculture experienced seriously declining prices on grain in the 1870s. Danish agriculture – and Danish economy – depended in these years on export of grain and the declining prices at the time led to a social crisis that forced the Danes to choose a new trajectory. The trajectory chosen implied a fundamental transformation of Danish agriculture into producing high quality animal products like butter and bacon, especially for the British market. To do so it was for instance necessary to build up processing industries like dairies and slaughterhouses. These were established as co-operatives, and from 1882 to around 1900 about 1000 co-operative dairies and 30 slaughterhouses were established. The following 50 years could be labelled as the classical period when the livestock producing sector (farms and co-operatives) strengthened the business. In these years the two main associations (Farmers' Union and Family Farmers' Association) represented respectively the middle size farms and the smallholdings. The latter founded their beliefs on a holistic conception of social responsibility, while the former fought to consolidate their farms in a more business-oriented spirit. The contradicting beliefs surfaced in relation to social questions, but also when it came to securing a part of the strictly limited factor of production, namely land. On the other hand, the trade was characterised by a certain stability, and the conflicts in the classical period didn't change the trajectory into fundamental new directions.

However, in the 1950s, Danish farmers found themselves in an income squeeze. Partly due to increasing protectionism on major export markets, because several nations aimed at self-sufficiency when it comes to foods, but also due to the neglected fact that satiety was emerging in the wealthy part of world. The decreasing market potential meant decreasing prices to the farmers, and thus an income squeeze. In this atmosphere, where the dominance of agriculture in the Danish economy and way of life was threatened, the farmers' associations began to suppress their conflicting beliefs and unite their efforts. First, they appealed to government to consolidate the sector and to provide the farmers attractive standards of living. The focus on standards of living stems from the fact that the crisis emerged when the farmers observed that other sections of the population attained material goods of the industrialised society, such as cars, radios, televisions, laundry machinery, etc. The farmers wanted to acquire these goods too, but were not able to do so on their own. That is why the farmers' associations appealed to the government to ensure farmers an income on a level similar to that of other sections in Denmark. As a matter of fact, the main associations commonly formulated the aim as to ensure farmers an income equal to that of skilled workers. They formulated demands based on moral judgements and, at the same time, in spite of traditional, liberal values, they interfered in the distributional demands from other social groups, for instance by strongly advocating income policy. On one hand, the farmers wanted to secure their own level of consumption through a redistribution of wealth provided by government and then, to some degree, transform themselves into wage earners. On the other hand, they were, to some degree, employees through their collective ownership of co-operatives.

This change in beliefs was remarkable when it comes to the smallholders who then tended to break with the holistic ideas (Ingemann, 1997).

EFFICIENCY AND INCREASING PRODUCTION AS NEW POLICY MEASURES

The Danish government showed a positive attitude to the farmers' demands. Several measures were intended to meet the specific problems confronting Danish agriculture, and to some extent the nation, through collaboration between government and agriculture throughout the 1950s. Among the formulated means at the end of the 1950s were (Bjørn, 1982; Ingemann, 1998):

- Join the EEC as soon as possible.
- In collaboration with the government, speed up the use of modern marketing in the export markets.
- Establish a comprehensive subsidy-system.
- Speed up R&D efforts and the Danish advisory-system.
- The notion of "The Efficient Farm".

It was expected that Denmark – along with its main market the UK – could soon join the EEC, and membership was seen as a key to a fundamental solution: it would ensure admittance to a comprehensive market and to enjoy the benefits from the EEC's agricultural policy means. EEC was founded on the Treaty of Rome in 1957, and in article 39 it was stated that provision of foods in abundant quantities and at low prices were highly prioritised policy measures which seemed very rational while the original EEC members as a whole could not supply enough food. Simultaneously Denmark produced around four times the domestic needs. Though it was not said out loud, it was somehow implicitly stated that when Denmark became a member of the EEC, the farmers could produce as much as they liked, and the EEC would guarantee the prices and buy the surplus. Once Denmark became a net beneficiary of the EEC, other countries would be paying the bill.

In the meantime, the use of modern marketing should be implemented in the export markets to increase the market shares. To create the financial basis, government granted subsidies and furthermore by law enabled the associations to levy a duty on farmers' produce when brought to manufactories. The duty was then transferred to national funds for marketing purposes controlled by the farmers' associations.

The farmers' demand for a certain income level was met from 1958 through massive governmental subsidies. The idea was that the subsidies would be formed as mechanisms similar to the EEC agricultural policy means. Originally, the subsidy scheme was introduced as a temporary solution, and the Danish agricultural policy was labelled as the "waiting room policy". Farmers were waiting for EEC membership, after which the European community could assume subsidising and policy measures in general according to Danish agriculture. The national Danish subsidy system, where the Danish government provided the financial security for the trade, had to continue until 1973 when Denmark finally became a member. The intermediate national subsidy system inferred that the farmers' associations took part in collective bargaining with the government, parallel to the bargaining on the labour market.

Another method engaged in national policy was to make farm production more efficient by introducing new, industrial farming technology, such as chemicals and automated systems in livestock production. The farmers' associations received governmental subsidies for advisory-centres, where specialists in a vertical system were – and still are – linked closely to Danish R&D institutes for agricultural technology. This system was meant to ensure a quick transformation of R&D results into practical use on the farms.

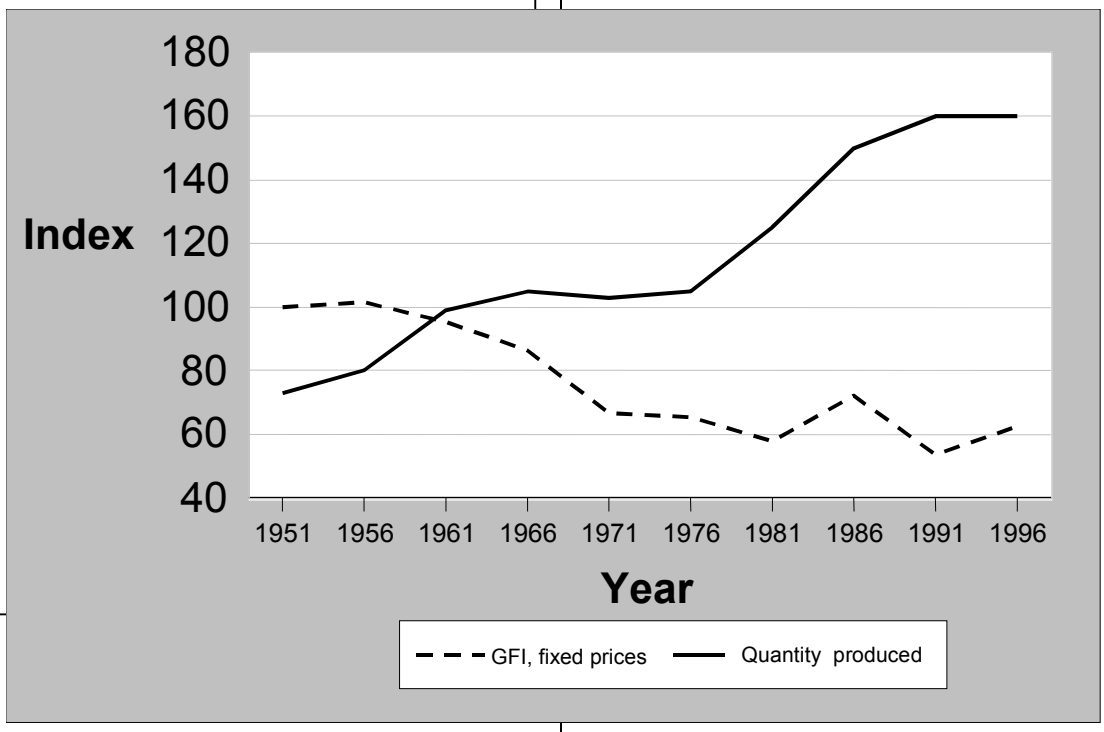
In addition to using public finances to secure their income, farmers formulated the notion of the efficient farm (Ingemann, 1998) with the following chain of arguments:

- Farmers must be secured an income similar to that of other sections of the population.
- When the income from farming is limited, then it is necessary first to limit the number of farmers.
- Farmers who must leave the trade can get jobs in the urban areas, and in that way automatically obtain a level of income similar to that of other sections.
- This means that fewer farmers stay in business and they can share the total income of the sector.
- Second, every farmer must – by means of real capital and swallowing up the less effective farmers' property – increase production.

Box 1 **Treadmill and cannibalism**

In the figure below it is illustrated that the amount produced is more than doubled while at the same time the Gross Factor Income (GFI) of farms in fixed prices is reduced to about 60 percent of the 1951 level. This seems to be an anomaly because the amount produced has increased and the income decreased. To explain this it is essential to make a distinction between the farm level and the national level. Some farms can increase the amount of production without notably affecting relative prices. But when all farms increase the amount of production, the total national amount is increased, and due to the limits of the human capacity to digest, the price level must decrease. The produced surplus can then be sold for exports, but in the western world – where there is effective demand – most consumers must be assumed to be satiated with food.

These points are leading to the concepts of 'the treadmill' and 'cannibalism' as originally introduced by W.W. Cochrane (1979). When farming is industrialised output tends to increase and the prices then to decrease. Thus the farmers' reaction is to increase output even more which in turn implies further decreasing prices – that is the agricultural treadmill. Simultaneously industrialisation implies that each farm needs more farmland to expand production. Farmland is limited and the only possible way to increase farmland is then to buy that of the neighbours and amalgamate – that is agricultural cannibalism.



- When fewer farmers stay in business, and each produces more, they can increase their level of income – or, to put it the cannibal way: eat your neighbour or be eaten.

From the late 1950s, Danish agriculture was designed to stay in business by means of a strict vertical co-ordination within the sector, by subsidies and by increasing productivity. Besides, the notion of the efficient farm was supplemented by the notion of the efficient co-operative, which implied concentration; in general the farms gradually became a tiny part of a vertical integrated agro-industrial complex. The agricultural policy was formed to fit the notion of the efficient farm, covering a wide spectrum of policies such as governmental provision of R&D, favourable tax depreciation schemes related to investment in machinery and buildings, in addition to governmental security for loans to investment purposes.

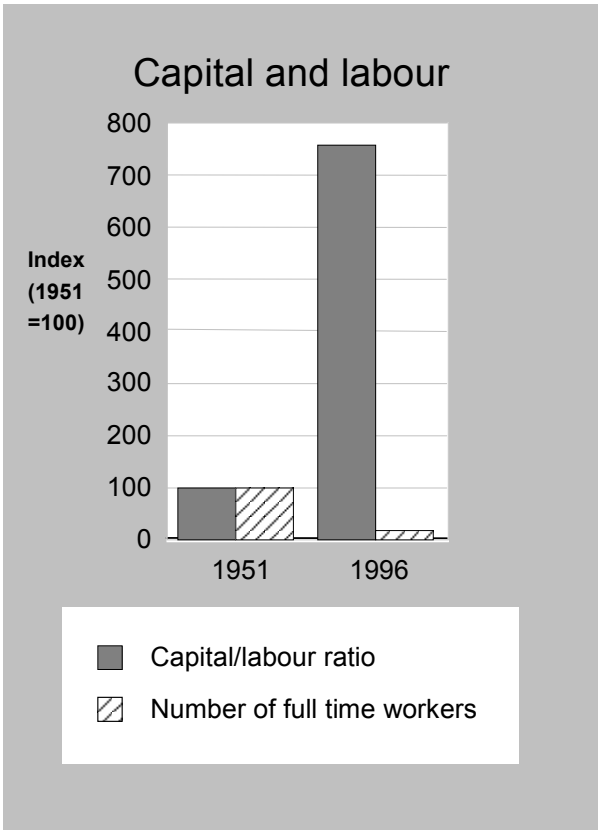
ECONOMIC DOUBLE-BINDINGS OF THE TRANSFORMATION

The described change of trajectory implied that, from 1950 to 1995, Danish agriculture more than doubled its production, but at the same time the aggregated GFI (in fixed prices) of the sector was almost halved (see also Box 1). The so-called

efficiency implied that the primary production was organised similar to industrial methods; thus labour was substituted by real capital and industrial inputs such as pesticides (see also Box 2). Simultaneously, Danish agriculture has experienced a dramatic decline in value added. In 1951, value added came to about 88 per cent of the production value, compared to 44 per cent in 1994. Furthermore, the value added in slaughterhouses is, in these years, only 27 per cent and in dairies only 21 per cent, compared to Danish manufacturing industry where the aggregated value added comes to 44 per cent (see also Box 3). Finally, from an income point of view it also seems difficult to assert that the efficiency strategy has been able to solve the income squeeze for the farmers (see also Box 4). (Ingemann, 1998)

Box 2 **Efficiency through substitution**

Industrialisation of farming represents a technological shift where human labour is substituted by real capital (machinery, equipment, etc) and industrial inputs (especially chemical inputs like antibiotics, chemical fertilisers, and pesticides).



