EU agriculture and climate change

European Parliament resolution of 5 May 2010 on EU agriculture and climate change (2009/2157(INI))

The European Parliament,

— having regard to the Commission staff working document entitled ‘Adapting to climate change: the challenge for European agriculture and rural areas’ (SEC(2009)0417),

— having regard to the Commission staff working document entitled ‘The role of European agriculture in climate change mitigation’ (SEC(2009)1093),


— having regard to its resolution of 12 March 2008 on sustainable agriculture and biogas: a need for review of EU legislation (2),

— having regard to its resolution of 4 February 2009 entitled ‘2050: The future begins today – recommendations for the EU’s future integrated policy on climate change’ (3),

— having regard to its resolution of 12 March 2009 on ‘the challenge of deterioration of agricultural land in the EU and in particular in southern Europe: the response through EU agricultural policy instruments’ (4),

— having regard to its resolution of 25 November 2009 on the EU strategy for the Copenhagen Conference on Climate Change (COP 15) (5),

— having regard to the International Assessment of Agricultural Science and Technology (IAASTD) report drawn up by the United Nations Food and Agriculture Organisation and the World Bank and signed by 58 countries,

— having regard to Rule 48 of its Rules of Procedure,

— having regard to the report of the Committee on Agriculture and Rural Development and the opinion of the Committee on Industry, Research and Energy (A7-0060/2010),

A. whereas the climate change caused by the historical build-up of greenhouse gases (GHGs) in the atmosphere is a scientifically established fact that may have a serious impact on ecosystems,

(3) OJ C 67 E, 18.3.2010, p. 44.
B. whereas agriculture is directly affected, since it is one of the many economic activities that manage natural resources for the benefit of humankind,

C. whereas climate change poses one of the most serious threats not only to the environment, but to the economy and society as well, with crop yields fluctuating from one year to the next, heavily influenced by the variation in extreme climate conditions, which has an implicit impact on every sector of the economy, although agriculture remains the most vulnerable,

D. whereas agriculture, as one of the main sources of two major GHGs (nitrous oxide and methane) which are generated by various biological processes linked to agricultural production is contributing to climate change while also being very vulnerable to its adverse impact,

E. whereas GHG emissions from agriculture (including livestock farming) declined by 20% in the EU-27 between 1999 and 2007 and the proportion of the Union’s GHG emissions produced by agriculture dropped from 11% in 1990 to 9,3% in 2007, inter alia as a result of the increased efficiency of EU agriculture, constant innovations and the use of new techniques, the more effective use of fertilisers and the recent reforms of the CAP,

F. whereas agriculture and forestry are the main economic sectors able to capture the CO₂ produced by human activities, to accumulate and store it in the soil by acting as sinks, and to fix it in plants through photosynthesis; whereas these sectors consequently have considerable potential to make a positive contribution to global warming mitigation efforts,

G. whereas climate change is already having adverse effects on EU agriculture (including declining water resources, brackishness and more frequent drought, desertification, a significant increase in winter rainfall and flooding in the north, threats to low-lying coastal areas from rising sea levels and the danger of salination, storms and other extreme weather events, erosion and landslides and the proliferation of insect pests and animal and plant diseases), and whereas the expected acceleration of such problems could have serious economic, social and environmental repercussions for the agricultural, forestry and tourism sectors,

H. whereas the agricultural sector is capable both of adapting and of mitigating climate change with the help of farmers’ know-how, a strong CAP and research and innovation developments but, since the natural processes involved are difficult to deal with, a great deal of effort must be made,

I. whereas European agriculture constitutes a pool of jobs which should be protected and expanded,

J. whereas agriculture remains vital to the continuance of human activity in European rural areas, inter alia because of the wide range of services which farmers can provide for the rest of society,

K. whereas the Union’s objectives for the development of renewable energies have a direct bearing on agriculture, and whereas this development can help substantially to reduce GHG emissions,

L. whereas one of the primary functions of EU agriculture is to feed the Union’s population,

M. whereas the Union should be a leader in the fight against global warming.
Contribution of EU agriculture to global warming mitigation efforts

1. Affirms that EU agriculture and forestry can contribute to achieving the Union’s climate change mitigation objectives by finding ways and support to help reduce its GHG emissions, promoting CO₂ sequestration in the soil, developing the production of sustainable renewable energies, and maximising the photosynthesis function; emphasises that, to this end, it is essential to foster the development of an agriculture producing tradable and non-tradable goods which exploit the potential and natural resources of each ecosystem as efficiently as possible and which reconcile economic, environmental and social performance as well as animal welfare imperatives so as to improve its sustainability;

