



FOOD OF THE FUTURE – THE FUTURE OF FOOD

DISCUSSION PAPER OF THE NETHERLANDS PRESIDENCY

I. Introduction

The Common Agricultural Policy (CAP) was and is one of the crucial pillars of European cooperation. In the 50-plus years of its existence, the CAP has made a tremendous mark on the European Union (EU) and continues to do so. It originated from the post-war need to establish food security for citizens in a war-wrecked Europe and to provide its food producers with a reasonable income. Over the past decades, the policy has been continuously adapted to changing geopolitical, economic and trade-political circumstances, as well as to changing perceptions of the role of the agricultural sector in society. The last CAP reform came about in 2013 and applies to the years 2014-2020. On the basis of, amongst other things, the 10 point Juncker political guidelines it now focuses on creating a climate that stimulates entrepreneurship, job creation and sustainable economic development. These ambitions concur with the ambitions of the CAP. Innovation and competitiveness should not be hindered by an excess of detailed rules, especially where small and medium enterprises are concerned.

The discussion on the future of the CAP has only just begun. With this paper, the Netherlands would like to provide input. It is time to discuss the future of our food. The main topic of this informal Agriculture Council will therefore be: “food of the future – the future of food”.

II. Changing context

The discussion about global agriculture and food supplies has changed over the past decades. Four developments have determined this change. Firstly, agriculture and food supply have been industrialised, intensified and scaled-up. Secondly, food supplies have strongly been internationalised. Trade and direct foreign investments by agrifood businesses have increased. Commodities and food products move cross-country and cross-continentially; production chains have become more international. A third development, linked to the previous one, is the increased importance of big multinational corporations working in the supply-, process- or retail-business in the agricultural chain. Food is often processed, packaged and sold separately. Furthermore, in the production process - apart from the farmers themselves - several players, such as suppliers of seeds, fertiliser and pesticides, are involved.

Digitalisation and an increased transparency of the production and production processes have led to an increased awareness of the consumer, which has resulted into them demanding more from the producers. Additionally, food crises both within and outside of the European Union have resulted into a more critical attitude of consumers towards food production.

Finally, important changes have occurred in the field of consumption. The consumption of meat and other animal products as well as processed products has risen sharply, because of an increase in prosperity, among other things. New technologies have a big influence on the behaviour of consumers and food producers. However, their possibilities and risks pose challenges for European policy (especially regarding genetics, big data, traceability, etc.). These developments have led to a change in where, by whom and how food is produced, as well as a change in what is produced and consumed. Increasingly, the production, processing and distribution of food take place separately, at a large geographical distance from one another. They are connected by a complex network of material flows and information. The activities within this food network have become more geographically distributed and more internationally intertwined. This entwinement has been strengthened by the introduction of chain management and private- and public production- and product-standards that often have a worldwide impact. In the meantime, the environmental impact of food supply has strongly increased by changing production methods in agriculture. The increasing number of kilometres travelled by our food and the increasing use of finite production resources are considered to be undesirable developments in this respect.

The discussion at EU level is strongly influenced by the concerns about a significantly lower "farm price plateau"; dividedness among member states on the necessity for radical changes on account of the ecological sustainability of the agricultural sector; as well as EU priorities and developments in international trade agreements; plus developments related to those trade agreements. On the one hand, there is a call for open markets and world trade in order to strengthen the competitiveness of the European agricultural sector and to contribute to global food supplies by exporting. On the other hand, there is also a call for the support of small businesses and regionalisation.

III. Further simplification and deregulation

The process of a continued simplification of the CAP will have to be integrated into the future of the CAP. There is a continuing cry for better regulation; (cost-)efficient as well as effective regulation that accomplishes goals against the lowest possible costs. From a national as well as farmers' perspective, there is a need for more simplification. Next to lowering the implementation costs as much as possible, European legislation should give farmers the freedom to be entrepreneurs, to innovate and to be competitive in the European and world market.

