Public Consultation on the Draft Climate Change Adaptation Sectoral Plan for Agriculture, Forest and Seafood Sector

- Details:
  
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  or

  **Member of the public:**

  **Subsector:**

  Dairy ☐ Mixed ☐ Fisheries ☐
  Beef ☐ Arable ☐ Industry ☐
  Sheep ☐ Horticulture ☐ Prepared Consumer Foods ☐

  Other: Industry; Dairy; Beef; Arable

- What do you think are the changes in climate that are having the most impact on those working in the agriculture, forest and seafood sector?

  Extreme Rain ☐ Storminess ☐
  Drought ☐ Flooding ☐
  Extreme heat ☐ Seasonal stability ☐

  Other: Seasonal stability, drought, flooding, storms

Extremes of weather are having a direct impact on all working in the agriculture sector from farmers on the ground farming, hauliers travelling rural roads to collect milk and workers operating processing facilities.

It is clear that public policies surrounding our climate challenges continue to change rapidly both at national and international level.
In recent times we have witnessed our 4,800 dairy farmer suppliers encounter difficulties with fodder shortages due to drought, protracted winters caused by harsh weather, severe flooding and damage caused by high winds during storms. In addition, our grain farmers have suffered difficulties with harvesting due to weather conditions, and also crop damage due to storms.

It is difficult to pick out one single change that is causing the most difficulty in efficiently and sustainably operating a farm. All of these changes in climate have a direct impact on the agriculture sector by varying degrees.

- **What do you think the main impacts from climate change will be on the agriculture, forest and seafood sectors?**

Farming by its nature is highly susceptible to any climatic changes. Increased rainfall, higher temperatures, changing weather patterns and any extremes of weather all have knock-on impacts in terms of day-to-day decision-making, longer-term crop and soil management and annual feed budgeting. As a result they also impact on the efficiency, sustainability and economic management of a farm.

- Grass growth - Extremes of temperature can impact on growth and have wider impacts in terms of building fodder reserves or resulting in a more costly and less efficient farm. For instance, Teagasc last year highlighted that by the middle of summer, drought conditions had led to a collapse in grass growth, limited grazing and an interruption to silage production.

- Higher temperatures - Spells of extreme heat during summer periods can impact on grass availability, fodder budgeting, cause heat stress for animals and increase risk of fires in forestry, hills and bogland.

- Soil conditions - The health of the soil can be impacted by both particularly wet and dry conditions. It can prove a challenge in dealing with trafficability issues; compaction; poaching; reduced plant growth; soil erosion and appropriate windows for spreading slurry/FYM.

- Infrastructure damage - Large buildings on farms are susceptible to damage during storms and high winds. It causes health and safety issues in an outdoor working environment.

- Pests and diseases - Changes in climate can result in more endemic diseases if the climate is more favourable ie damp and mild. It can bring added pressures and emphasise the need for the availability and continued correct usage of products such as anthelmintics at farm level.

- Feed budgeting - Recent harsher winters have raised awareness of the need to constantly assess stocking rates and winter fodder budgeting, with farmers being advised to plan for a five-month winter.

- Forestry - High winds can lead to damage and felling of trees among forestry stands, whilst milder climates can lead to more endemic pests that can bring more disease.

- Grain - Crops can be badly damaged by high winds, which can resulted in flattening and economic losses.

- Costs - More variable weather conditions can bring added expense to farms from planning for longer winters to repairing damage caused by storms. Research and advice on farming efficiently in a changing environment is key. Other tools such as insurance options to protect against the costs may also have a role.

- **How are those working in the sector currently adapting to climate change?**
Farmers have shown themselves to be early and keen adaptors of new processes and technologies to deliver more sustainable and efficient farms. We have already witnessed immediate changes being put in place following recent weather extremes.

- The longer term impact of Storm Emma, which hit Ireland at the end of February and into the start of March 2018, saw both farmers and farm development advisors place an even stronger emphasis on winter fodder budgeting for a five-month winter. This now forms part of practical advice on farm.