The substitution by means of real capital is illustrated in the figure above. Capital engaged per full time worker have increased about 7.5 times from 1951 to 1996. (Ingemann 1998)

Box 3 **Value added**

A commodity contains inputs and an amount of real capital used in the production process. The value added is then an expression of the increase in value caused by "the building up" from inputs to final commodity, or to put it in other words: value added is the difference between value of production and the resources used from outside the firm. In that sense value added is the part of the commodity price left to pay capital, land, and labour.

The more difficult and hence qualified the work process, the more qualified labour is needed, which again means that more value is added. With the ongoing industrialisation of farming it has been necessary to introduce methods of production where the animals somehow are reduced to machinery. In that way farmers are able to produce increasing amounts of goods using a high degree of real capital and a low degree of labour. For instance it is said that no special skills are needed to produce eggs when the hens are in cages, because the routines then are scheduled and automated. But when it comes to egg production by means of free range hens – as in organic farming – the production manager must necessarily have great skills and experience to understand the behavioural signals of the flock and to be able to respond quickly to these signals. So, the farmer is more in the center in organic and similar modes of farming, tending to increase value added. A survey has exposed that conventional milk farms produced 39 per cent of production value as value added while comparable organic farms produced 50 per cent value added due to lower costs and higher output prices (Anonymous, 1997; Ingemann, 1998).

POLITICAL DOUBLE-BINDINGS OF THE TRANSFORMATION

In the 1950s other sections were able gradually to enjoy the fruits of the industrial society, while the farmers found themselves caught in an income squeeze. The latter then entailed claims on other sections while the pay-level of skilled workers was advanced as a moral standard. If farmers couldn't obtain that level through the market, it was seen as the social responsibility of other groups to make up the difference. The farmers' associations were able to use their economic and political power to persuade the government to establish a complex policy system to support Danish agriculture,

primarily through subsidies. Thus, the policy system in the 1950s represented an innovation to collaboration: The negotiated economy was introduced and institutionalised. In this system, the government played the role as a court of appeals when the outcome on the market wasn't satisfactory to the farmers (Hernes, 1978). In the 1950s, it became the aim for every farmer to raise his standards of living – as a minimum to the level of skilled workers – without any serious reservations as to the means. Here, the notion of the efficient farm was also introduced. To push farmers into other trades would be justified by referring to an expected increase in their standard of living, while the remaining farmers would increase their income by commanding an increasing amount of capital goods and by introducing various industrial inputs, such as chemicals, into farming. These means should enable them to increase production and thus their income.

The argument that the rejected farmers would be secured a certain income level was at that time correct, while manufacturing and services needed labour power. The other part – stating that increased production would secure higher income to farmers – was and is somehow more troublesome in acknowledgement of the mechanics of the treadmill and cannibalism as illustrated in Box 1. These mechanisms have been obvious since the 1950s and have led to production of standard goods by industrial methods, doubling production and halving the aggregated GFI. At the same time, the industrial mode has entailed a dramatic increase in the capital intensity on farms and a dramatic

Box 4 **Decreasing income**

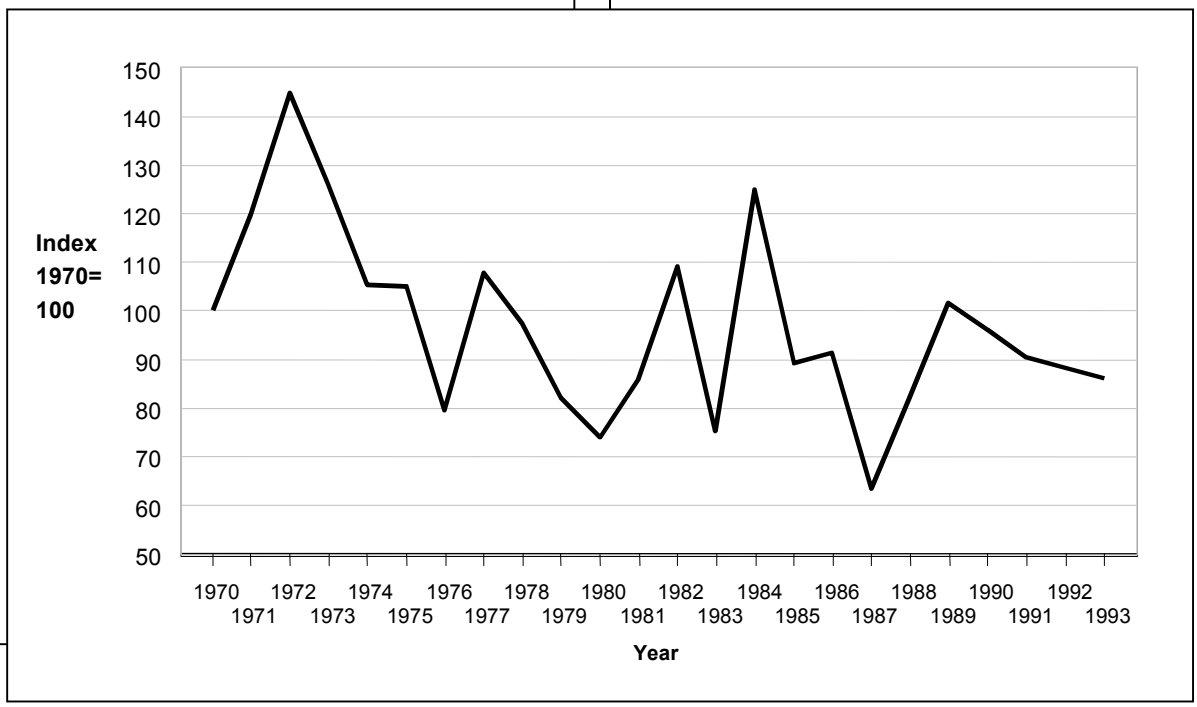
The Danish membership of EEC lifted the income level of Danish farmers but only for a short while. The figure below illustrates the average income per holding in fixed prices and it reveals a decreasing trend.

The chronic income squeeze of farmers have institutionalised comprehensive subsidy schemes in most rich countries. In Denmark the direct and indirect subsidies (calculated by means of OECD method) are indicated in the table below. The figures reveal that the total subsidies equal more than two times the value of the family's private consumption (Ingemann, 1998).

Per full time holding. 1000 DKK. 1996

Direct subsidies	150
Indirect subsidies	316
Total	466
In comparison	
Taxes paid	74
Family's consumption	206

The experienced development indicates that it is not possible to solve the income squeeze by increasing output of standard foods.



decrease in farmers' equity. That means increasing dependence on industrial manufacturers and financial institutions, as well as dependence upon governmental subsidies. (Ingemann, 1998)

In the outlined evolution notions and political power have had a marked influence on the conditions under which the market functions. Governmental institutions have been used as a board of appeals when the resulting allocation by the market was not acceptable to the farmers, and in general combined efforts have been made to arrange the allocative outcome by means of managing operations of political as well as economic institutions. As a parallel to the agro-industrial complex, an agro-political complex evolved too, based on the special policy style of the negotiated economy. (Ingemann, 2002)

By maintaining the notion of the efficient farm, it has, until recently, been possible to neglect the limits of the human capacity to digest and the treadmill. However, the anomaly between this notion and reality might have gone too far. The crucial policy measure in Denmark and EEC was to expand output by means of industrialisation of farming. The policy was successful – one might to some degree say too successful – which already in late 1970s made it obvious to raise the radical question: *why stick to a policy implying that we in the EEC produce too much food causing pressure on the EEC budget and rural areas, maintain an income squeeze on farmers and serious negative effects on natural life support systems and developing countries?* However, the general picture of the CAP is still *de facto* a policy that involves incentives to continuously expand output by means of industrialisation, although a limited number of incentives to decrease output in certain marginal areas are introduced as supplement. In that manner the system reproduces its own fundamental problems. Thus we are still waiting for a radical change of trajectory in a more sustainable direction.

THE DOUBLE-BINDINGS AND THE CAP

To sum up, looking at the evolution of Danish agriculture and the reflections of CAP within it we are facing a construction of a Gordian knot involving several economic, political, and ecological problems. The economic problems are especially linked to income squeeze from satiety and the consequent treadmill among the farmers and budget pressure on the EU. The political problems are especially linked to the evolution and institutionalisation of a negotiated economy regime where various interest groups are woven into a complex and balanced network of relations; this network includes both agro-industrial and agro-political complexes. The ecological problems are linked to environmental threats to Europe's and other nations' natural life support systems and to carrying capacity in developing countries. In this complex of problems it seems rather obvious that the interplay between the economic and political problems is the cause while the ecological problems are among the crucial effects. Further, the economic and political problems reproduce themselves and each other which makes the necessary (radical) solutions very difficult. ¶

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How the CAP undermines food security in developing countries

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Criticisms of the detrimental effects of the pre-1992 CAP on the food security of developing countries (DCs) have been profound and widely shared all over the world. Not only on free trade grounds by the main competitors of the EU (the US and the Cairns Group countries) and the international institutions (IMF, World Bank, OECD, etc), but also on other grounds by NGOs, environmental and small farmers movements from North and South alike. If this last group stressed the dumping disruptive effects on the Southern farmers of the large export refunds of the EU and of its non emergency food aid – and consequently the necessity for Southern small farmers to protect their own domestic markets at the import level – the first group insisted more on the high import barriers surrounding the EU's domestic agricultural market, which prevented DCs from earning the foreign exchange they badly needed to service their growing foreign debt. This last type of criticism was however somewhat questionable since the EU domestic market had been opened for more than twenty years without restrictions or duties to 90% of ACP countries' raw agricultural exports and even to 99% of them when we add the products subjected to tariff quotas (bovine meat, bananas, sugar, rhum).

This is why the 1992 reform, elaborated in line with the on-going negotiation on the Agreement on Agriculture (AoA) eventually signed in 1994 at the end of the Uruguay Round of GATT, were both of them hailed by most critics from the two groups as means to foster more sustainable types of agriculture in the EU and the rest of the world, namely in DCs. The combined decrease in the EU's guaranteed prices (for cereals and bovine meat), the lowering by 36% (between July 1995 and June 2001, compared to the levels prevailing in the 1986-88 base period) of its import protection level and of its export refunds and by 20% of its coupled domestic support would lower its dumped surpluses and enhance world prices, thus benefiting greatly DC farmers who could also export more to the EU. At the same time the partial shift from market price supports to direct decoupled and fixed payments in the EU, the possibility to link cross-compliance conditions to them, the increase in agri-environmental measures and the set-aside of about 10% of cereal acreage were expected to foster a more nature friendly type of agriculture in the EU because farmers would be induced to reduce their consumption of chemical inputs.