An integrated agriculture and food policy also requires a new regulatory approach. Currently all elements in agriculture and food policy are known for their very detailed regulations and controls. This has become a huge burden for national and regional administrations, as well as for entrepreneurs all along the food chain. This leads to increasing costs for all involved. It also induces more and more barriers for entrepreneurs on the market.

A future integrated agriculture and food policy therefore needs to be an example of the European efforts for better regulation.

Amongst the objectives of Better Regulation is the reduction of administrative burden and costs for entrepreneurs and administrations when developing new policies. But it should be just as important to enable entrepreneurs to earn their income in the market. Therefore elements in rules and regulations that hamper innovation and competitiveness should be removed. For a truly integrated agriculture and food policy better regulation is essential.

Better regulation has many faces. Less regulations, integration and simplification of regulations, but also more effective implementation of inspection and controls. Also the principles of subsidiarity and proportionality should be applied consistently. Finally opportunities from using new (ICT) technologies in implementation, inspection and controls must be utilized where possible.

It is a challenge to legitimately incorporate these different goals and insights into the future of the CAP.

IV. Continuing emphasis on market orientation, a viable countryside and solidarity.

We are currently facing the task to get a clear picture on the challenges that European agriculture will be faced with after 2020. The CAP used to be one of the founding elements of European corporations, and could remain so in the future. This is dependent, however, on our determination to further the European cooperation as well as the ways in which we can shape new relationships in the coming years. Throughout the years, the CAP has been fundamentally reformed and changed in accordance with a changing context and new insights in the needs of the EU and outside. The changes of 2013 bear witness to the increased emphasis on sustainability and market orientation. This process is not over yet and will continue to lead to political discussions. In addition, we face some determining tendencies in the food supply chain worldwide that force the EU to give a new interpretation to the governing principle of solidarity in the treaties. On the one hand, globalisation and emerging economies in Asia and Latin-America will continue to play a great part in markets for labour-intensive agrarian and industrial products, as well as in resource markets. The EU will continue to be influenced by this.

On the other hand, citizens will increasingly value the conservation and the reinforcement of regional identities, as well as the liveability, attraction and the vigorousness of the countryside. With the enlargement of the EU in recent years, the diversity of levels of development in agriculture, the landscapes, and the biodiversity, has grown greatly. In big parts of the EU small and medium (family-) businesses have got a broader function with regards to the countryside. More than ever, solidarity has become a vital part of the countryside. This is also true for regionally determined production-limiting circumstances and cultural diversity. Agrarian activities continue to be of great importance to the conservation of an economically viable countryside. Conservation and, where possible, increase of

employment opportunities and economic growth in the countryside is of vital importance in this respect. A viable countryside is also necessary to strengthen the rejuvenation in the primary sector. Rejuvenation of the primary sector makes or breaks the future of food production, after all. This calls for a reflection on the old principle of solidarity.

Against this backdrop, the (central) premises of the CAP, being the securing of enough and high-quality food and production-resources from renewable sources, as well as energy, will remain of essence. A sustainable primary production coupled with quality technological processing- and marketing industry is of vital importance to the stability and wellbeing in the EU. The same is true for the connection of the environment, landscape, and diversity in the EU.

To summarise, the aforementioned premises are an important basis upon which the discussion on the future of the CAP should be based. At the same time, the CAP should also respond to new challenges.

V. Changing challenges

The character of global agriculture and food issues has changed. Food is unevenly distributed on a global level. One in ten people remains malnourished. Simultaneously however, obesity and overweight occur on a large scale. In 2014, 39% of the adult population over 18 was overweight (WHO, jan 2015, factsheet 311). Because of population growth, urbanisation and the foreseen changes in eating patterns, the demand for food will rise and the pressure on global food supply will increase even further. At the same time, challenges appear in the fields of food security, public health, ecological sustainability and the industrialisation of food production. This means that current challenges in the food chain are no longer solely related to traditional agriculture. This necessitates demand-driven policy, rather than the current supply-driven policy.

