

# Teagasc submission to the Draft Forestry Programme 2014- 2020: Ireland

## Introduction:

Teagasc welcomes the draft Forestry Programme 2014 – 2020 and believe that many of the proposed measures have the potential to contribute to the expansion of the forestry sector in Ireland and the potential to leverage the existing resource to the benefit of the forest owners, the community and the state. Teagasc looks forward to being an active participant in the successful delivery of this programme along with the Forest Service, forest owners and the timber industry.

## 5.1 Measure 1: Afforestation and Creation of Woodlands

### Planting Targets

Teagasc endorses the continued efforts to increase our forest estate especially in light of the positive contribution of forestry in mitigating GHG emissions through carbon sequestration and fossil fuel substitution. This will continue to play a very positive part in meeting our national and EU obligations and assist in the sustainable expansion of the agricultural sector. This is particularly important in meeting Food Harvest 2020 targets and the horizon point of moving towards a carbon neutral agricultural sector by 2050. However, the proposed mean planting programme of 7,670 hectares (ha) per annum set out in the draft Forestry Programme 2014-2020 differs significantly from the targets set out in the Forest Policy document “Forests Products and People” which proposes a target of 15,000 ha per annum post 2016.

While the continued commitment to afforestation is welcome, efforts to increase planting close to targets set out in the Forest Policy document “Forests Products and People” would facilitate forestry being used as an offsetting measure, close to 8 Mt CO<sub>2</sub> equivalents per annum. The potential of forestry to offset these carbon emissions would make a positive and significant contribution to facilitating the expansion of agricultural and other sectors. In addition, the demand for timber is predicted to increase and shortfalls in supply are projected. This includes the requirement for biomass and therefore increased planting is necessary to partly meet the growing demand of these markets (Phillips, 2011).

### *De minimis* Funding

The fifteen years of annual forest premium rather than the original proposal of twelve annual premiums under the new Afforestation Scheme through the addition of *De minimis* funding should increase the attractiveness of afforestation to landowners. The €200,000 threshold associated with *De minimis* funding should be clearly outlined in scheme documentation and should also be clearly highlighted and explained in future technical or financial approvals issued under the new schemes.

### Establishment Grant

Teagasc welcomes the principle that the rules in relation to the current schemes will generally apply for the new programme. This will be very helpful in ensuring a smooth transition from the current programme to the new programme especially for those who have already planted under the existing scheme rules. Clarity on the area to make up the 8ha is required to ensure that a significant number

of applicants can avail of the higher payment under these schemes. While the Teagasc National Farm Survey (Teagasc NFS) in 2010 found that an average ownership of over 11 ha per forest owner (Hennessy *et al.*, 2011), farm forestry studies carried out in Clare and Cork in 2006 and 2009 respectively recorded average forest areas of 8 ha and 9 ha (Purser *et al.*, 2006 and 2009). The use of an aggregated 8 ha would facilitate more farmers under the new programme. We would like to make the observation that the grant level for unenclosed land seems very low in comparison with enclosed land as the costs for ground preparation and plants are similar for both types of land.

The removal of grant aid for deer fencing of conifer species may act as a disincentive to diversification of the forest estate. Species like Douglas fir, western red cedar and other deer-vulnerable species may no longer be considered as they are ineligible for deer fencing unless planted with a 70% mix of broadleaves. This is particularly true in areas with high deer populations. Many of these species offer the opportunities to diversify silvicultural practices to address issues such as the maintenance of water quality through the use of low impact silvicultural systems.

### **Annual Premiums**

Removing the differential between the farmer and non-farmer rate of premium presents a new opportunity for land owners who are not farmers or are retired farmer to plant their land and avail of higher premium than before. While this is likely to increase non-farmer owned land available for afforestation, there is a risk that it may have an adverse effect - outside forestry interests may compete with local landowners in certain parts of the country thereby pushing up land prices resulting in local landowners being out-bid for neighbouring properties and unable to expand their holdings. This effect caused significant disquiet in the late eighties and early nineties when private afforestation took off.

Teagasc has concerns that the new incentive to plant over 8ha will be perceived as a disadvantage to owners of small farms. Farms are generally smaller in the west and so pressure for farm land is high. Experience from the FEPS scheme showed that there was little planting under that scheme in the west and this may have been partially due to the area requirement.