2. Considers that, if agriculture is to be more actively involved in the global process of curbing climate change, care must be taken to ensure that the competitive position of the EU’s agri-foodstuffs sector in the world market does not suffer;

3. Takes the view that organic farming, extensive grazing and integrated pest management practices are among the ecologically effective systems needing further development; emphasises, however, the need to find ways to facilitate a transition to more sustainable agriculture in the case of the other systems used on most farmland;

4. Recognises that innovation has a major role to play in reducing the impact agriculture has on climate change and in lowering its environmental impact;

5. Calls, in particular, for the future CAP to encourage – through the provision of information, training and incentives – practices that contribute to improving the efficiency of agriculture and its potential to reduce GHG emissions, and to improving carbon sequestration, including:

   — simplified, appropriate cultivation techniques that provide plant cover (such as reduced or no-tillage and leaving crop residues on the ground) and facilitate intercropping and crop rotation, thereby maximising photosynthesis and helping to enrich the soil with organic matter, as demonstrated by the SoCo project launched at the European Parliament’s instigation;

   — the preservation and development of afforestation, reforestation, agroforestry, hedges, wooded areas on farmland, permanent or temporary grassland pasture systems and reforestation;

   — the introduction of farming methods which will increase the carbon storage period in existing forests;

   — better management of soil and of minerals and appropriate protection of carbon-rich land (peatland) and wetlands (growing suitable crops, such as reeds, as an alternative to drainage);

   — farm modernisation (building insulation, energy-efficient equipment and the use of renewable energies) and more efficient production chains;

   — modern techniques of feeding, animal keeping and manure treatment and use, which will significantly reduce methane emissions;

   — the use of biomass energy integrated into food production, which will contribute to reducing CO₂ emissions in addition to making use of by-products and waste;

   — the planting of woody and herbaceous energy crops (cultures) in floodplains, areas which are wet or sandy and areas less suitable for agriculture, with the aim of increasing CO₂ absorption and carbon sequestration;
6. Emphasises that, as well as being more environmentally friendly, such farming practices have a positive impact in terms of improved biodiversity and soil quality, water retention and efforts to combat erosion and pollution and that mitigating the effects of farming activity on climate change is another of the ‘public goods’ provided by agriculture;

7. Recommends introducing a common European forestry policy that promotes sustainable forestry management and production and does more to tap the potential and the economic development of this industry, which is the one that makes the greatest contribution to carbon capture, as this sector makes the greatest contribution to carbon capture; this policy should pay maximum attention to the different regional conditions for forestry, because there are different opportunities and threats for forest environments in northern and southern Europe;

8. Points out that forests also make a significant contribution to efficient water management. Member States must therefore be encouraged to undertake forest management which will reduce differences in the water regime between periods of drought and flood, thereby reducing the negative effects of droughts and floods on agriculture, energy production and the population;

9. Recommends stepping up policies on mountain regions, as the pasturing and stock-breeding industries have a particularly important role to play in mitigating climate change and in helping to adjust and reduce vulnerability, particularly by means of proper management of pastureland;

10. Recommends that strategies be devised for preventing and mitigating the adverse consequences for agriculture in the European Union through:

   — an action plan for the most affected areas: using certain plant varieties which are resistant to the new climate conditions, adapting the calendar of farming activities to the new conditions, forestation, building greenhouses, managing water resources for agriculture and making polluted land more environmentally friendly;

   — the other measure should be a plan for the future aimed at eliminating the causes of climate change by promoting a global economy based on reduced CO\textsubscript{2} emissions, combined with the promotion of energy security;

11. Emphasises that nitrous oxide emissions can be cut by making more effective use of nitrogen fertilisers (precision farming); also points out that fertilisation using the residual mass from biogas production provides opportunities for organic precision fertilisation and thus the reduction of emissions;

12. Calls for research on livestock feed and genetic selection of farm animals to be stepped up with a view to reducing methane emissions, provided that such mitigation measures are not adopted if they jeopardise animal health or welfare; also calls for the introduction of a food programme designed to reduce the Union’s dependence on imported plant proteins for animal feed and for an information programme to educate consumers about the impact of their purchasing and eating behaviour on the climate;