Public health

Food in the EU is safer than ever. However, because of changing consumption patterns and living habits we increasingly deal with public health risks such as obesity and related illnesses. A healthier food pattern will have positive effects on our health and on the costs of health care.

Following the internationalisation of food markets and the emergence of more complex and longer food- and trade chains, the concerns regarding food safety are on the rise again. Recent cases of food fraud contribute to this process. It is clear that food contamination can take place at any point in the chain. Examples can be found in the processing industry (such as in slaughterhouses and meat cutter businesses) and in the food industry. These are not merely related to microorganisms (such as listeria and salmonella), but also to contaminants (toxic substances, such as pesticides). Additionally, the frequent use of antibiotics in intensive farming increases the risk of the development of multiresistent bacteria. Another potential threat is constituted by outbreaks of zoonoses. The internationalisation complicates the control of food security. Additives and

conservation agents, added by the food industry in order to strengthen taste and increase shelf life, are in some cases harmful to human health too. They have therefore been regulated.

Ecological sustainability

Problems are arising regarding the ecological sustainability of our agricultural system. Food production requires a lot of land, water and resources. It also causes a significant part of the emission of greenhouse gases and contributes to the decrease in biodiversity. On a local level, food production, as well as other production industries, often leads to substantial environmental damage. These ecological problems in turn influence the food supply. In the long term, several studies predict scarcity of commodities and resources, mostly water, phosphate and fossil fuels, which are essential for agriculture. These scarcity problems can be subdivided into scarcity of non-renewable commodities as well as scarcity of natural resources that are renewable as long as their use remains within limits and there is no depletion.

Because of the potential scarcity of essential commodities (e.g. phosphate) and natural resources (e.g. water), the effects of climate change, decreasing biodiversity and local environmental pollution, it is all but certain that the increasing demand for food can be met. Climate change and biodiversity loss therefore form potential threats to food production. Simultaneously, food production constitutes a part of this global problem. The food system contributes significantly to the global emission of greenhouse gases and therefore to the climate issue. In the EU, the share of agricultural emissions of greenhouse gases has lowered from 24% in 1990 to 10% in 2014. Nevertheless, it is clear that the implementation of the COP21 will have to lead to more efforts in the sector. A transition to a circular economy is necessary in order to combat waste and avoid needless depletion of commodity supplies. Additionally, a transition to a bio-economy includes switching to alternative and less environmentally harmful commodities. These transitions allow the system to remain robust, and for Europe to stay on the forefront of these developments.

Social challenges

In the past decades, the European consumers have become estranged from the production of their food. During the last few years, several incidents in the domain of food have made the news. Moreover, heated public discussions about animal welfare, intellectual property of starting materials of plant and animal origin, and the healthiness of our food are ongoing. Consumers want to get rid of the "anonymity" of the food producer. The consumer wants the food producer to become a familiar face again and the place of production to become easier to trace. In many European countries, traditional food halls are restored to their former glory. Interest has emerged in "short food chains", "local food" and seasonal eating. In addition to an ever increasing focus on convenience, quality and price, consumers pay attention to other aspects of food and food production such as sustainability, animal welfare, health and fair trade. Although these developments are still modest in scale, they play an important role in the public discussion on food. The consumers feel a need for an increase in direct contact with the producer

and/or the region of origin of the food. Additionally, concerns regarding climate change have increased the attention to the footprint of a meal. For instance, parallel to the industrialisation of the primary production, organic agriculture and other food production methods deviating from the regular have gained attention in many EU countries.

Food security

Food security must be reckoned with, both on a global and a European level. Food safety must be guaranteed and food waste must be combated. The FAO estimates that one third of the food produced for human consumption is lost or wasted. In less developed countries a lot of food is lost through spoilage – for instance because the necessary infrastructure and organisation for a timely, and suitable transport (temperature, humidity) to buyers are lacking. Due to the lack of this infrastructure, storage is often complicated, which necessitates immediate consumption. Consequentially, day-to-day-trade has a larger presence in those countries than in coordinated chains.