- For example, a series of 19 animal nutrition clinics were held in early 2018 to help farmers as they dealt with challenging conditions on farm due to harsh conditions and a long winter. To help with feed shortages Glanbia also arranged for the import of circa 20,000 tonnes of Alfalfa from Spain & Italy, with a minimum 17% crude protein and strong ‘buffering capacity’ to balance higher concentrate feeding. A support payment of €50 per tonne on all ruminant feed and sugar beet pulp to help stretch any available fodder purchased by Glanbia Co-op members was also offered during the month of April 2018. A €30 million extended (2 years) credit scheme was put in place by Glanbia Co-op to support farmers with increased input costs. The lessons learnt from this period and the advice gathered is now built into longer-term advice planning for farms. Farmers are advised to ‘Measure, calculate, plan and start as soon as possible’.

- Another practical on-farm example of changes put in place due to weather is that following Storm Emma our Glanbia Connect online store and chain of agribusiness stores saw many milk suppliers invest in a farm generator to ensure supply in case of disruption.

- With clear trends towards more heat waves in Ireland, farmers are being urged to invest in a bulk tank monitoring system and have correct storage capacity to allow for correct milk cooling. Glanbia Ireland partnered with Finance Ireland and a range of industry leading equipment suppliers to launch an innovative new scheme to finance the purchase of critical infrastructure required on dairy farms. Finance Ireland sourced funds for the initiative from the Strategic Banking Corporation of Ireland (SBCI) The Glanbia Ireland FundEquip scheme was designed to allow dairy farmers to spread the cost of generators, feed bins, milk cooling equipment and bulk tanks over a three or five year repayment term at a competitive interest rate.

- The precision application of both fertilisers and slurry forms a key part of the advice given out by our farm advisory teams. It is based around the central tenet of the ‘right amount, right place and right time’. Farmers are already basing decisions on individual nutrient management plans, location, soil type and weather. An easy-to-follow nutrient management plan is an important tool on a farm as it results in informed decisions that are environmentally-friendly and cost-efficient.

- Improving soil fertility is key towards delivering an efficient and resilient farming system that can adapt to change. Healthy soils can absorb nutrients more effectively and cope better with issues that changing weather patterns might bring. It also allows for extended grazing into the shoulders of the year which has a key place in efficient and effective farming. The sustainable grass-based system, with cows at grass for at least 250 days a year on average, gives it a strong carbon-saving advantage and economic boost over alternative systems. For instance, to aid farmers in improving soil fertility suppliers and Glanbia Ireland customers attending the National Ploughing Championships in 2018 were able to sign up for special discounted soil testing service available for just €15 per sample. As well as analysis for the major nutrients in an accredited Irish laboratory, the all-in price included a technician coming to the farm and taking the soil sample for the farmer.

- Extreme weather events can have a severe impact on farm incomes. Glanbia has developed a range of income volatility tools - eg Fixed Milk Price Scheme and MilkFlex loans - that can assist farmers by protecting their income from rapid fluctuations during this period.
Where do you get climate related information?

- **Met Eireann/Weather forecast** - The five-day weather forecasts provided by the Irish National Meteorological Service are used for making daily decisions on farm. In addition, reports that Met Eireann collaborates and produces, such as ‘Ireland’s climate: the road ahead’ help inform debate on longer-term challenges.

- **Teagasc** - The results of innovative research from Teagasc from grassland trials, water infrastructure, precision technologies such as Low Emission Slurry Spreading (LESS) and many other areas also provide a key database of information.

- **University research** - Studies such as those carried out by the ICARUS Climate Research Centre in Maynooth provide longer-term viewpoints on changing weather patterns. Other research such as the Government-funded SmartSward project in UCD to investigate the potential of multi-species grasslands in comparison to perennial monoculture ryegrass swards also provide key viewpoints for sustainable grassland options to deliver more resilient farms.

- **Environmental Protection Agency** - It provides research reports which can provide key climate-related information that feeds into government planning and policy decisions.

What additional information do those working in the sector need to adapt to a changing climate?

Continued research into new methods, technologies and field trials to allow farms to adapt and farm more efficiently should be encouraged.

- More information on evolving technologies for the more precise delivery of slurry/fertiliser should be emphasised.