13. Urges also that action should be taken to speed up and step up research into plant breeding to make crops and plants better able to withstand new climatic conditions and to be able to meet the challenges posed by climate change, particularly with regard to requiring that a suitable quantity of good-quality raw materials, and therefore a secure food supply, is maintained; considers that this research should as a matter of priority relate to plant varieties which tolerate water stress and extremely high temperatures, and the relevant crop techniques; stresses also that these varieties and techniques could offer a viable alternative to the current costly and inefficient irrigation systems in some areas, and that they also offer the advantage of being more acceptable to local communities;
14. Emphasises that optimised storage – and the application – of organic fertiliser and the processing of such fertiliser in anaerobic digesters are currently some of the most promising ways of reducing methane emissions (whilst also providing a source of renewable energy) and reducing dependence on chemical nitrogen fertilisers, particularly in regions characterised by high-density livestock farming; considers that this biogas helps make agriculture self-sufficient in energy;

15. Draws attention, in this context, to the need to be able to use digestate from manure fermentation installations for biogas production as a substitute for artificial fertiliser without its falling into the category of ‘livestock manure’, so that the use of artificial fertiliser can be further reduced;

16. Calls for the speeding up of administrative simplification and of research and development work on the exploitation and utilisation of biomass found on farms (farm and forest waste), biogas from livestock farming and other sustainable agrofuels, provided that the latter do not jeopardise food security;

17. Stresses that the principle of sustainability must be enforced when using biomass; considers therefore that its use as close as possible to the place of production of the agricultural raw materials must be encouraged as this would reduce energy loss caused by transport;

18. Points out that the use of biomass for heating might significantly reduce the harmful impact of climate change, and therefore calls on the Commission and the Member States to award rural development funding to rural public institutions switching to heating systems based on bioenergy;

19. Stresses that more extensive use of ICT could improve the monitoring of several phases of production and improve their management in order to increase production in relation to the use of the means of production and, simultaneously, reduce greenhouse gas emissions and energy consumption; stresses, likewise, that the more extensive use of ICT, the integration of policies to promote training for farmers in new technologies and support for innovation and entrepreneurship among young farmers in particular are key topics, with a view both to making farming more environmentally sustainable and making the sector more competitive;

20. Emphasises that the Union’s position as the leading importer of agricultural produce results in a higher carbon cost than that generated by European farms, owing to the lower environmental standards often found in non-EU countries, coupled with long-distance transport emissions and deforestation; takes the view that there is a need to inform consumers, by means of a targeted communication strategy, of the benefits of a healthy, balanced diet made up of high-quality regional and seasonal items produced by a sustainable and efficient agriculture, the carbon footprint of which could be differentiated from those of imported products; takes the view also that there is a need to compensate European farmers fairly for their efforts to reduce emissions, and to encourage local farms to diversify (inter alia by developing EU production of plant proteins);

21. Endorses, in this context, the idea of voluntary EU origin labelling in the case of products originating entirely within the European Union;

22. Calls for the implementation of effective control mechanisms on imports from third countries and advocates full reciprocity between the criteria that have to be met by European producers to combat climate change and the requirements applying to imports from third countries, to avoid any loss in the competitiveness of Community products;

23. Emphasises that the Union must reinvest in the rural and forestry management development policy in order to help disseminate new practices and foster the development of sustainable agriculture elsewhere in the world;
Measures to help EU agriculture adapt to the effects of global warming

24. Emphasises that EU agriculture must now adapt to the effects of the climate change currently taking place and prepare for its negative net impact on many regions of the Union;

25. Considers in this regard that the Union must develop a coherent strategy for agriculture to adapt to the two kinds of adverse climatic effects anticipated:

— overall global warming;

— more marked variations in climate conditions resulting in an increase in extreme weather events;

26. Takes the view that the CAP must focus on the management of resources in a more sustainable and efficient way and that this must be taken into account in the forthcoming reform of the CAP, including for example:

— optimising water resource management (more efficient irrigation systems, use of recycled water, economical use of water on the land, hillside reservoirs, etc.), making users responsible;

— choosing crop varieties, particularly those selected for their ability to resist extreme weather events, and practising crop rotation according to considerations such as drought and disease;

— protecting the soil from water and wind erosion by ensuring organic matter content;

— planting rows of trees, hedges or wooded areas on the edges of farmland to retain water, limit runoff, act as windbreaks and provide shelter for crop auxiliaries such as pollinating insects;

— preserving pastureland and promoting animal production on pastureland;

— monitoring and controlling disease; in this context, there is a need to develop national and European instruments to monitor outbreaks and repeat outbreaks;

— undertaking monitoring and control of insects; in this context, monitoring of invasiveness potential and cross compliance measures concerning plant health (increased controls at borders and sensitive locations such as tree nurseries and airports, biosecurity measures) must be developed;

— restoring damaged areas;

— maintaining forests which can adapt to climate change and managing forests in such a way as to limit the risk of fire;