In the EU and elsewhere, food is sometimes wasted by the production of surpluses, losses during processing, the discarding of products of which the expiration date has passed while on the market and waste in households. When less is wasted and lost, of course less has to be produced. Nevertheless, the prevention of production surpluses cannot always be overcome in a global economy.

Taking food security, a growing world population, and an increasing prosperity into account, the agricultural sector will have to be able to adapt time and again to changing circumstances and to the effects of climate change. The world needs climate smart agriculture. We need to be able to develop crops that are resilient in the face of changing climatological conditions. For instance, it is essential that growers retain access to seeds and starting materials and are able to develop climate-proof crops through breeding. In order to be able to feed the world population in the long run in a sustainable manner, a shift to climate smart agriculture and to a circular economy is necessary.

VI. From a Common Agricultural Policy to a Common Agriculture and Food Policy

The European Union will have to answer to the changing context and its resulting challenges with its post-2020 policy. The way in which we do so will influence the discussion on the establishment of the Multiannual Financial Framework in the General Affairs Council.

While there is a high degree of consensus on the nature and the importance of agriculture and its problems, opinions on how to address these aspects vary. Advocates of the economic importance of the sector in the EU and the increasing production through intensification and scale-up are located on one side of the spectrum. They put their money on innovation, free trade and large entrepreneurial agricultural businesses; and they think the government should prevent and correct the negative environmental consequences of this development.

On the other side we find the proponents of major changes of market structures and government policy. They advocate the strengthening of the position of small farmers and local communities in order to prevent or tackle negative environmental consequences. Behind these differences in opinion different visions and problem perceptions hide with regard to health, taste, environment, animal welfare, fair trade, affordability, labour circumstances, employment, prosperity, global justice and the roles of technology, markets and governments. These questions are of great salience to agriculture in the EU. The agricultural sector already has a large diversity of business sizes, agricultural structures, and production circumstances in the 28 Member States and considerable regional differences in competitiveness. The CAP will have to continue to relate to these different interests in the future. Here, too, the interpretation of the aforementioned principle of solidarity figures prominently.

For the sake of further discussion on the future of the European agricultural policy the Netherlands presidency lists below a number of elements that it considers to be of crucial importance and on which it would welcome the views of participants.

1. *Shift to an integrated agriculture and food policy*

From a support that was solely focused on production, the CAP has developed to a more market orientated approach by means of income support, the abolishment and reduction of production quotas, export subsidies, and intervention mechanisms. The market as well as product standards have changed during that time. The primary producer has become more connected to the food supply chain. Consumers and society increasingly demand higher standards of the production environment, the quality and the type of products. Moreover, the consumer demands more choices and a larger variety on the supply side; it is up to the producers to account for this the way modern entrepreneurs would do.

One of the latest most important developments is the increased demands society makes in the field of food quality. This concerns not only the physical properties of a product, but has more to do with a much broader quality-awareness. In addition, production methods get more and more attention. This concerns animal welfare, the use of pesticides, veterinary medicinal products, additives in processed foods, the food safety of agricultural products, the increased insight into the relationship between agricultural production methods, human health (AMR), et cetera.

This broad quality awareness is only partially covered by the current CAP. The call for a broader EU food policy that encompasses many more goals, instead of the existing agricultural policy, becomes ever louder. This also does more justice to the fact that food policy should not just concern the primary producer, but should involve the entire chain. It also does justice to the fact that challenges such as climate policy and food waste demand efforts from all the parties in the chain as well as the consumers.