All these expectations have however been largely overestimated and these reforms, extended by the 1999 CAP reform along the same lines as in 1992, have not prevented the agricultural problems of DCs to worsen even more. Although their share in world agri-food exports has increased from 30% in 1974 to 34% in 1997 – which underlines their growing integration in world agri-food trade – their share in agri-food imports has increased much more, from 28% to 37%, the end result being that they turned from an agri-food net surplus to an agri-food net deficit of $13 billion in 1997[1]. In particular, the food deficit of least developed countries (LDCs) has increased by 60% from 1994 ($1.6 billion) to 1998 ($2.6 billion). And this food deficit of DCs has deteriorated even more in the last few years. During 1998-2001, the prices of most tropical products have plummeted to their lowest levels ever. In spite of that, these reforms have not improved the environmental situation of European agriculture which has continued to deteriorate[2].

To understand these unexpected outcomes, let us make some preliminary observations. It is totally unrealistic to think that Western countries (WCs), which have democratic regimes and strong farmers' unions, would cease at any time in the future to support their farmers and their agriculture. It

[1] FAO, Principales tendances de la production agricole mondiale, de la demande, du commerce et de la sécurité alimentaire, Septembre 1999.
[2] European Commission, *Environnement 2010: notre avenir, notre choix*, 6è programme communautaire d'action pour l'environnement, Bruxelles, 24-01-2001; Agence européenne de l'environnement, *Situation de l'environnement à l'aube du 21e siècle*, 1999.

suffices to acknowledge the more than four times increase in direct payments received by US farmers between 1996 and 2000 despite the FAIR Act, to compensate them from plummeting prices of temperate products, and the pursuit of this tendency in the proposals for the next Farm Bill. A similar observation applies to the EU direct payments (blue box) which, after the CAP reform in March 1999, account now in France for 126% of cereal producers' net income and 129% of bovine meat producers' net income.

Consequently, the core problem to be solved is this: what kind of farm support measures should be incorporated in a new CAP and in a revised AoA which would be the least detrimental to the rest of the world and the most appropriate to foster socially and environmentally sustainable farming systems and non trade concerns or multi-functionality? The answer is straightforward, even though it will horrify the mainstream theorists of agri-food trade: import protection measures are the only financial support measures that do not and can not have dumping effects on the rest of the world, and foremost on developing countries (DCs). It is also the only means to maintain agricultural policies based on market signals, i e on prices – but on domestic prices, not on erratic world prices – instead of transforming farmers into quasi-civil servants in the name of liberalised markets, at least in WCs.

To understand this, we have first to revise drastically our definitions of the core trade concepts, especially those extremely tricky ones such as "economic welfare", "protection", "distortion", "world prices", "dumping", "decoupling" and "special and differentiated treatment". Then we will see the enormous privileges of WCs and the large-scale cheating of the couple of accomplices EU-US in their notifications to the WTO: even though they have devised the AoA to their advantage they have not been able to abide by its rules. Finally, we will show that the main objections to institutionalising import protection as the basis of the new AoA are unfounded.

I
The basic concepts used in agri-trade negotiations are extremely deceitful

"ECONOMIC WELFARE"

The concept of *economic welfare* – as it is defined by the mainstream, over-simplistic and static trade theory – is much too short-sighted when it asserts that, in a free trade framework, global welfare will be improved because consumers' surplus would be larger than the sum of the negative surpluses of producers and tax-payers. Hence the forecast in 1993 by the World Bank and OECD of an increase in world welfare of $213 billion a year after full implementation of the AoA by 2005. Hence the Australian forecast of a $150 billion welfare increase if the new AoA would eliminate all forms of agricultural protection, the World Bank predicting a net surplus of $248 billion[1]. Those assumptions have two main flaws.

First, the drop in prices at the farm gate is very rarely transmitted to the consumers. For example, despite the drop by 35% in the intervention price of EU cereals from 1993 to 1995, the European Court of auditors underlines in 1999 that

> Without doubt cereal purchasers benefited from decreased prices after the reform… However, significant falls in the price to the final consumer could either not be established (eg for bread) or could not be related specifically to reduced cereal prices (beef and pork). Thus, the burden on the taxpayer increased considerably, with no particular gain to the consumer.

The European Commission itself has just acknowledged that

> consumers benefit rarely from the decrease in prices at the production level2.

Again, while the reference food basket increased by 2.8% in constant dollars in the US from 1986 to 1998, the value of agricultural products incorporated declined by 35.7% (USDA). And J Morisset has shown that

> In all major consumer markets…the elasticity of transmission has always been much higher, on average 3.4 times higher, when the world prices were

[1] World Bank, *Global economic prospects 2002*, November 2001 .
[2] European Court of Auditors, Special Report n° 6/2001 on milk quotas, together with the Commission's replies, 2001/C 305/01, 30 October 2001.

> increasing rather than decreasing. Any decline in the international prices of sugar and beef is unlikely to be passed on to consumer prices, while reductions in petroleum and coffee prices are transmitted but much less than the corresponding increases. If upward movements are perfectly transmitted but downward movements are not, the spread between world and domestic prices will increase continuously over time"[1].

Furthermore, that welfare type of reasoning completely forgets not only the dynamic effects of free trade on less competitive countries, but also the non trade concerns, i e the external effects of free trade on employment, the environment, land use planning, the rural landscapes, the quality of food and animal welfare.

"PROTECTION"

Broadly speaking, any kind of measure the end result of which is to increase the competitiveness of domestic products over foreign ones is a form of *protection*. Consequently import protection and even export subsidies are only a small part of protectionist measures, which encompass all types of public domestic supports (and even non financial ones): agricultural supports (of all colours: amber, blue, green) as well as non agricultural ones (the "golden box", see below). Therefore, one should dismiss the usual scare tactic of "protectionism" brandished by laymen, mainstream economists and ignorant politicians against proponents of import protection, which is actually the way of supporting farmers that is least detrimental to the rest of the world and which should consequently be considered as the basis of the next AoA. Therefore, one should be very sceptical when we hear the EU trade Commissioner Pascal Lamy proclaiming that "protectionism, like corruption, rarely flourished where the light shines"[2]. It goes without saying that, for him, the EU export refunds and a fortiori blue box direct payments to farmers are by no means protectionism.

"DISTORTION"

The word *distortion* – like *protection* – is also used by WCs as a scare tactic to intimidate laymen and even diplomats. In the two first pages of the US statement to the WTO's Committee on Agriculture of June 23, 2000, the word 'distortion' is repeated 15 times! Distortive (protectionist) instruments should not continue to be defined as those which increase the gap between domestic and world prices of agri-food products, which modify "market signals". No! The true distortive (protectionist) instruments are those which are – and have been for long decades – within reach of only some countries (the affluent Western ones) and out of reach of the large majority of countries, the DCs. Import protection is in that sense the least protectionist (distortive) instrument whereas budgetary supports (export subsidies as well as domestic supports of any color) are much more distortive because they are practically out of reach of poor countries.

Furthermore, and contrary to the prevalent hierarchy, the most distortive domestic supports are not those we usually think of: decoupled supports (green box) are more distortive than the coupled ones (amber box), fort two reasons. Because of their scarce budgetary resources, DCs give priority to amber supports which have a more direct effect on agricultural output and prices than those of the green box[3]. There is a second reason: supports from the amber box are often used to maintain domestic prices *above* world prices (e g the "intervention" price in the EU) and are therefore compatible with an objective of self-sufficiency without exports, whereas blue and green supports allow to reduce domestic prices *below* true production costs and even to align them on world prices, with an obvious dumping effect.

"WORLD PRICES"

How can we assert that *world prices* are the "true" prices on which one should align domestic agri-food prices when

1) less than 10% of the main agricultural products are traded (intra-EU trade excluded): 10.0% of all cereals from 1995 to 1998, 8.2% of all meats and 6.4% of all dairy products
2) the world price doesn't even result from the confrontation on the market of that small share of world production: it is only the export price of the most competitive country, e g for dairy products it is the price of New Zealand, the

[1] WB Research Economic Paper n°1815, April 1997
[2] Pascal Lamy, "*WTO: what next?*", Institut Universitaire des Hautes Etudes, Genève, November 21, 2000 http://europa.eu.int/comm/trade/speeches_articles/spla38_en.htm

[3] FAO, *Some issues relating to food security in the context of the WTO negotiations on agriculture*, Round table on food security in the context of the WTO negotiations on agriculture, Geneva, 20-07-2001.

milk production of which has been only 1.9% of world milk production from 1995 to 1998; and the world price of wheat is the US price, the US share of world wheat production being only 5.1%

3) they are highly volatile: the average world price of wheat (HRW, FOB Golf of Mexico) increased from $142.5 per ton in 1993 to $215.4 in 1996 and dropped to $114 in 1999
4) they are dumping prices given the huge (explicit and implicit) export subsidies they receive in the main WCs at all levels (farming, processing, marketing, etc)
5) they are manipulated in space and time by oligopolist multinationals which are generally in the position of sellers and purchasers in most countries
6) they are also manipulated by State monopolies (Canada, Australia, New Zealand): even the EU manipulates them by differentiating export subsidies according to the regional area of purchasers, and the US differentiates its export credit guarantees on the same line.

"DUMPING"

Contrary to any economic rationality and to economics textbooks, the GATT agreement has allowed, since its creation in 1947 (article 6.1.a), to consider that there is no *dumping* as long as exports are sold at the domestic price, even if this price is well below production cost, and this provision has been incorporated in the AoA (article 9.1.b). This enormous swindle is at the root of the CAP reforms of 1992 and 1999, which have reduced by 46% the intervention price of cereals. It had fallen by July 2001 to €101.31 per ton (t), a level close to the world price but much lower than the production cost of the French wheat – the most competitive in the EU – which is about €160/t. The direct payment of €63/t closes the gap and has allowed the EU to export, since July 2000, the majority of its wheat and barley without any export refund, but obviously not without an actual disguised dumping. However the EU is boasting about its competitiveness from now on for wheat and barley. Which is obviously an enormous lie because, if explicit export subsidies (export refunds) on cereals have actually decreased from ECU 2.2 billion in 1992 to €883 million in 1999, direct payments to cereal producers have increased from 0 to €12.8 billion. For the 34 million t of subsidised exports in 1999-2000 – corresponding to 16.42% of the 207 million t produced in 1998-99[1] – direct payments have represented €2102 million. Adding them to export refunds, total actual export subsidies on cereals have reached €2985 million in 1999, i e they have been 36% *higher* than in 1992. As Einarsson puts it,

> When border protection is reduced and replaced with direct payments (as required by the AoA), the result is lower prices across the board. The gap between the protected internal price level and world market prices is reduced, and the need for export subsidies thus reduced correspondingly (also in conformity with the AoA). But for the importing country, there is no difference. Whether the export price is artificially lowered by export subsidies or by direct payments, the dumping effect is the same[2].

This is one of the main reasons – combined with huge supplementary direct payments to US farmers – why the wheat world price has remained so low for the last four years.

The same mystification is at work for meat exports. For bovine meat first, the intervention price of which has decreased by 32% since 1992, allowing a reduction of export refunds from ECU 1711 million in 1993 to €726 million in 1999 or to €948/t. Adding the €372 million in direct payments related to exports, the total export subsidy has reached €1433/t. Adding then the direct payments on cereals fed to the exported cattle, the actual total export subsidy per ton has probably increased over its 1993 level.