Teagasc recognises the achievement of securing 15 years premium instead of the 12 years suggested initially and also the upward adjustment of 3-10% in the annual premium. However, landowners, in particular farmers, who are considering planting may perceive there to be an overall reduction in the incentive to plant their land. For example in the case of less than 8 ha oak plantation (GPC 6), the total premium paid in previous afforestation scheme over 20 year was €10,300 per ha. The same forest under the proposed programme would be €8,100 per ha paid over 15 years without discounting. The effect of this reduction on farmer afforestation uptake is not clear, but it will result in lower incomes than previously available. The choice of forestry for many farmers is predicated on maintaining a satisfactory level of income and cash flow and this may dictate uptake in the schemes.

### **Land Availability**

Studies have found that agricultural subsidies play an important part in the afforestation decision (Collier *et al.*, 2002). A soon to be published study by Ryan *et al.* (2014) entitled "The role of subsidy payments in the uptake of forestry by the typical cattle farmer in Ireland from 1984 to 2012" highlights some of the factors that farmers may consider before taking up the afforestation option. It

is evident that for much of the period reviewed, cattle subsidies were higher than forestry subsidies, particularly in More Severely Handicapped (MSH) areas and for more intensive farms. This finding is consistent with a recent analysis of the characteristics of Teagasc NFS farms with and without forestry, which concludes that farms with higher stocking densities are less likely to consider converting land to forestry (Howley *et al.*, 2012).

In general, over the entire period 1984- 2012, the subsidies available to farmers considering forestry for undertaking afforestation have been less attractive financially than for remaining in cattle farming, in particular for intensive farms with higher animal stocking rates and for more extensive farms participating in REPS. In addition there is currently a growing demand from the dairy sector for grass land due to the recent and projected further up scaling of many dairy farms.

Afforestation can permanently take potential agricultural land out of reach or at the very least reduce the land value due to its long-term implications. The desire to continue farming is not a uniquely Irish phenomenon. Gorton *et al.* (2008) examined farmer attitudes in EU countries and concluded that even post-decoupling of payments from production, farmers retain their productivist objectives and prefer to utilise their land by farming it. A slower than expected uptake of afforestation by farmers in Ireland may not be surprising in this context. The potentially reduced afforestation uptake by farmers must be weighed against an expected increase in applications by a number of landowners who were previously excluded from the higher rate of premium and will now wish to revisit their land use choices.

Teagasc surveys have shown that the permanent nature of forestry under legislation has been a disincentive to farmers deciding to plant. This is likely to be even a greater disincentive to the uptake of the agroforestry and forestry for fibre measures. The permanent nature of forestry was identified as a primary barrier to planting in Teagasc surveys of farmers conducted in Cork in 2009 and in Roscommon in 2010. Of the 102 participants in the Cork survey, 32% of respondents felt that the most influential variable in making the decision to plant was that “forestry is better use of marginal land”. The second most important factor influencing the decision to plant was the level of grant/premium payment available (23% of respondents). In Roscommon, the most common reasons for not considered forestry as a land use option in the survey were that the land was too good for forestry, not interested in forestry, don’t have enough land” and “I prefer farming to forestry” (Ryan, Kinsella & Upton, 2013).

In a survey of farmers conducted by Teagasc in 2012 (unpublished), questions were asked about the reasons for farmers not planting. The results indicated that factors related to land quality and agriculture were generally the most important, other factors such as the profitability of forestry and the levels of premium payments available were recognised as important when considering the forestry option. In the context of traditional farming enterprises, and the opportunities that exist on the removal of quotas and the predicted expansion of dairying under the Food Harvest 2020 vision for the agri-bioeconomy, there may be a perception that agroforestry could potentially be competing with more established land uses for similar good quality land.

#### **5.1.4 Native Woodland Establishment Scheme (NWS Est.)**

Teagasc supports the inclusion of the Native Woodland Establishment Scheme in the draft Forestry Programme. This scheme will present opportunities for landowners in environmentally sensitive areas while enhancing biodiversity within the forest estate and expanding native woodlands nationally. A forestry land use option is often an attractive one to land owners within environmentally sensitive areas. The NWS Est. Scheme, with cooperation between landowners, the Forest Service and relevant environmental agencies, has the potential to create an extremely valuable woodland resource. We would contend that the continuous involvement of the landowner in the planning and creation of these woodlands is vital for their long term success.