Additionally, the number of farmers both in the EU and worldwide has decreased significantly in the past decades and will decrease even further. The legitimacy of a policy aimed at the primary producer thus becomes ever less self-explanatory. This

is especially true when the power in the food chain does not lie with the farmers, but when other players decide on the means of production and consumption. A shift in perspective towards the food chain can offer lasting legitimacy. Following this line of reasoning, strengthening the position of the primary producer within the chain will remain an important topic.

Topic for discussion: should the CAP be broadened to a Common Agriculture and Food Policy? If yes, which steps ought to be taken? And which conditions apply, taking subsidiarity into account?

2. Increased focus on innovation

In the search for answers to the abovementioned challenges, research, development and innovation are essential. Recently, this has clearly been underlined by the European Commission with the launch of its new agricultural research strategy for the coming years. For the development of the future agricultural policy after 2020 an ambitious policy, well supplied with funds, in the field of research, development and innovation is crucial. The coordination of the policy of separate member states in order to achieve the most effective as possible use of scarce means is of essential importance for an efficient agricultural research and innovation policy. This requires a good coordination between the national (regional) and the European level as well as involving all stakeholders in the chain (primary producers, food processing companies). More attention is needed to determine how innovative agricultural practices that are better focused on sustainability and competitiveness, could be rewarded differently than the current practice.

Currently, an increasing number of arable farms already work with precision agriculture on the basis of satellite data. Automation in cattle husbandry also rapidly increases. Looking from both a production and from an environmental point of view a lot can be gained from these and other ICT-techniques. High-tech is certainly not at odds with quality. A "race to the bottom", by aiming for the lowest price however is. The use of modern techniques can contribute to the simplification of the CAP and a reduction in the administrative burden of both the farmer and the government.

The EU has a great diversity of agricultural businesses. Ranging from large-scale businesses that are focused on production for the world market, to small-scale businesses that are oriented towards regional or local markets. For this last category the employment of innovations and ICT in their business is not self-evident. By means of coordinated developments in the field of innovations and ICT on EU-scale, these small businesses will also gain access to these technologies.

Topic for discussion: Should a substantial part of the available CAP funds, in addition to funds like the EIP, be aimed at innovation and ICT?

3. Sustainability

Since 2014, the CAP has been made more sustainable by coupling 30% of the direct payments to the application of greening measures by the primary producer. The aim of these measures is to discourage monoculture, increase the conservation of permanent grasslands in order to benefit CO₂ absorption, and to strengthen biodiversity in agricultural areas. By these and other measures, for which there is an annual budget of 18 billion euros, the CAP contributes to the improvement of the European environment and the fight against climate change. It helps farmers to align their business with the directives covered by cross compliance (especially the Nitrates Directive and the Water Framework Directive) Further steps could and should be made in this respect.

An important and contemporary environmental theme is climate change. It is clear that agriculture is not only a cause of the problem of climate change, but could, like no other sector, contribute to the solution of the problem by means of climate smart agriculture. The result of the 21st meeting of the Conference of the Parties in Paris in early December 2015 formulates an ambitious effort by all parties, including the EU. Climate smart agricultural policy can make an important contribution in the fields of food security, climate adaptation and climate mitigation of the agricultural sector, in order to realise the EU's sustainability goals. As in the case of climate policy, the agricultural sector, which accounts for about 10% of EU greenhouse gas emissions, not only contributes to the problem of natural depletion, but is also of great importance to the solution of the problem. The agricultural sector, which uses about 40% of all land in the EU, can provide an important stimulus to the protection and the recovery of natural resources and biodiversity by means of more advanced production methods and by contributing to a circular economy (through prevention of food losses and waste and reuse of valuable minerals from animal manure). The central question is then how the future European agricultural policy can contribute in a more ambitious way to the protection and the recovery of natural resources. More sustainability is indispensable in this respect.

Topic for discussion: Should we increase the sustainability of the CAP by broadening its ecological focus, which was introduced in 2013, to include climate goals to which a larger part of the payments is coupled? Which role can the CAP play in the transition to sustainable, climate smart adaptation and mitigation techniques?