At least one would say that this criticism doesn't extend to exports of pork and poultry which have not been concerned by the CAP reforms of 1992 and 1999. In fact, since half of their production costs are related to feedstuffs (cereals, soya) which are paid at domestic prices well below their production cost to EU farmers (cereals) or are imported duty free (soya, cassava…), the fact that pork and poultry are often exported without any or with a low export refund cannot deny their actual dumping. Hence the increase in EU's poultry exports to the Ivory Coast which "were so large in 1999 that more than half of the producers have stopped their activities"[3]. And the EU gave almost

[1] According to the quantity in subsidised exports notified to the WTO.
[2] Peter Einarsson, *Agricultural trade policy as if food security and ecological sustainability mattered*, Globala studier 5, Forum Syd, Sweden, November 2000. http://web.forumsyd.se/Arkiv/Globala/FS_Globalastudier_upload/Agrtrade.pdf
[3] Agra-Presse Hebdo 20-12-1999.

no refund in the 3rd trimester 2000 on frozen chicken, the CAF price of which was at 573 CFA/kg in Lomé (Togo) against 1200 CFA/kg for the local chicken. We could also tell the same stories for the EU exports to CEECs.

"DECOUPLED" SUPPORTS

The *decoupled supports* are the utmost mystification of the AoA. All supports, including collective ones from the green box, give competitive advantages to farmers of countries which provide them. Because all green box measures have the effect of reducing production costs, helping farmers to enter new markets, increasing producers' incomes or compensating their losses. All of which amounts to as many forms of protection. Although the agri-environmental measures and the specific direct payments going to producers in disadvantaged regions are placed in the green box by the AoA, one cannot deny that the high proportion of them accruing to EU livestock farmers is greatly improving their competitiveness and has therefore dumping effects when the corresponding meat is exported.

Blue and green supports are even more distortive than explicit export subsidies which are much more transparent for foreign countries and allow anti-dumping measures.

II
The privileges and the cheating of Western countries

The enormous privileges and cheating of Western countries are completely discrediting their nice discourse on the necessary liberalisation of agricultural policies. Three points have to be underlined:

1) the omission of the "golden box";
2) the fact that the so-called "special and differentiated treatment" granted to DCs is actually playing in favour of rich countries;
3) the enormous cheating of the EU and US in their notifications to the WTO.

THE OMISSION OF THE "GOLDEN BOX"

Only Western farmers can enjoy, free of charge (at least in most WCs), many structural non agricultural advantages, that we can put in a "golden box". Among these are:

- A global economic environment very propitious to farmers who are facing on their domestic market non agricultural households with a high and ever increasing purchasing power.
- All types of efficient economic and social infrastructures: material and intellectual means of communication, public research, education and social security systems.
- Pretty efficient and democratic public institutions, with a feasible judiciary which can enforce commercial contracts.
- A fairly competitive context for businesses.
- Agro-climatic conditions generally more favourable than in DCs, including in terms of human, vegetal and animal health, etc.

Moreover, the *present* higher competitiveness of Western agri-food products results not only from the *present* agricultural and non agricultural supports they enjoy but, to a greater extent, from those supports they have enjoyed *in the past*, for many decades or even centuries.

The greatest paradox of this mystified talk of the benefits of more liberalised agri-food markets is that, in order to obtain on the domestic market those "real" world prices presumed to prevail in a free trade context, the EU has to support farmers' incomes on a massive scale with so-called

decoupled supports (as the US does too)! Actually there is no decoupling at all. The recipients of those decoupled payments are not the unemployed or excluded people but those holding the owner's or user's rights on the agricultural production factors (land and cattle). And there is a growing body of evidence showing that such decoupled supports are much more distortive on the domestic market itself than the coupled ones, particularly by inflating land prices, fostering the amalgamation of farms and preventing the access of the young to farming.

SPECIAL AND DIFFERENTIATED TREATMENT

In spite of the verbal gesticulations of WCs and the WTO about the special and differentiated treatment (SDT) granted to poor countries, the reality is quite the opposite: SDT works clearly to the advantage of rich countries. The fact that DCs have to reduce their supports by only 2/3 of what the developed countries have to, and the fact that they have 4 years more to do so, is not enough to conclude that SDT plays in favour of DCs, in the face of other facts:

1) WCs, which account for less than 1/6 of world population, give more than 90% of export subsidies and 90% also of all domestic subsidies (of either boxes). The average tariff applied by WCs on the main agricultural products (cereals, meats, dairy products) is more than twice the level applied by DCs (45% against 20%). Industrialised countries have *de facto* a monopoly on the Special Safeguard Provision which was only opened to countries having tariffied their import protections. And this provision has been used 399 times by the EU and the US from 1995 to 1999.

2) The amber box plays, in fact, solely for WCs. The *de minimis* provision – which exempts domestic coupled supports, i e AMS (Aggregate Measurement of Support), from the reduction of 20% (for industrialised countries) or 13,3% (for DCs) relatively to their levels in the 1986-88 base period – is supposed to favour DCs (it can reach 10% of their agricultural value added, against 5% for industrialised countries). But in fact only 10 DCs (and 6 CEECs) have notified a positive AMS for 1995-96 and 1996-97. For the overwhelming majority of DCs therefore the AoA specifies that their *de minimis* level is the ceiling of their authorised amber supports for the future, whereas industrialised countries may grant up to 80% of their high amber supports of the base period. Even the few DCs having notified an AMS do not have the budgetary resources to grant amber support. Besides, the agricultural value added per worker of OECD-24 is about 60 times greater ($40,000 in 1999) than that of DCs ($641 in 1995)! The *de minimis* ceiling applies even to the least developed countries (LDCs), even though they are exempted from reducing their supports. And the *de minimis* provision allows the EU and the US not to notify any non specific AMS because it remains much below their 5% ceiling, which can be explained because the two accomplices have cheated on a large scale in their notifications to the WTO (see below).

3) Article 8 of annex 3 of the AoA states that budgetary payments made to maintain the gap between the 1986-88 fixed external reference price and the applied administered price, such as buying-in or storage costs, shall not be included in the AMS. According to this provision, the EU has not notified its ECU 1.5 billion for buying-in or storage costs in 1998, even though most of those stocks have been dumped on the world market later on. On the other hand, footnote 5 to article 3 of annex 2 states that the difference between the acquisition price of governmental stockholding programmes for food security purposes in DCs and the external reference price is accounted for in the AMS. This provision is much harmful to China and India because their enormous food security stocks in wheat and rice have been bought in the last years at prices much higher than world prices.

4) The AoA doesn't admit any negative AMS, even if it would be very often negative in DCs. They are not allowed to deduce from the AMS the heavy export taxes weighing on their farmers, because those are supports at the border level (non included in the amber box). Moreover, export taxes are severely condemned by the WTO on the ground that they reduce output and, hence, increase world prices. At the same time, article 4 of Annex 3 states that

> Specific agricultural levies or fees paid by producers shall be deducted from the AMS

because these levies are considered negative domestic supports. Hence for example the ECU 460 million in fees paid by EU beet producers and sugar factories in 1997-98 have been deducted from the EU AMS, even though those fees are used to subsidise the EU sugar exports!

5) Because most DCs having a positive AMS have notified it in domestic currencies, their much higher inflation rates than in WCs – for well known structural reasons – have had the effect of increasing much more their current administered prices and hence the gaps to the 1986-88 world reference prices, i e their current specific AMSs, thus overtaking rapidly the ceiling of their commitments.

EU-US CHEATING IN WTO NOTIFICATIONS

As upsetting as it might be, one cannot help but reveal some fundamental facts that even the WTO ignores: by taking legal actions in the WTO against many DCs or CEECs, and by complaining permanently that those countries are violating their commitments to further open up their markets and reduce their distortive supports, the EU and the US have created the impression that they are the ones abiding the best by their own commitments. The truth is that they have cheated on a large scale in their notifications to the WTO[1].

1) *Cheating on the specific AMSs*. One reason stems from the blurred method devised by the AoA to calculate the coupled support of the specific AMSs. This method is an economic nonsense because the AMS is calculated as the gap between the 1986-88 (not the current) world reference price and the current administered price, multiplied with the production concerned by this administered price. Countries have consequently used very different methods of calculation. Regarding dairy products' AMS for example, the EU has under-notified quite legally around ECU 10 billion in 1997 (by applying the price gap to the limited amount of dairy products directly targeted by administered prices, i e butter and skimmed milk powder, even though all dairy products have been supported indirectly by these administered prices), whereas the US has actually cheated by $3.3 billion in 1997 (by using a milk reference price higher than the actual 1986-88 world milk price).

But this couple of accomplices have mainly under-notified or not notified at all some important items of their non specific AMS, e g:

2) *Tax reductions on agricultural fuel* is not notified although they are the most important item of support to variable inputs declared by the US to OECD ($2385 million in 1997). This item also counts for ECU 403 million for Germany alone in 1998 within the EU.

3) The US has notified only $119.5 million in 1997 in *support to agricultural insurance* (apart from disaster payments which are in the green box). But it is easy to find from the USDA budget that actual support has been between $1 billion and $1.5 billion in 1997. For 1998 the US have notified $747 million but actual expenses have reached $1.368 billion: $466 billion in net indemnities to farmers and $902 million in administrative, delivery and other expenses[2]. Furthermore this support should have been notified in the product specific AMSs. For its part, the ECU 102 million notified by the EU on this item clearly underestimates the actual support, given its importance in Spain and Italy.

4) The EU under-notifications affect many other items: whereas *support to irrigation* is the most important non specific AMS measure for the US ($349 million in 1997), the EU has not even mentioned this item, which is, however, very important in Spain and Italy again, and which was about ECU 61 million in France for 1997.

5) The *support on interest rates* – which, with ECU 599 million, represents 84% of the non specific AMS of the EU – clearly underestimates the actual EU support because this item has reached ECU 501 million for France alone in 1997 and ECU 350 million for Germany in 1998 (including subsidies on investment). For 1998, the EU has notified €312.5 million when the support on interest rates has reached €360 million in France alone[3]. The EU representative to the WTO has asserted that these subsidies on interest rates and farm investments have been included in the green box (at ECU 4971 million) because these investments were not linked to a specific production nor to prices. This assertion is inadmissible because everybody knows that, in the EU, farms and their investments are more and more

[1] For more details, see my recent book: J. Berthelot, L'agriculture, talon d'Achille de la mondialisation. Clés pour un Accord agricole solidaire à l'OMC, L'Harmattan, 2001, 509 p, €33,54; or J. Berthelot, La mystification du découplage des aides agricoles, Economie Rurale, n° 261, janvier-février 2001, pp 104-112; paper also available in Problèmes Economiques, n° 2719, 27-06-01, pp 18-22. And J. Berthelot, L'urgente réforme des politiques européennes. Un autre modèle pour l'agriculture, Le Monde Diplomatique, april 2001 (English version on request).

[2] USDA, http://www.usda.gov/agency/obpa/Budget-Summary/2000/text.html

[3] From the French Ministry of Agriculture and Fisheries.

specialised, as the European Commission itself acknowledged in 1999:

> The EU-15 is dominated by specialised farming systems which accounted for 80% of farms…in 1995. This specialisation has been going on since 1995[1].

Above all, since article 6 of the AoA on "domestic support commitment" indicates that

> investment subsidies which are generally available to agriculture in developing country Members and agricultural input subsidies generally available to low-income or resource poor producers in developing country Members shall be exempt from domestic support reduction commitments that would otherwise be applicable to such measures

this implies *a contrario* that such investment subsidies are not exempted for industrialised countries.

6) One should infer from the same article and from article 4 of annex 4

> Equivalent measurements of support shall be calculated on the amount of subsidy as close as practicable to the point of first sale of the product concerned. Policies directed at agricultural processors shall be included to the extent that such policies benefit the producers of the basic products. Specific agricultural levies or fees paid by producers shall reduce the equivalent measurements of support by a corresponding amount

and from article 13 of annex 3

> Other non-exempt policies, including input subsidies and other policies such as marketing cost reduction measures

that all *supports to agro-industries* should have been notified in the (non specific or at least specific) AMS, which has not been the case. For France alone, these supports to agro-industries (according to EC regulation 951/97) have reached an annual average of ECU 225 million from 1994 to 1999 (and this type of support has been operating since 1960).