- Knowledge Transfer continues to be key as it is central to equip farmers in adapting to a changing climate and achieving improvements in all areas from efficiency to environmental sustainability.

- Many hi-tech tools and programmes are already in place on farms and can play a role in aiding facilities in adapting to a changing climate. Additions to the quality suite of tools should be encouraged. These programmes include the preparation and effective use of a Nutrient Management Plan; participation in Knowledge Transfer Groups; use of Nutrient Management Planning online; PastureBase Ireland; the Carbon Navigator Tool and the Agricultural Sustainability Support and Advisory Programme (ASSAP) which is working with farmers to improve water quality.

- There are already trials underway on stabilised urea applications in Teagasc and on farms at present which are showing encouraging results. Additional information in this area is important.
• How do you perceive and use weather and climate information to inform management decisions?

Our farm advisory team encourage the use of weather and climate-related information to inform key decisions on farm. It is a key component in the advice that is provided to farmers - including winter feed budgeting; best practice for spreading fertiliser/slurry and other management decisions.

We use our platforms such as Glanbia Connect to advise farmers on the latest technological advancements, plus any weather alerts such as during recent drought or storm events.

Early warning systems could play an important role into the future in aiding farmers to operate their businesses. Farming is by its nature an outdoor occupation and that brings health and safety risks for human and animal in extreme weather events.

• Is the source of inputs to your farm or business affected by climate change; if so what supply chains?

Nearly all inputs and outputs from our milk and grain suppliers' farms are impacted by weather, which in turn is affected by climate change.

Key inputs include electricity network; milk collection service; feed and water supply. It is vitally important that our farmers and our business has a properly functioning rural infrastructure including both electricity and roads.

For example, some farmers were required to dry off herds earlier than planned after Storm Ophelia made landfall in mid-October 2017. The farms were left for a number of days without power or road access. In this instance, the storm’s overall impact was lessened as it was late in the season. However, it would have had a far worse effect if it had in the busy springtime.

• When making investments and management decisions how far ahead do you plan?

- 0 -1 year  
- 1-5 years  
- 5 -10 years  
- 10 years +

Most of our farmer suppliers generally operate to a five-year farm business plan, which is also the time period that is generally required by finance facilities when seeking a loan.
Does the Draft Climate Change Adaptation Sectoral Plan adequately demonstrate the potential impact climate change may have on Agriculture, Forestry and Seafood in Ireland (see section 4 of Draft Plan)?

- Yes
- No
- Need more information

Yes, the section demonstrates adequately the potential impacts and consequences of climate change.

Adaptation measures must be sustainable to ensure there is the ability to integrate them into everyday practice on farms.

It is also something that should be continuously reviewed as there are also many unknowns - climate change could, for example, affect the nature and impact of plant and animal diseases that affect Irish agriculture.

The Adaptation Plan’s focus is on actions that can be undertaken over the next five years. Therefore, do you think the Adaptation Objectives are appropriate for the duration of this plan (see section 2 of Draft Plan)?

- Yes
- No
- Unsure

Yes, it sets out a clear overarching goal of building resilience. It is already being put in place on farms and through advisory services. The recent drought, flooding and harsh storm weather has already firmly-focused minds on this area. The overarching objectives of raising awareness, reducing vulnerability and ensuring a joined up approach to adaptation planning are all key. However, it should be adapted into agriculture policy in a fashion that ensures it is both sustainable and practical at farm level.

What three things could the Department do to help you be better prepared to adapt to future climate change?

1. Changes to Government policy to allow for adaptation for climate change could be made as part of a process that is both sustainable and practical at farm level.

2. Collaboration through multi-stakeholder groups could continue to be encouraged to ensure that all viewpoints are taken into account

3. Measures such as technological advances could be encouraged through future grant-funded schemes
• Any other comments?

• State support should continue to be provided to assist companies in developing schemes that protect farm incomes in the face of income volatility caused by extreme weather. For example, the Ireland Strategic Investment Fund (ISIF) supported the development and launch of the MilkFlex Fund.

• It is vitally important that investment continues in delivering a functioning rural infrastructure including both electricity and roads. These services are crucial to the running of both farms and businesses in rural Ireland.