4. Market orientation and food chains

The CAP has gradually shifted from offering a safety-net based on targeting price-signals towards one targeting farm income. In the past, market measures used to be the most important tool of the CAP. Nevertheless, currently, market measures are only a tool of last resort, when market conditions become adverse and prices collapse. As a result of the increased market orientation of the CAP, farmers and their organizations are now much more directly confronted with the consequences of their own business decision. It is for them to respond to market signals. In the meantime, the income of primary producers is increasingly determined by their

position in the food supply chain. The farmers' share in the value chain is decreasing and incomes are generally very modest compared to the profits higher up in this chain.

Structural changes in the food chain have raised policy questions on the functioning of the food chain and the need to increase the bargaining power of the agricultural sector. Increasing the share for the farmers in the food chain may reduce the need for income support and therefore raises questions on the role of the CAP in income support.

The same goes for the current market situation, especially in the dairy and pig meat sectors. This is generally called a crisis, but to what extent can overproduction, caused by decisions taken freely by entrepreneurs in certain Member States, be called a 'crisis'? Isn't it a matter of businesses not reacting to price signals and refusing to adjust their supply to the demand? In, for example, the United States, which has a very different structure in its agricultural sector, support takes the form of an insurance against low product prices at a very basic level. Support for risk management systems by farmers could be increased, although the European system for commodities is different from the US.

Topic for discussion: Should the CAP return to providing a safety net based on product prices rather than farm income? How can farmers be better equipped to improve their position in the supply chain?

5. From income support to support for societal challenges

The 2013 CAP will still claim a large part of the EU budget (more than 30 percent) in 2020. The goals of the CAP justify the use of EU budget. However, at the same time Europe faces other big challenges. Geopolitical developments have revealed the need to have a more self-sufficient food supply. An important question is whether, and if so, to what extent and under what conditions, different financing possibilities could provide a contribution (financial instruments; EFSI, and instruments offered by the European Investment Bank). At the same time, future agriculture, food policy, and the allocation of funds is to a large extent determined by its societal support in Europe. Society's legitimisation of a future agriculture and food policy will therefore play a large role in the discussion of future finances.

Topic for discussion: How should income support be transformed into support for the realisation of society's challenges?

6. Strengthening of the external dimension

The CAP is oriented on the EU (territory). That is understandable given its history and its development. The external dimension of the current CAP is mainly aimed at international trade in agricultural products because of its salience to the internal EU agricultural policy. The EU is not only the world's largest exporting region of agricultural products, but also the world's largest importing region. There is an ethical side to this as well as an economic side. The United Nations have renewed and tightened their goals in the field of global food security and sustainable

agricultural production in September 2015 (Sustainable Development Goals, SDGs). The EU has subscribed to these SDGs.

An important question for the future development of EU agricultural policy is whether SDGs should make an contribution to the enormous challenges the world community, including the EU, has taken on in the field of food security and sustainable agricultural production. This should lead to a strengthening of the external dimension of the future EU agricultural policy. The agricultural cooperation that has been initiated between the EU and the African Union (AU) is an example of such an effort.

This orientation on development cooperation is by no means incompatible with the trade interest which the CAP professes. It has for example led to the acceptance of of imported goods in the EU, especially from the least developed countries. The EU currently imports more from these countries than the BRIC-countries combined. Through entering into cooperation with developing countries, they will eventually develop into trading partners. Moreover, this cooperation stimulates the (global) level playing field where production standards are concerned.

The external dimension of the CAP should also address how we relate to the international geopolitical developments. Increasingly, the extent to which European agriculture and food policy is dependent on commodities from other, sometimes unstable, regions is questioned. That leads to a growing ambition to be more self-sufficient in Europe, for example where the production of protein crops is concerned.

Topic for discussion: How can efforts to open markets of developing countries aim more strongly at supporting those countries in their development?