7) There has been no notification either on other *tax reductions* or on fuel granted through Member states' budgets. More generally, there has been large under-notifications of EU supports granted at the Member states level or at intra-state levels.

8) The EU has also cheated on its notified *export subsidies*, although to a lesser extent than on its notified non specific AMS. The EU has for example under-notified its export subsidies on coarse grains by ECU 129 million for 1998-99. The EU has also elaborated a very complex legal make-up to export melted cheeses beyond its authorised ceiling.

[1] European Commission, Agriculture, Environment, Rural Development: Facts and Figures - A Challenge for Agriculture, 1999.

III
Unfounded objections to import protection

The main obstacle to rebuilding the AoA on the principle of import protection – food sovereignty – as the least protectionist way of supporting agriculture and the best way to express solidarity among countries, is the fact that a large majority of the public opinion (and of economists) is allergic to this idea. There are three fundamental objections which have to be refuted:

1) an increased import protection in the North would run counter to DC interests;
2) an increased import protection in the South would be unendurable for their poor consumers;
3) an increased import protection in the EU would plunge the CAP again in the same inefficiencies and oversupplies as before 1992.

IMPORT PROTECTION IN THE NORTH COUNTER TO DEVELOPING COUNTRY INTERESTS?

If increased exports from DCs in general seem necessary to reduce the deficit in their balance of payments, at least in the short run, it is more than dubious that increased agri-food exports to industrialised countries will benefit their small farmers and consumers, for many reasons.

We have already mentioned the growing agri-food trade deficit of DCs as a whole, despite their increased exports relative to their GNP. Then, increased agri-food exports from DCs will benefit agri-food multinationals, the international institutions devoted to them (IMF, WB, WTO, OECD) and, at best, a minority of large farmers to the detriment of small farmers and consumers. As more and more production factors (land, capital and public supports) will be devoted to export crops, small farmers will be more and more marginalized. The same thing will happen to staple food crops, and their prices will rise, to the detriment of

consumers. All of these facts have been widely documented. And the fiercer competition among DCs to conquer industrialised countries' markets will accelerate the long term declining trend already observed in the real prices of agri-food products. The end result is foreseeable: greater balance deficits for DCs. Therefore, even DCs' governments – which are anticipating a larger amount of hard currency from increased agri-food exports – will lose their bet, even though many of their corrupt leaders will take personal advantage of it.

The benefiting multinationals will not be restricted to the field of agribusiness. Indeed, the whole strategy of the European Commission Trade Directorate has been to induce DCs to accept a new global "Development" Round in Doha. Since Seattle, Pascal Lamy has kept repeating to them that the EU will make CAP-related concessions in exchange of the opening up of their markets to high-tech industrial products and services of such companies as Bouygues, Vivendi, Deutsche Telekom and Nokia – the most important sectors for the EU's GDP and employment – without forgetting such agri-food companies as Danone and Carrefour, which have the greatest stake in buying their agricultural raw materials at world prices. Hence the seduction strategy followed by the EU towards DCs since the failure of Seattle, and notably the EU "Everything but arms" decision in February 2001 for LDCs. Hence also the multiplication of bilateral free trade agreements concluded or negotiated between the EU and most Southern countries, with an agricultural section henceforth obligatory. Therefore if the enlarged Development Round were to be confirmed in 2003 at the next WTO Ministerial in Mexico, the losers will not be limited to farmers and the whole world population will suffer.

Happily, the worst is never sure and there are good alternative proposals for an AoA benefiting all farmers in the world. Notably the proposal made by Via Campesina, an international movement of small family farmers (to which belong notably the European Farmers Coordination (CPE), the National Family Farm Coalition of the US and the Landless' Workers Movement from Brazil), together with ROPPA, a network of farmers organisations and agricultural producers from Western Africa. In their press release of May 17, 2001, they

> denounce the "liberalisation" of farm products exchanges promoted by WTO as well as the dumping policies implemented by large export countries on third countries, particularly LDCs. These policies ruin their production capacity and food habits and provoke the disappearance of family farming in the North and South… The EU decision to open up its agricultural market to LDC products without tariffs is the contrary of a solution for these countries. It has been adopted more to justify the penetration of LDCs' markets by EU exporters rather to give LDC farmers a genuine opportunity to sell their production in Europe…Priority should be given to healthy, good quality and culturally appropriate subsistence production, for the domestic market and for the sub-regional or regional market in each region of the world. In LDCs, the first priority of farmers is to produce for their families, then to seek access to their domestic market, before seeking to export. The EU decision is only going to strengthen the profit of large companies that use the resources and labour force of LDCs to grow cash crops aimed at the EU market. It will decrease the resources and labour force dedicated to the production of food for rural and urban populations whilst increasing food insecurity. The farmers from Vía Campesina and ROPPA reassert… the right for countries/groups of countries from the South and the North to protect their agriculture and market to be able to fairly remunerate labour and products from family farms.

This option for an AoA enhancing import protection as the main agricultural support, indispensable to the South as well as to the North, has been well argued by Peter Einarsson, drawing from a large number of research works by NGOs[1].

In order to make clear to DCs that import protection in the North has no protectionist objective and in order to be agreed on by the more competitive exporters (the US and Cairns Goup's countries), the EU should take three measures:

1) Eliminate very rapidly all import protection on tropical products without close temperate substitutes and all tariff escalation on transformed tropical products (cotton included). Indeed it is necessary to leave to DCs the benefit of the added value to their raw products, the more so as their agro-industries are one of the scarce industrial sectors for which they can have a comparative advantage.
2) Transfer all its import duties (variable levies) to a special fund devoted to reducing the food dependency of LDCs.

[1] Einarsson, *ibid.*

3) Since some DCs are structurally net importers (e g Arab countries), the tiny minority of European farmers claiming to be competitive – without export refund or direct payment – could opt to export all their production but would be deprived of production quota to sell on the EU domestic market (or would receive at most half a quota, this point having to be negotiated). For the US and the Cairns Group the closure of the EU market (feedstuffs included) would be largely compensated by the withdrawal of the EU from the world market where it is presently exporting each year around 25 million t of cereals, 1.8 million t of dairy products and 1.5 million t of meat.

Indeed deprotecting the EU market – particularly vis-à-vis the Mercosur which produces the same temperate products as the EU: cereals, sugar, all meats, dairy products – would be suicidal for its farmers who would lose their own domestic market which has been absorbing on average, from 1995 to 1998, 89,5% of their cereals, 92,1% of their meat and 90% of their dairy products.

IMPORT PROTECTION IN THE SOUTH UNENDURABLE FOR THEIR POOR CONSUMERS?

The undeniable risks in the short run that an increased import protection would become unbearable for the majority of DCs' consumers, who have indeed a very low purchasing power, should be put into perspective and minimised, for several reasons.

First, because the majority of consumers, notably those suffering from malnutrition, are also farmers and, even if they don't all have large surpluses to sell on the domestic market, they will generally benefit from the higher prices following the stop in imports at dumping prices.

Second, because all historical experience shows that all industrialised countries of today, including from the South (Korea, Taiwan, India, China, Brazil, etc), have highly protected their agriculture at the import level. We have seen that this import protection remains today more than twice as high in WCs as in DCs for the main basic agri-food products. Conversely, the only DCs unable to industrialise have been those, like in Sub Saharan Africa, which did not have the political capacity to protect themselves at the import level.

Finally, it is much more rational to support temporarily – by transfers in cash or in kind (food stamps), training programmes and income generating projects – the most deprived social segments to face higher food prices. Because the solution of importing food at dumping prices generates a vicious circle of underpayment and underdevelopment as we have acknowledged it up to now. Time is largely up to trigger the reverse virtuous circle based on paying higher prices to farmers, which will allow them to invest in order to raise their productivity, which will reduce their unit production costs and eventually their prices to consumers.

IMPORT PROTECTION IN THE EU TO REVIVE PRE-1992 INEFFICIENCIES AND OVERSUPPLIES?

To attribute to price support the deterioration of the environment is unjustified because it is quite easy to protect agriculture at the import level without going back to an over intensification of agricultural production systems, by the following means.

Profitable domestic price levels will be achieved by applying variable import levies (not fixed tariffs) in order to ensure sufficient income for farmers within the more favoured climate zones, and for at least half the production of each basic agricultural product. Several measures will forestall the stockpiling of excessive inventories and prevent agricultural intensification, primarily through the controlling and sharing out of production. First, production quotas will be set for products that are non-competitive without import protection or direct payments (explicit export refunds being rapidly eliminated). Alternatives to production quotas include land set-asides and the establishment of upper limits for production and marketing.

The size of farms will be limited to encourage young farmers to set up their own farms, including those from non-farming backgrounds, whose involvement is increasingly needed. Non intensive measures will be imposed on all farm operations by promoting soil-based livestock raising. Non-soil-based livestock raising and the use of chemicals in the production process will be phased out progressively; the subsidisation of production factors contributing to pollution (including the use of irrigation in high-rainfall areas) will be discontinued; and the Polluter Pays Principle will be strictly applied.

If domestic prices collapse despite the implementation of such measures aimed at controlling supply, an intervention price will be applied selectively and exclusively to family farms. However, farmers located in less favoured areas

would receive a complementary direct payment within a ceiling by each unit of farm labour, based on the farmers' ability to create jobs, and thus added value, non-intensively. These payments will be differentiated according to agroclimatic problems, and will thus be higher in areas with lower yields (contrary to the current direct payments system); it will also favour collective measures.

In order to avoid total disconnection between domestic and world prices, and to regulate fluctuations of the latter, the main exporting countries will negotiate their respective market shares and coordinate their inventory levels, if necessary by means of land set-asides.

IMPORT PROTECTION WOULD SIMPLIFY THE AOA DRASTICALLY

Once import protection – and more precisely variable levies – will have been recognised as the optimal authorised support measure for any country, provided it will go hand in hand with the elimination of all forms of dumping, it will be much less important to regulate all other types of support. However, the political inability of many Southern countries to increase their import protection given the powerful pressures exerted on them by the IMF and the World Bank implies to eliminate very rapidly all export refunds and other implicit export subsidies.

The claim to establish true decoupled supports – of the green box – to foster the provision of the public goods encompassed in the "multifunctionality" or "non trade concerns" concepts is therefore an enormous joke that no intellectually honest economist can endorse. On the contrary those public goods will automatically be provided through new agricultural policies based on the promotion of socially and environmentally sustainable production systems giving priority to the satisfaction of local food needs. Import protection is the best way to promote those concerns, provided it goes on par with production quotas, a strict implementation of the Polluter Pays Principle, and limited incentives to less intensive farming systems.

CONCLUSION

For all the reasons above, the next AoA should be revised drastically and set import protection as the optimal authorised way of supporting domestic agriculture in any country. Being the only support measure without dumping effects and the only one that most DCs can afford, it is actually the least protectionist measure. It is the only measure which can guarantee that farmers of every country have access to their own domestic market, even if this import protection should preferably be implemented in the context of political regional groupings of neighbouring countries.

Agriculture fulfils many functions. For this reason agricultural policy should no longer be dictated by the conservative farmers' unions under pressure from the agri-food companies. Agriculture policy requires the input of other organisations as well, such as environmental protection and international solidarity associations, consumers' and unemployed workers' groups and local elected representatives.

Agricultural policies obviously require some form of international regulation, if only to combat dumping. However, in its current set-up the WTO is an unsuitable policy-making body since its objective is not to ensure sufficient quality and quantity of food supplies (especially to the world's 815 million people still afflicted by chronic malnutrition), but rather to obtain "substantial and progressive reductions in support and protections" affecting farmers worldwide. Fashioning a strategy based on the needs of farmers and citizens – the only approach that takes European expectations into account while showing solidarity with the rest of the world – comes up against a powerful coalition of interest groups. Only strong and speedy mobilisation will ensure that this strategy is adopted in the face of the WTO. ¶

Jacques Berthelot is an agricultural economist and member of Solidarité, a development NGO based in Gaillac (see his other papers at http://www.solidarite.asso.fr).