#### **5.1.5 & 5.1.6 Agroforestry (GPC 9) & Forestry for Fibre (GPC 10)**

The proposals to introduce two new pilot GPCs for agroforestry and forestry for fibre are very welcome. These measures may contribute to increased sustainability, may prevent/mitigate runoff, sequester carbon, supply fibre, increase broadleaf & biodiversity and provide for habitats, etc. However, the proposed permanent nature under the provisions of the current forestry legislation is likely to limit uptake due to the smaller number of premium payments compared to conventional forestry.

A wider range of alternative agroforestry systems should also be considered and investigated. The proposed 400 – 1000 stems ha<sup>-1</sup> under GPC 9 precludes alley systems where, for example, tree rows can be spaced 20 m apart or greater and trees 1.25 m within the rows. More research will be required so that advisory agencies have good information to advise both the industry and potential growers. Training will be required of advisors, contractors, consultants etc., with particular emphasis on the provision of adequate stock proofing of trees. The recognised need for further agroforestry pilot sites to be established is very welcome.

It is suggested that the internationally terminology is **Agroforestry**, not agro-forestry (for example, the World Agroforestry Center; Association for Temperate Agroforestry, Agroforestry Systems international journal).

In relation to the Forestry for Fibre scheme a broader range of species and clones should be investigated to ensure that the most productive and resistant species choices are made based on the most recent information.

## **5.2 Measure 2: Investments improving the Resilience and Environmental value of Forestry: - NeighbourWood Scheme**

Teagasc is supportive of the NeighbourWood Scheme being part of the Forestry Programme 2014-2020 and that the definition of the 'local community' will remain sufficiently flexible to include a group of individuals coming together as part of a local initiative. The on-going costs associated with maintaining the forest were an issue for participants in previous NeighbourWood Schemes and is likely to be so again in this scheme.

### **5.3 Measure 3: Investments in Infrastructure: Forest Road Scheme**

Teagasc views the retention of the existing support measure for forest roads as being very positive. In order to reach existing timber supply forecasts, investment in forest roads together with optimisation of the potential timber supply chain is essential. The importance of the access to public roads and of internal forest roads was underlined by a recent report into supply of energy wood (Farrelly, Fitzgerald & Phillips, 2013). Teagasc feels that the provision for public access on grant-aided roads should be highlighted to forest owners as part of the scheme details.

### **5.4 Measure 4: Prevention and Restoration of Damage to Forests: - Reconstitution**

In the main we would support the proposals for the prevention and restoration of damage to forests - Reconstitution Scheme as set out in the draft Forestry Programme 2014- 2020. The primary objectives of the scheme is *to support the restoration of forest potential arising from damage by natural events and the introduction of protective infrastructure in forests and the development and promotion of forestry through the incorporation of practices that restore, preserve and enhance biodiversity*. The interpretation of some of the proposals to fulfil these objectives should be clarified. The following highlight where some confusion may arise.

It would appear that under the scheme details forests that are damaged or that can be potentially damaged by disease out breaks will have priority over forests damaged by other natural causes. The support for forests damaged by natural causes, catastrophic events and/or climate change related events other than disease will not be guaranteed but will be discretionary. In the restoration of forests damaged by other natural causes, catastrophic events and/or climate change related events, we would consider it important that wind damage be included.

Under the Eligibility, Grants and Premiums section it is assumed that the grant premium categories will be paid on a per hectare bases. There may be significant implications if there is no upper ceiling on the amount of grant that can be paid on an individual holding.

### **5.5 Measure 5: Investments improving the Resilience and Environmental value of Forestry: - Woodland Improvement (Thinning and Tending-Broadleaves)**

It is very positive development that the Thinning and Tending of Broadleaves Scheme will be part of the Forestry Programme 2014-2020. The continuing development of broadleaf silvicultural techniques and skills through the Woodland Improvement Scheme are essential if quality potential crop trees and attendant biodiversity benefits are to be delivered. Without the scheme supports, the

potential of many broadleaf plantations will not be reached due to the high financial burden to forest owners and may result in the decision not to thin or actively manage their crop.

Clarification is required as to whether the maximum of €20,000 per applicant in total allows for the applicant to apply for payment for more than one separate activity e.g. cleaning up work at one stage of the crop development and again for tending and thinning.

As a change from the previous scheme, it is very welcome that the proposed scheme will also fund:

- The installation of silt traps and appropriate blocking of existing forest drains.
- The retro-fitting of setbacks and other open areas within existing forests, for environmental reasons. This includes the creation of aquatic buffer zones and archaeological exclusion zones, and setbacks introduced along prominent forest edges, to soften landscape impact.
- Enrichment planting of broadleaves to enhance the delivery of ecosystem services.
- The application of silvicultural treatments (e.g. heavy thinning, ring-barking) to encourage greater ground vegetation cover along aquatic zones well in advance of final clearfell.