27. Emphasises that it may be necessary to re-think the water management, including river regulation, of former floodplain areas with unfavourable growing conditions which were subsequently drained, revitalise suitable floodplain areas and replant former floodplain forests;

Implications for the European agricultural model

28. Emphasises that the CAP will have to contribute to a more sustainable agricultural policy, whilst at the same time increasing yields and bearing in mind that global warming may jeopardise world food production capacity, including in Europe;
29. Takes the view, likewise, that the CAP should provide financial incentives for local authorities in the Member States to take measures aimed at:

— restoring the production and protection capacities of natural ecosystems, agricultural crops and other assets that are affected by drought and desertification or flooding;

— improving practices with regard to the use of water resources, soil and vegetation which have proved to be unsustainable over time;

— identifying, improving and promoting plant species and animal breeds in areas affected by drought and/or at risk of aridity;

— improving preventive measures;

30. Notes that climate change has a direct and disproportionately harmful impact on agriculture, which must therefore be given priority when measures are drawn up to mitigate the effects of climate change;

31. Takes the view that the ‘new challenges’ referred to in the CAP Health Check, i.e. climate change, water management, renewable energies and biodiversity, should be reiterated and respect for and improvement of the quality of the soil and its functions (carbon capture, retention capacity of water and mineral elements, biological life …) should also be added to these challenges as all these are major issues affecting the interests of future generations, and should be further taken into account in the future CAP;

32. Notes that the current cross-compliance system, which was designed to ensure that agricultural producers meet very high standards in terms of animal welfare, animal health and environmental protection, has been problematic for farmers and has, in its current form, perhaps not been the best means of achieving the desired outcomes; calls, in the context of the next reform of the CAP, for greater emphasis on more sustainable and more efficient production models, bearing in mind that these require public funding to enable farmers to cover the extra costs arising from the supply of ‘public goods’ of benefit to the whole of society (such as the preservation of rural areas, biodiversity conservation, carbon capture and food security);

33. Recognises that the CAP needs to set world-leading standards in environmental protection; points out that this will mean a level of cost which cannot be recovered from the market, although in part that can be regarded as delivery of public goods, and that European producers will need protection from third-country competition which does not meet EU environmental standards;

34. Takes the view that climate change is forcing the Union to adapt the agricultural policy model; consequently calls on the Commission, in its future communication on CAP reform after 2013, to promote a more sustainable and efficient agricultural model in line with all the aims of the CAP, geared to producing sufficient, safe food and more respectful of environmental balance; such a model must be based on a fair and legitimate farmer support system and must also enhance the role of the farming profession;

35. Considers that, to enable European agriculture to contribute in future to food security and climate protection, an ambitious CAP must be maintained, including in particular the system of direct payments from the Community budget and simplified and fair payments for the EU as a whole;

36. Stresses the importance of creating and permanently guaranteeing the basis for the development of alternative economic activities that will gradually reduce local communities’ dependence on drought-affected agricultural production or on natural resources; takes the view that access to financing from European funds is a key factor in safeguarding the conditions in which alternative economic activities are carried out;
37. Stresses the importance of promoting integrated development planning practices in rural areas in line with local needs, by introducing principles based on optimising land use in order to adapt to changing environmental conditions (prolonged drought, landslides, floods, etc.) and to the market for products and services that can be supplied at local level;

38. Also calls on the Commission to give thought to new support systems that support the contribution which farming makes to reducing CO$_2$, such as carbon fixing in farm soil and biomass, and that encourage agricultural use of areas that make a positive contribution to climate change;

39. Stresses the need for accurate Commission estimates of the costs of adapting agriculture to climate change;

40. Considers it essential to strengthen risk and crisis management instruments and adapt them to increasing market volatility and growing climatic risks;

41. Emphasises, given the scale of the climate challenge and investment, that the farming and forestry management community must focus on more sustainable modes of production and there is a need to retain a strong CAP with a commensurate budget beyond 2013; adds that provision must be made for new additional funding to be used to provide incentives to disseminate modern and innovative technologies and systems which can achieve practical results in terms of mitigation and adjustment in the various sectors of agriculture;

42. Stresses that, although the CAP is not a European climate policy, it must nevertheless be the basis for the introduction of effective instruments and incentives to combat climate change, something which should also be borne in mind when discussing the future of the EU budget;

43. Takes the view that the European Union should maintain its leading position in the battle against climate change, and that it should not slip to number two as a result of the current economic difficulties;

44. Stresses that the European Union needs development and financing policies for agriculture that guarantee safe and high-quality food;

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45. Instructs its President to forward this resolution to the Council, the Commission and the Member States’ governments and parliaments.