Discussion

Summarised from tape recording

Question *Thomas Roland, Danish Consumer Council*

– The agricultural treadmill implies that farmers will never have same economic opportunities as the skilled labour they are compared with. What shall we do then? Give up farming totally in the EU?

Answer *Ingemann*

– We could have marvelous tax reductions in Denmark, if we told the farmers "we will pay your private consumption, if you please stop farming". The reason that we don't do this in Denmark is that it is not Danish taxpayers who pay, it is other taxpayers in other parts of Europe.

– The problem with the agricultural treadmill is that when you produce too much, you put a pressure on the farmer, an income squeeze. The only way to get out of it is by subsidies, but the subsidies also create a new income squeeze, the way they are set up in the EU. We need to find a policy where you do not give incentives to produce *too much*, but incentives to produce *enough*, and without the negative external effects.

A *Berthelot*

– To complement this answer: the CAP should be redirected toward protecting our own domestic market. We export 10 percent of our total cereal production, 8 percent of our meat production, 10 percent of our dairy production.

– The policy of the Commission in Doha was the exact opposite. They agree to further reduce the import protection level, but will not reduce the export refunds. We are now facing imports of common wheat from the Ukraine, and even the French cereal growers who have always been the spearhead of the EU export orientation are starting to ask themselves whether it would not be better to protect the 90 % of their market.

– We should stop all exports where we are not competitive without export refunds and direct payments. Roquefort cheese can continue to be exported, and good French wines.

– But we should protect our market, even for feedstuffs like soya. I attented two workshops last week at the World Social Forum in Porto Alegre with Brazilian farmers. They do not want to go on exporting soya. The production is very detrimental to their environment.

Q *Gun Rudquist, Swedish Society for Nature Conservation*

– I fully agree regarding the hidden support in the direct payments and the possible solution in starting to discuss border protection in a constructive way. But could you further develop *how* you can protect what you want to keep in your own country – like farming which is important for biodiversity and culture in Sweden – without distorting the possibilities for developing countries to develop their own agriculture.

A *Berthelot*

– The income of the most "efficient" farmers in the best agroclimatic areas in the EU should be based on a fair domestic price, achieved through variable import levies. No direct payments for this category, covering maybe 50 percent of EU production. But for multifunctionality reasons there should be complementary direct payments with a ceiling per person employed. All farmers should be constrained to respect a more eco-friendly type of farming. We should progressively disconnect animal farming from external inputs and link it to the production of the soil.

– In order not to have a detrimental effect on developing countries, we should prevent all exports of any products where we need direct payments or export refunds.

A *Ingemann*

– We also have to look outside the CAP, in general policies, such as control of monopolies. The lack of will to regulate monopolies in the 1980s and 1990s is in play here. If we want to produce just enough food we need to regulate monopolies in the EU. And we also have to give incentives to building alternative, local food chains, to reinvent direct relations between consumers and producers.

Q *Anneke Svantesson, Ecotrade, Sweden*

– Dr Berthelot, you said you would like to put a ceiling on domestic production. That's a tricky business. Could you explain more? And secondly, is there any difference in what measures are good in developing countries, as compared to in the EU?

A *Berthelot*

– EU farmers are in general quite happy with production quota for milk and sugar beets. We could extend those, but we could also use other measures. By decreasing chemical inputs we can reduce yield. We can produce our own feedstuff instead of importing 50 million tons.

– Developing countries are on the same line of defending their food sovereignty. Their import protection levels have been very much reduced by structural adjustment policies. Now they are advocating increased protection levels in the WTO. In October, I was in Ouagadougou, where a West African farmers' network were developing similar ideas.

– We can say that most of their consumers are too poor to support increased farm prices. But what you have is a vicious circle of underpayment of everybody. We should promote *virtuous* circles whereby higher prices to farmers will allow them to increase their yields, lower their unit production cost and thereby the consumer price.

Q *Gundula Meziani, Soil Association, UK*

– A comment for Dr Berthelot. I find your analysis fascinating, but I am just not convinced about the solution being import protection. It does not sound like an organic solution, it sounds very conventional. If there are pests in the field, we control them, we kill them with chemicals. The variable tariffs sound just like Integrated Crop Management, we just use as much chemicals as we need. I think the organic solution is to create a dynamic which has its own balance, and is that not local food economies? Could you comment on local food economies versus import protection?

A *Berthelot*

– I don't see any opposition between the two. Do we want to have organic products from large industrial estates in Brazil or Thailand? A misconception which is very broadly held among NGOs in North and South is that the North should at least allow developing countries to export more in order to pay for their foreign debt. This is false, because more export production in the South will mainly be good for the agritrade multinationals and for a minority of large farmers in those countries, at the expense of organic small-scale production. ¶

Reforming CAP objectives and principles

GUNDULA MEZIANI *Policy advisor, Soil Association, Bristol, UK*

The UK has more than most European countries pursued productivity and agricultural 'restructuring'. The UK situation thus clearly illustrates where current CAP objectives have led us:

- environmental degradation (soil degradation, farmland bird numbers fallen by 30% since 1970)
- national disease crises (E.coli, BSE, FMD)
- fall in farm employment (51,000 in last two years)
- fall in food nutrient levels (reduction of 15% to 76%, depending on mineral), and
- major 'external costs' to society (at least £2.3 billion each year).

Why change the CAP objectives?

- CAP objectives out of date
- Clarity and commitment
- Designing the new policy measures
- Ensuring the right stakeholders influence the reform

We should distinguish between different levels of objectives: (1) primary long-term objectives, (2) 'strategic' objectives and (3) principles for the design of policy measures.

PRIMARY OBJECTIVES

Current primary CAP objectives in the Treaty article 33 (ex article 39) read as follows:

> 1. The objectives of the common agricultural policy shall be:
>
> (a) to increase agricultural productivity by promoting technical progress and by ensuring the rational development of agricultural production and the optimum utilisation of the factors of production, in particular labour;
>
> (b) thus to ensure a fair standard of living for the agricultural community, in particular by increasing the individual earnings of persons engaged in agriculture;
>
> (c) to stabilise markets;
>
> (d) to assure the availability of supplies;
>
> (e) to ensure that supplies reach consumers at reasonable prices.

These obviously need to change. New objectives should focus primarily on

- Environmental sustainability
- Enhancement of farmland biodiversity
- Health and food safety
- Rural development
- Animal welfare
- Fair trade

But they should also take into account

- Reduced cost to the state (considering the total of both direct and indirect costs)
- Good market orientation
- Adequate farm incomes
- Adequate production levels for food security

STRATEGIC OBJECTIVES

Strategic objectives could be for example:

- A significant expansion of organic food and farming (target: 30% by 2010).
- A significant improvement in the sustainability, health and animal welfare impacts of non-organic farming.
- A major development of local food economies (target 40% of food sales by 2010?).

NEW PRINCIPLES FOR POLICY MEASURES

Based on the new objectives, a number of principles can be formulated for the design of new policy measures.

- Public funds only for the delivery of public goods that are not delivered by the market.
- Organic farming to be a model and spearhead the transition to sustainable, health promoting farming.
- A continued and central place for small and family farmers.
- Include the 'unsupported' sectors (pig, poultry, horticulture).
- An end to discrimination by CAP measures

against organic farming and the improved sustainability and health impact of non-organic farming.

- Internalisation of the external costs and/or reduced disparity in price competitiveness between intensive and organic /improved non-organic production.
- EU wide, harmonised support for organic farming.
- An end to the disruption of foreign markets by export subsidies.
- The promotion of positive animal health, over the treatment and control of animal health problems.
- The introduction of alternative policy measures (e g green taxes, public purchasing and public information).
- Maintenance of the current size of CAP budget.
- Generous, supported transition periods to minimise economic and social disruption to the EU farming community. ¶

Summarised from author's notes with some reference to tape recording

Short distances and balance

HELGE CHRISTIE *Chair of Oikos and farmer, Tolga, Norway*

Three important principles should be the primary ones for agriculture:

- careful and natural production
- short distance food
- balance between production and consumption

EU dumps food, like the US. There is overproduction and environmental problems.

How to find the balance? The EU should choose principles which are also possible to use for other countries and which can be helpful in the WTO.

It is possible for the EU to reduce production to need level. There must be a right to import protection to reduce import of feedstuffs (now zero tariff). The area for feedstuff production would reduce overproduction.

Presently, the Blair House agreement binds EU to import at zero tariff 50 million tons of soya, while there is a ceiling at 5 million ha of oilseeds in EU.

Border protection is one measure, another is supply management (to fit production to domestic consumption).

Principle of food sovereignty is something that many developing countries want. Could it also be obtained in developed countries? Each country would have the right to produce food for its own need. ¶

Summarised from tape recording

Principles for reform of policy measures

PETER EINARSSON *Agricultural policy analyst, Ekologiska Lantbrukarna, Sweden*

I will speak about the lower levels in the hiearchy of objectives that Gundula referred to. How can we implement new and more visionary objectives inside the CAP? In particular I will address the two "pillars" of CAP, and Good Agricultural Practice.

THE "PILLARS"

There is much talk about the two pillars, that we should decrease the funding for the first pillar and increase it for the second. I have no problems with the principle, but we need to look at how it would work in practice.

As can be seen from Box 1, the two pillars have different characteristics in several respects. I find that people often tend to mix up these different characteristics. For example, it is often taken for granted that support to environmental improvement in agriculture must be in the form of targeted payments, as in present second pillar programs. Hence the notion that gradual reform is simply a question of moving money from one to the other.

I would like to introduce a different way of thinking. We should always start at the level of objectives. There is no valid reason to have one set of objectives for one part of the support system, another set for the other part. We know what incoherence it has led to already. We will not solve this by shifting money only. We need to rethink and renegotiate the objectives of CAP, and make them valid for the *whole* system, for both pillars. In fact, with the same objectives, there would be no reason to divide the support system into two separate pillars. There is no inherent reason why broad, general policies could not also be used to achieve the new types of objectives.

Box 1 **The two "pillars"**

	"First pillar"	**"Second pillar"**
Objectives	Productivity	Rural development Environment
Eligibility	All	Conditional
Policies	Market stabilisation Broad direct support	Targeted direct support
EU funding	100 %	50 - 75 %

GOOD AGRICULTURAL PRACTICE

One of the most interesting new items in Agenda 2000 was that it brought in a reference to Good Agricultural Practice. This has had little practical effect so far, because the interpretation of GAP has been "you may not break any existing laws in your country". Which was of course already the case.

Still, it is a very interesting concept. What if we would decide to set down specific criteria for what GAP should mean in terms of the CAP? This definition could start from the present "integrated production" (IP) level, the "best practice" in non-organic production. I say start, because it should definitely be a dynamic standard, with the level gradually increased to improve performance. The definition could also be expanded beyond environmental compliance and include for example animal welfare and cultural heritage elements.

There would need to be a basic framework common to whole EU. But details must be adapted to regional realities, subject to approval by the Commission. A requirement to comply with this GAP should apply to all support systems, general as well as targeted.

This would land us with a three-level system as sketched in Box 2. There would still be the option to produce outside the GAP definition, only

Box 2 **Good Agricultural Practice**

Level	**Requirements**	**Type of support**
Basic	National legislation	Safety net only (border protection, market stabilisation)
Standard	Dynamic GAP	General direct payments
Advanced	Specific per program	Targeted payments for commitments/services

fulfilling national legislation, but that would only give access to the safety net components of the CAP, not to any direct payments. The higher levels would require compliance with GAP (or more).

OTHER PRINCIPLES

Let me briefly mention a few other key points.