## **5.6 Measure 6: Investments improving the Resilience and environmental value of Forests: - Native Woodland Conservation Scheme**

Teagasc supports the fact that the establishment and conservation elements of the Native Woodland Scheme will be part of the Forestry Programme 2014-2020. The Native Woodland Establishment Scheme provides a flexible approach to afforestation to facilitate appropriate woodland creation in areas with environmental restrictions (with due regard to these environmental restrictions and other factors e.g. the release of carbon on peat sites) and to facilitate a broader range of objectives including tourism and recreation. However the number of hectares that is proposed to be funded under the Conservation element of this scheme is likely to have only very limited local impact.

A support system to provide advice and to equip forest owners to have the necessary information and skills and infrastructural support is critical in order to optimise the potential woodland resource for both the land owner and the wider community.

## **5.7 Measure 7: Knowledge Transfer and Information Systems**

Teagasc recognises that forestry is a new enterprise for most private forest owners, therefore knowledge of forestry and forest management is sometimes low. The expansion and use of the

forest resource and overcoming inertia are challenges resulting from a lack of knowledge and a limited owner-based forest culture.

Knowledge transfer through extension services and discussion groups, coupled with infrastructural support, are prerequisites for the optimisation of the private timber resource by means of providing knowledge and skills necessary to improve the productivity and profitability of forest enterprises, encouraging the adoption of best practice and providing assistance to forest owners to meet set standards re the environment and addressing plant health and cross compliance issues.

In a survey of forest owners, (Maguire K, Ní Dhubháin, A and Farrelly N., 2010) significant factors identified in the decision to harvest and thin forests include:

- if owners have timber production as an objective ((they are 2.7 times more likely to thin)
- if there is a written management plan for the forest
- if owners have attended extension activities ( 2.5 times more likely to thin)

### **5.7.2 Knowledge Transfer Groups (KTG)**

Teagasc strongly supports the proposed KTG Programme which aims, through the formation of forest owners into KTGs, to maximise the potential and skill transfer for forest owners, thereby stimulating proactive management and appropriate tending, thinning and harvesting interventions. Research has found that farmers participating in groups have a higher uptake of new technologies, achieve higher physical performance in the farm enterprise, and generate higher profits (Bogue, 2013).

Teagasc feels that this is a very important and time-critical initiative to ensure that the existing private forest resource is fully managed and that the timber harvest is optimised. However the proposed programme needs be well targeted and focussed at forest holders with forests approaching production stage. Feedback from other enterprise discussion groups has been very positive and they have been found to facilitate the adoption of technology and improve farm profitability.

Teagasc feels it is also important that established forest owner groups be allowed to host their own KTGs. While the programme requires each group to be managed by an accredited facilitator approved by DAFM, this service can be provided either by Teagasc or private forestry professionals. It is suggested that the wording in the proposed programme be clarified to read “either Teagasc or private *forestry* professionals.”

### **5.7.3 Continuous Professional Development (CPD) scheme**

Teagasc is strongly in favour of the Continuous Professional Development scheme to develop a CPD structure for all registered foresters through mandatory membership of a professional forestry association which has a CPD programme. The regulation of the forestry profession and on-going promotion of professional standards in forestry is essential both for the development of a competent and forward looking forestry sector and to meet public expectations.

Teagasc supports the proposal to include confirmation of participation in a recognised CDP programme as part of requirement for registered foresters. However it is also important to communicate the significance of a CPD programme to the public and we encourage an effective presentation of this information as part of the register.

#### **5.7.4 Targeted Training Scheme**

Teagasc welcomes this scheme particularly in relation to the targeted training of forest owners who will be not engaging with KTGs and Forest Owner groups. In relation to harvesting machine operatives, there is a concern in the forest industry about the absence of training for harvesting machine operators. The lack of trained and certified operators is already having negative effects on the industry, as highlighted in FTEI's Harvesting Training Needs Analysis report (FTEI, 2011). Any targeted funding should be on the basis of a partnership approach between the relevant industry stakeholders.

#### **5.7.5 Advisory Services Scheme**

Teagasc acknowledges the commitment to ensure the availability of appropriate advisory support to forest holders to enable the maximum financial return to be generated from the forest resource in a sustainable manner consistent with legislation and guidelines.