Budget. It is not realistic to achieve ambitious new objectives while at the same time substatially reducing the total CAP budget. On the other hand, there are several possibilities for redistribution, so there would not be a need for budget increase.

Prices. Most farmers would prefer price levels closer to the cost of production, rather than high support levels. There are major hurdles to achieving this in the short term (WTO commitments). But price adjustment to more realistic levels could begin with internalisation of external costs (PPP, green taxes) and various forms of quality price differentiation.

Market stabilisation. World market prices are extremely volatile. Without a degree of price stability farmers cannot be expected to take on important new commitments under revised and expanded new objectives. However, export subsidies is not an acceptable method. Alternative means have to be developed to control surpluses.

Supply management. In the long term output can be controlled by reducing input-intensive practices. Europe is NOT a region which easily feeds itself, being among the most densely populated in the world. We do so today with the help of huge amounts of imports and external inputs. Without those it would not be a major problem to balance production and consumption. In the short term however administrative supply management (set-aside, quotas etc) must remain or increase. ¶

Summarised from tape recording and author's transparencies

Discussion

Summarised from tape recording

In the afternoon session, a panel of invited "discussants" commented on presentations. They were

Dr BERNHARD BERGER
who works at the European Commission, DG Environment, primarily with integration of environmental concerns into agricultural policy. Mr Berger however made clear that in this context he represented his own opinion, not that of the Commission.

Mr JOHN IVERSEN
who is an ex-MEP from Denmark, and former member both of the Agriculture and the Environment committes in the European Parliament. Mr Iversen also served as a spokesperson for the former Environment Commissioner, Ms Bjerregaard.

Mr JONAS RINGQVIST
who participated in his capacity as member of the Swedish Parliament and its Agriculture committee. Mr Ringqvist represents the Left Party.

Mr JUHA RUIPPO
who was at the time head of the agricultural policy sector at the Finnish agricultural producers union MTK. He has since moved to Brussels as an MTK representative there.

The session was moderated by

Mr PER ROSENBERG, chair of the Swedish Society for Nature Conservation.

PANEL

Iversen

– We have to avoid the protectionist trap. I hear people talking about import restrictions. It is foolish to think that we can stop globalisation.

– We can go in a direction where sustainability becomes the main principle. Although the Commission sometimes forgets, it is already part of the basic principles of the EU.

Berger

– The devil is in the detail. But for now just a few more general comments. The EU sustainable development strategy from Gothenburg is an interesting document to read in this context. For agricultural policy it speaks about "quality instead of quantity", including support for organic farming. So thoughts are on the way already.

– CAP is like a big tanker. Nobody knows how much to turn the steering wheel to make it go in a new direction. Too much, you go in the wrong direction. Too little, you don't go in the right direction.

– Good Farming Practice: the common market organisations (first pillar) now have most of the money, 36 billion in direct payments etc. Second pillar, rural development, is 4 billion. Very unequal. So there is a need to move money. But only moving money will not solve all issues. There is a need also for change inside market organisations. Example: A small reform made it possible for organic farmers to harvest forage on set-aside land. This is in the first pillar. Another example: Beef extensification, you get more money if you have less animals. And the opportunity to set more specific environmental requirements is already there in the common rules regulation, also first pillar.

Ringqvist

– I am glad to hear the clear message about changing basic objectives. One reason we have so many problems is the inconsistency between objectives and measures. Minor reforms have been made without revising the targets.

– A difference between first and second pillar which was not mentioned is that second pillar measures are locally adapted, something we need more of in agricultural policy.

Ruippo

– I agree with Mr Berger that there is already the possibility to link many things to the CAP. But it is very different how member states handle them.

– The Blair House agreement: I don't know if there is much reason to have this discussion now.

– One thing we should perhaps discuss is what has been raised by the Danish, a possible third pillar including animal welfare.

AUDIENCE

Question *Berthelot*

– I am also against protectionism, but import protection is the least protectionist measure. Only rich countries can subsidise their farmers with money. However green the support is, exporting the supported products has a dumping effect. Import protection, without export subsidies, is the least detrimental solution for the developing countries.

Answer *Iversen*

– I am also in favour of eliminating export refunds, which are nearly criminal. But I cannot agree on import restrictions. In the politically realistic way, I cannot see that we can go in that direction, with a Europe which would close its borders to other countries' products.

Q *Einarsson*

– John Iversen mentioned sustainable development, which has already been adopted as a major objective of the EU. Do you also agree it should come into the CAP objectives in the Treaty?

A *Iversen*

– Yes. If it is in the principles, it should be in the policy. With enlargement, we must avoid the mistakes we have made with the current CAP. We end up having more and more production, at the expense of the environment. Poland for example has a lot of family farming where sustainability is much better taken into account than in the current CAP. Please raise these issues in the discussion about enlargement!

A *Berger*

– Regarding rural development, the second pillar: I don't want anyone to leave the room and just see rural development as a hidden subsidy. What is in there? Different measures to keep a viable agricultural production in a viable rural development. Investment: yes, but linked to clear standards re animal welfare, environment etc. Agri-environment: you pay for environmental goods. Less favoured areas: you pay farmers to keep farming and avoid land abandonment. ¶

German consensus about new policy orientation

THOMAS DOSCH *Chair, Bioland, Mainz, Germany*

My remarks are based on a common position about CAP reform agreed by a broad coalition of German NGOs in October 2001[1].

There are many reasons why reform is needed.

- Cost
- Bureaucracy (ask any farmer)
- Danger that the CAP will discredit the entire farming sector

The services provided by farmers are in danger of being lost from public consciousness. Coupling support to those services is a way out of the subsidy trap.

The need for support becomes greater the less prices cover the real costs of environmentally friendly and animal welfare oriented farming. The orientation toward (low) world market prices conflicts with legitimate social demands, which increase the cost of production. The paradigm shift in agricultural policy must recognise this contradiction.

The pursuit of growth in production, cheap production of raw materials, must be replaced by competition for food quality and for quality in agricultural production methods. This requires a new orientation with environmental and social qualifiers for direct payments.

Direct payments now go to certain crops and certain types of livestock. This puts especiallly grassland farming and forage cropping at a relative disadvantage. This is counterproductive from the environmental point of view. Grassland farming must remain at the core of milk and beef production. Its discrimination under the present support system has contributed to a situation where grassland has severely declined, while silage maize production has considerably expanded. The same is true for feed legumes, which are natural nitrogen fixers and soil improvers as well as valuable feedstuff.

[1] The full text in English translation can be found at http://www.euronatur.de/PDF_Dateien/coalition_on_new_agriculture_agenda_2007.pdf

REFORM PROPOSALS

Our reform proposals would eliminate discrimination and also a lot of administrative overhead in processing of premia. We propose to greatly simplify the support system by combining all crop and animal payments into a single basic payment per hectare, linked to a number of environmental and social criteria. Those who do not meet the criteria would remain free to produce, but not receive any support payments.

Payments

- One basic area payment for all agricultural land uses including grasslands
- Also paid for non-productive areas on agri-holdings (biodiversity refuges)
- New member states should be given the option to adopt basic payment already when they enter the CAP

Environmental criteria

- Linking livestock production to area: max 2 LU/ha
- Crop rotations should be used on tillage lands, with a single crop comprising not more than 50 % of the rotation and with a minimum of 20 % recovery crops in rotation
- Landscape elements such as hedgerows, woodland copses, field margins and watercourses are to comprise at least 5 % of a holding's area (the basic payment would also be payable for these lands)
- Agricultural land use in areas subject to flooding and in fenlands is restricted to grassland
- Genetically modified plants are not allowed on the holding
- The holding adheres to GAP and complies with current environmental legislation

Social criteria

- Degressive payments for largest farms.

Up to EUR 30 000	100 %
EUR 30 000 - 100 000	75 %
EUR 100 000 - 200 000	50 %
Over EUR 200 000	25 %

- But: opportunity to increase entitlements to 100 % depending on how many people the farm employs.

Additional proposals

- Integrated rural development including accompanying measures for special services provided by the farming sector.
- More flexibility of and coherence between programmes, more participation by the local communities.
- Withdrawal from price dumping on the world markets.
- International protection of quality standards and "Green box" measures. ¶

Summarised from tape recording and author's computer presentation

Agri-environment and new policy measures

METTE MELDGAARD *Agricultural policy analyst, Landsforeningen Økologisk Jordbrug, Denmark*

My intervention will focus on two things. First I will make some remarks on the agri-environment schemes and the rural development measures, then say something about new policy areas which could be taken into the new CAP.

When we are talk about two pillars of the agricultural policy we must realise that the first one is big and heavy while the second one hardly can carry the roof over the back door.

This has to change. Today the small second pillar is carrying the whole environmental part of the CAP. In the new reform we certainly will have to strengthen this pillar. The question is on the one hand how to do this – because we will still need to have targeted programs for the rural areas and for specific environmental issues – and on the other hand how to implement GAP as the basis for the general payments.

The main changes in the agricultural policy should take place in the general payments as laid out earlier today.

SECOND PILLAR

These are some key points for the reform of the second pillar.

Budget. The budget for the second pillar should be much larger, around 20-30% of the total CAP budget depending on the level of general changes in the GAP requirements.

Co-financing. The co-financing rate from the EU should be higher as well, to make sure the programs are attractive to implement at the national level and to make them more equal to the general payments. Perhaps 75% could be the right level but that has to be discussed.

LFA. Less favoured area programmes could be brought inside the agri-environmental scheme, creating a broader basis for nature management programs.

Pasture. All natural pasture should be given support. It is needed to support the rapidly vanishing cultural heritage, to maintain biodiversity and also for historical reasons. Pasture in general should be linked to the density of animals according to the local natural capacity of the land.

ORGANIC FARMING

Organic farming should have a place of its own in the program, not just as a part of the general agri-environmental scheme. This is very important because organic farming is a spearhead for a sustainable development in agriculture and should be treated as such. The impact from organic farming should be planned to be spread as much as possible. The following should be the first important steps to give organic farming its proper place in agricultural policy.

- Specific organic research programs.
- Establishing permanent structures where organic and general agriculture interests are combined with consumer and environmental interests.
- Setting up a European Actionplan for organic agriculture with specific goals and targeted areas for development in the whole chain from the farm to the consumer.

Even though organic farming in general will benefit from a changing CAP based on GAP, we think it remains necessary to have a specific area support for organic farming. This is a payment for the public goods provided from organic farms and a recognition of organic farming as a provider of new knowledge for the whole agricultural sector.
We therefore think it should be made mandatory for member states to offer agri-environment support for organic farming, including maintenance payments. There should also be a requirement to set up national organic development plans including targets for conversion.

POLLUTER PAYS PRINCIPLE

This takes us back to the discussion of the Polluter Pays Principle (PPP) and how to let the benefits of organic farming to society show directly to the consumer in competition with industrial agricultural products. This has to be targeted in a new CAP reform. I suppose it will be too ambitious

to divide between OF and industrial farming alone but making the industrialised farming sector finance some of the changes in the agricultural policy will benefit sustainable farming in general.

Green taxes

The main area here is green taxes. Taxes on the agrochemical inputs, using the revenue for supporting a change towards sustainable agriculture, is a logical option.

In Denmark we have used the possibility in smaller scale with taxes on pesticides, using the revenue for different programmes supporting research and development of non-pesticide and organic farming. But it is very difficult to have taxes high enough to really make a change in behaviour, as long as it is possible to buy the pesticides cheaper in other countries. The distortion of competition is also used as an argument against green taxes from the conventional farmers. But having a European tax would solve these problems and give a revenue for changes at European level. I think it also would be an important psychological signal to farmers as well as the consumers.

Food policy

Talking about consumers I think it is very important to have a broader view. A change in agricultural policy should certainly be followed by a change in consumer and food policy in general. For example:

- Linking changes in the agricultural policy with e g information campaigns about animal welfare, health and environmental aspects of the food policy.
- Giving support to a change in public procurement in general, possibilities to choose locally produced food for schools and hospitals.
- A targeted education of schoolchildren.

ANIMAL WELFARE

Finally the animal welfare question as well as the precautionary principle require us to look at transportation of animals. We think this should be limited in the future. Changing the support schemes to support an extensification of animal production and higher self-sufficiency of feed is already a step in the right direction. But it is necessary also to have restrictions on transportation time. A suggestion is 4 hours or 300 km. There should maybe be derogations in special areas with very few inhabitants (and cows), but in general such a restriction would stimulate regionalisation of production and processing, and this could then be supported through the rural development scheme. ¶

Edited version of author's speaking notes

Where to start

ARJA PELTOMÄKI *Luomuliitto, Vantaa, Finland*

Being the last speaker, I note that almost everything has been said. My contribution will simply be to list a few changes which could be initiated right away. Several of the larger reforms will have to take time, but at least the following things can and should be started already during the review process in 2003-2004.

CHANGE OBJECTIVES IN TREATY

Productivity is still main objective. Environment, rural development, animal welfare etc are not mentioned. An EU government conference is being held in 2004 to change other parts of the Treaty in preparation of enlargement. The opportunity should be taken! Preparations already under way, governments should raise the issue *now.*

START ELIMINATING EXPORT REFUNDS

Export refunds are no longer the most important part of dumping (direct payments are). But the EU is alone in the world in using them, and heavily criticised by developing countries in particular. So it is a good place to start, and it can be done unilaterally. This will mean that other methods must be developed to control surpluses (supply management).

FLAT-RATE FOR NEW MEMBER STATES

The direct payment system is difficult to change on short notice for existing member states. But there is no reason to force new members into a system which should anyway be eliminated. It would give new members a head start. It is also more compatible with a more serious emphasis on agri-environment and rural development. The Commission actually has proposed that the "phase-in" period should be with flat-rate payments, but seems to imply that this is temporary and should be differentiated later.

LEGUME EXEMPTION FOR ALL

Extend the exemption for growing legumes on set-aside to all farmers. Exemption from set-aside for legume crops is a good strong signal that farms should aim for feed self-sufficiency. It should be extended to all farms on same basis as now for organic farms only. This was actually what was originally proposed by France last year, but then not accepted by other member states

NO SET-ASIDE FOR ORGANIC FARMERS

For organic farmers, the exemption should be taken one step further and not be limited to legume crops. The reason we have set-aside is to reduce cereal production. But by conversion to organic production, a farm already reduces output by much more than the present 10 % set-aside. In addition, there is no surplus of organic cereals, so there is no reason to reduce in the first place

MANDATORY MODULATION

Increase the budget for rural development by mandatory modulation on EU level. More money to rural development programs is needed urgently, it cannot wait until after 2006. Therefore, modulation must be made mandatory. Redistribution should be done on EU level rather than nationally, otherwise only countries with high present support (cereals) will benefit. But member states should remain free to decide how modulation is implemented (differentiation or not).

HIGHER RDR CO-FINANCING

When money is modulated from the first to the second pillar, the need for national co-financing also increases. This may be positive for the richer EU countries, but for the poorer members it will make rural development measures more difficult to use. The solution is to increase co-financing rates, either for all or on a need basis.

LOWER ANIMAL STOCKING RATES

Reducing stocking rates is a good way to prepare for a coming reform. The maximum stocking rate for general animal payments has already been reduced a little. This process should continue without interruption.

ORGANIC ACTION PLAN

An EU-wide action plan to increase organic production should be finalised in time to be decided in parallel with the review changes (2003).

END EXPORT REFUNDS FOR LIVE ANIMALS

As a very first step in the elimination of export subsidies, there should be an immediate end to export refunds for live animals. It is unacceptable to use taxpayer money to subsidise long painful transports. Export the meat instead if export is needed. Eliminate export restitution for live animals without delay already in 2003. ¶

Summarised from author's computer presentation.

Discussion

Summarised from tape recording

PANEL

Ringqvist

– Totally agree about expansion of second pillar budget. Agree also about flat-rate. But reluctant about common rules for good practice. Differs too much between member states. Should be mandatory to do it, but locally adapted.

Berger

– Flat-rate: interesting approach. Some problems, like risk of moving production to more favoured areas. Higher co-financing: some advantages for member states with less money and plenty of areas to protect. But would diminish the incentives for member states to contribute from their side.

– Not sure that organic farming would benefit from increasing the GAP standard. All agri-environment schemes are paid on basis of costs incurred or income foregone, compared to good agricultural practice. If you raise the standard of GAP, the subsidy for organic farming will automatically fall in the system.

– I would warn against extending the derogation for legume growing on set-aside to all farmers. Will create serious nitrate leaching problems.

Iversen

– When you say we should choose locally produced food, what does that mean? People don't understand it, and I don't either. If it means that we in Denmark cannot buy anything from Italy, I am against it.

– I totally agree about more money for rural development. But schemes have to be simplified and understandable to the public.

AUDIENCE

Question *unidentified*

– A comment to John Iversen about being local. It must be difficult for you having worked in the EU for many years, as the culture of the EU is to open up the market and remove all the national barriers. A parallel problem which was mentioned this morning is monopolies and competition. Monopolies are so strong that everybody loses their freedom. This is a result of the open market and the WTO. A paradox: it should give us freedom but it gives us the opposite.

– The local aspect is one of the means to come up with alternatives to the concentration which results from the inner market philosophy. But it is also linked to the problems of how to manage resources, both natural and human. It's a simple word for a very complex organic, ecological, political, philosophical, ethical problem. I hope that you could pay a little more attention to this aspect. I think most people actually understand this. It is not that we could not import things from Italy, but there are limits. It's not either or, but where to put the limit.

Q *Ingemann*

– I relate to all six presentations this afternoon. They raise what you may call provocative or nasty questions. I say necessary, basic questions.

– The first question: Why do you have higher beliefs in the political systems than in the market? I tried to state in the morning session that political reallocation is not more rational or reasonable than the market allocation. So why keep up with this enormous bureaucratic system?

– The second question: What is the main objective? To support farmers, to support bureaucracy or to support food systems? We have a very basic problem, reflected in the name of what we are gathered to discuss today: Common Agricultural Policy. If we want to introduce GAP, it cannot be common, because it is a question of local and regional conditions. And agriculture: it was adequate to talk about in the 1960s, when the union could not supply enough food. But today we have too much food. You cannot indirectly support rural areas by supporting farmers, who are 3 percent of the population.

– What we need is not 'common', not 'agriculture', but principles for food systems: a fundamental, radical other kind of policy. Organic farmers' organisations should be the first to make this critical analysis and present new visions for

food systems, instead of increasing subsidies and reallocating them from conventional farmers to organic farmers.

Answer *Dosch*

– I don't think we are shifting money from the conventional to the organic sector. I did not mention organic farming once. I was talking about agriculture. All the farmers are in one boat. If the market is not paying for special services, you have to pay them to do the job. It is much more expensive to pay civil servants to take care of the landscape. We have this in certain areas of Germany. They go out in the morning, come back for lunch, go out in the afternoon, come back at five o'clock, in their Mercedes Unimogs.

– A basic flat-rate for the total area connected to environmental criteria would make sure that it is a service for the consumer, to protect landscape, groundwater and so on. An example from Munich: the city water supplier decided to pay farmers in the water collection area €250/ha per year for converting to organic farming, because it is cheaper than cleaning the water afterwards. Nobody is willing to pay this over the food prices.

Q *Ingemann*

– Increase the taxes on the conventional food instead.

A *Dosch*

– I agree. I am an economist too. You can give incentives or you can punish somebody. An advantage is that you would support everyone producing in an environmentally friendly system, even producers from abroad. I am not in favour of import restrictions, I am in favour of certain production methods.

Q *Moderator*

– Do you believe in politics? That was an underlying question here – or rather explicit in fact.

A *Dosch*

– I believe in the market, but the market is not everything. In the former Communist countries, they believed in plans, i e politics. Plans instead of markets. Now, we cannot say markets instead of politics. We must have objectives, and look at production methods which will support the objectives. If organic farming is a method to reach the objectives, it is worth taking tax money to get there.

Q *Carl-Johan Lidén, Ministry of Agriculture, Sweden*

– To Mr Dosch: what is the objective of the flat-rate payment that you propose?

A *Dosch*

– The flat-rate only makes sense if you connect it with environmental criteria. The objective is to have an environment-friendly kind of agriculture.

Q *Lidén*

– Then it looks to me like it should be an environmental aid payment of some kind, not a general acreage payment.

Q *Marianne Schönning, Ekologiska Lantbrukarna*

– I agree with Mr Iversen that we need simple transparent schemes which reduce bureaucracy. Secondly, all kinds of detailed rules and standards on international levels tend to risk the local adaptation in production, which is one of the key elements of a sustainable future agriculture. An example: the limiting of stock densities. In Sweden, two livestock units per hectare is far too much. In Italy, in productive areas two units per hectare could well be fed in an environmentally sound way. In the same vein, I get very sceptical about giving a detailed definition of GAP on a European level. This must be kept on a national level.

Q *Helge*

– To Mr Iversen, about Italy and Denmark and transport: is it not sustainable for the environment to try to reduce long distance transport of foods *if* Denmark and Italy produce the same product? What about CO_2, the atmosphere, climate change?

A *Iversen*

– There are examples of really crazy things. Potatoes being grown in Holland, washed in Morocco, transported to Germany and then packaged and sold all over Europe. Why is that so? Because the cost of transportation is not in the prices. Transport is too cheap. You can solve that in your way, by restrictions. Any potato grown in Holland has to be in Holland. In my world, the answer is to have the environmental cost of transports put into the price of transportation.

Q *Charly Hulthén, Friends of the Earth, Sweden*

– We don't see local food as something mandatory. We say *choose* local food, from the variety that is available to you. Then people start

thinking of what conditions the food is produced in. It makes them think about what goes on around their summer houses.

– Then there is this problem about the market and politics. We have every reason to ask questions about how the market is serving us when it comes to food. If you go back to the fundamentals of the market, you have free access to the market for producers, full information for consumers, and the consumers making their choice on the basis of this. Look at the fundamentals of market ideology and at what we have in the food trade. You see some discrepancies. That is where the need for politics gets into the picture.

PANEL FINAL STATEMENTS

Berger

– I will be very realistic. I think that what we will see in the Mid-Term Review is that money will be moved from the first to the second pillar. I hope this money will be used in a good way.

– We have heard interesting ideas. But the subject is complex, and there are other aspects. This is not the right place to say what the details should be.

– To finish: like someone said already, the Commission cannot do everything. We have to move together. One important thing not mentioned today is implementation, using what is there.

Iversen

– About the CAP, my brain says: drop it, get rid of it. My heart says: make it greener. As a tax payer, I say: make it cheaper. As a consumer, I say: let's have better quality of food. And as a citizen, I say: make it sustainable.

Ringqvist

– I have not heard anyone here today put forward a conservative opinion, like some European farmers' organisations do. I am glad for that. But neither have I heard anyone with a visionary point of view. The proposals I have heard today have been adapted to a realistic mainstream. When those who should be the visionary and the radical adapt to a realistic mainstream approach, I believe the coming reform of CAP will be something that can be seen as a continued Agenda 2000.

– That does not need to be bad at all. If it is a success or not depends a lot on whether we make a revision of the basic targets.

Ruippo

– As a normal farmer in Finland, at this time of the year when we are waiting for spring, I am also optimistic. The main task is to have a policy which makes it possible to have agriculture all over the EU area. In Finland, we want to have milk production also in Lapland.

– In the near future, we should think more about what happens with candidate countries. The Commission has indicated that the direct payments there can be divided per utilised agricultural area. A very simple way to deliver the money. But what is the interest for the taxpayer? ¶