We endorse the requirement for advisers to have the appropriate qualifications, skills *and experience* to undertake this role as an essential component of this service. Teagasc sees a particular role for itself in the provision of objective and independent advice based on the interests of the landowner, taking their whole farm situation into account.

#### **5.7.6 Combining Measures**

Teagasc supports the development of networking between different strands of scheme beneficiaries to ensure knowledge is transferred to a wider audience where possible.

#### **5.7.7 Environmental issues**

It is a positive development that there is the opportunity for some KTGs to have a primarily environmental focus. However the provision of advice and information on environmental issues, for example Water Framework Directive, Habitats Directive, Birds Directive, Sustainable Use Directive, etc. will remain a priority for all advisory services and KTGs.

### **5.8 Measure 8: Setting up of Producer Groups**

Teagasc supports the commitment to provide financial support towards establishing producer groups. Teagasc believes that the groups are a valuable mechanism for neighbouring forest owners to develop their knowledge, share experiences in preparation for the timber production stage and provide a range of environmental services.

The document refers to 26 existing producer groups and the 13 new groups being the target for support over the programme. We would comment that the number of *new members* of producer

groups may be a more appropriate metric than the number of *groups formed*. At present there are less than 26 producer groups because some existing groups have amalgamated and others are more accurately described as discussion groups with the potential to develop into a producer group should they so decide.

We believe that the inclusion of groups currently operating at a more basic discussion group level for financial support to develop their scale and in time to bring timber to market should be considered. In addition similar consideration should also be given to KTGs formed as part of this programme that wish to continue their activities as a forestry producer group.

## **5.9 Measure 9: Innovative Forest Technology**

Teagasc notes with approval the provision of grant aid for innovative forest technology. There is potential under this measure to support the introduction of new technologies for use in private forests which may contribute to increased efficiency, reduce costs or contribute to reducing the environmental impact of forestry operations. In particular, Teagasc welcomes the focus on smaller scale technologies which may be more appropriate to the forest profile owned by private landowners.

## **5.10 Measure 10: Forest Environment and Climate Services:- Forest Genetic Reproductive Material**

Supports aimed at improving the quality of new planting stock, the conservation of existing forest genetic resources and the production of designated broadleaf species are positive new measures. Improved material e.g. birch and alder will play a vital role and also has the potential to be used in the Native Woodland Establishment (NWS Est.) scheme to extend the native woodland cover and associated biodiversity in Natura 2000 areas, in acid sensitive sites and riparian areas.

The scheme will help to increase self-sufficiency in the production of improved seed that can be used for afforestation. There is still a high reliance on imported sources of seed especially in relation to oak and Sitka spruce. There are almost 1,400 ha of sessile oak seed stands registered but 100% of all seed and plants are imported in some years due to various climatic and cultural factors that lead to the infrequency of mast years. There are over 600 ha of Sitka spruce seed stands registered and yet 95% of the seed or plants are imported. Similarly Douglas fir, Hybrid and European larch are all imported.

The scheme will provide funding to establishing new seed stands or to provide a contribution towards the management of existing seed stands. In the case of oak for instance the locating and registering of new stands and provision towards the management of existing stands where predation or vegetation makes seed collection difficult, will help in overcoming some of these difficulties. While the majority of Sitka spruce is imported priority funding will be given to the establishment of new seed orchards for improved Washington (Sitka spruce).

Protected structures are used to grow genetically improved birch for seed production. While the number and size of indoor seed orchards will be limited their establishment and running costs are relatively high, it is very important that there is a funding mechanism to support this type of seed production. On-going research will further improve these seed orchards.

### **5.11 Measure 11: Forest Management Plans**

The proposed forest management plan measure will contribute to the generation of robust local forecasts, whether this is for a local producer group or for a potential end user(s). The linking of the forest management plan to the felling licence application process will also increase the plan's compatibility with future certification requirements and will provide more accurate information with regard to the private timber currently being harvested and into the future. Teagasc believes that provision should be made for a forest owner rather than a registered forester to draw up a "light" Forest Management Plan for areas <5ha. The development of a forestry culture amongst forest owners would be encouraged through this provision and could be linked to the proposed Knowledge Transfer Groups (KTGs) as a deliverable output.

It is recommended that the threshold area (ha) for the FMP requirement be set at 5 ha for conifers and 2 ha for broadleaves. A 10 ha threshold would capture only 58% of the total forest area, while a 5 ha threshold would capture 86% of the forest area. In addition, broadleaf areas are generally smaller again.

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