Forestry Programme 2014 – 2020

Mid Term Review

Submission by:

Teagasc Forestry Development Department

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Introduction

Teagasc would like to reaffirm its ongoing support for the Forestry Programme 2014 – 2020. The focus of the Teagasc forestry advisory service is to proactively promote the aims and objectives of this programme in collaboration with the Forest Service.

Teagasc supports the progress and achievement of many of the aims and objectives of the programme and continues to interact with the Forest Service in the process. Our dedicated forestry advisory programme of activities is provided in an integrated manner with our Teagasc agricultural advisory services and is informed by our ongoing forestry and broader research programmes.

As a contribution to enhancing the progress of the afforestation programme we are in the process of finalising plans for a 4–year campaign (2017 – 2020) to promote the further uptake of sustainable afforestation. This campaign will be in collaboration with the Forest Service, industry and other stakeholders.

MEASURE 1: Afforestation and Creation of Woodland

- What changes can be introduced to the afforestation scheme to increase the % level of broadleaves being planted and in particular native woodland creation. How can the scheme be altered to increase the level of species diversity? How can decision makers who want to plant on good land be encouraged to plant broadleaves and not GPC 3?

Broadleaves & Diverse Conifers

The decline in the percentage of broadleaves has been unavoidable to some extent with the demise of ash as an approved species. It is anticipated that improved supply of broadleaf planting stock (including improved sycamore, birch and alder from the Teagasc tree improvement programmes) and the development of additional seed stands and orchards will contribute to addressing supply and quality issues. Due to the considerable investment of capital, land and time involved in afforestation with broadleaves and diverse conifers, it is paramount that the best source of genetic material available is used.

The choice of tree species is a complex issue. On the one hand the use of broadleaves necessitates the planting of better quality land in general which inadvertently puts it in competition with agricultural use, thereby limiting planting uptake rates. On the other hand, the planting of more marginal land may result in less competition but such land types present problems for the successful establishment of many hardwoods and diverse conifers.

The decision to plant involves a significant and permanent economic land use change and landowners need to know that they are adequately compensated and rewarded if they are to plant Grant and Premium Categories (GPC s) that are not economically optimal and that they are recognised (rewarded?) for the provision of the additional services including ecosystem services. Current advertisements clearly give the message to forest owners that if their forest asset is to be saleable in the future, the species configuration should predominantly consist of Sitka spruce. This brings to the fore the economic difference between establishing GPC 3 on 30-35 year rotations.
compared to other GPCs which generally have rotations in excess of 60 years. Clearly, there needs to be significant emphasis placed on developing the market for quality timber for non-structural uses and support for the provision of ecosystem services.

If more diversity is required in relation to conifer species there may be merit in providing a similar level of premium for ‘diverse’ conifers as for hardwoods. These have rotations in excess of 60 years, produce higher quality timber and require considerably more management intervention. This financial incentive may encourage their establishment on suitable land types.

If the percentage broadleaf is to be increased there may be a case for the Forest Service to consider alternative approaches to broadleaf planting more akin to some of the agri-environmental measures including riparian buffers, field corners, hedgerows, extended shelterbelts and on field boundaries,. These may provide additional benefits, including enhanced biodiversity, water quality and provide connectivity via wildlife corridors, while contributing to broadleaf planting targets. Such measures could fit comfortably into agroforestry measures, if planned with farming practices in mind. This could also help bridge the gap between agriculture and forestry and take the form of multifunctional forestry similar to the Planned Recreational Forestry option that was briefly available in the 1990s.

Facilitating the use of alternative species mixtures and configurations such as oak and birch nursing mixture in 3-line bands could also open additional possibilities in relation to broadleaf establishment. In addition, facilitating the establishment of mixtures that include more than two species should be considered. The design of such mixtures should be robust and should tolerate a degree of delayed management at time of thinning.

Measures to increase the percentage of broadleaves could include:
- The requirement that a proportion of suitable GPC1 land to be planted with native broadleaves eg improved Birch and other appropriate native species,
- An allowance of limited planting of native broadleaves within the 10m riparian buffer zones and treating these trees as plots e.g. scalloped design,
- The provision of scrap mounding along riparian margins. If well planned these may be beneficial to watercourse ecology.

Potential financial incentives could include a bonus premium being paid for all forest applications that contained:
- 100% Broadleaf mix
- 100% Diverse species
- Broadleaf & Diverse plots over a certain area threshold e.g. 5 ha

Native Woodland Scheme (NWS) Establishment
In relation to increasing NWS establishment, a specific targeted campaign promoting native woodland creation should be launched. This could be informed by GIS analysis to help determine the most appropriate areas. It should promote the use of ‘qualified’ birch as a viable additional broadleaf species to be considered on suitable soils. The specific focus during promotional campaigns should be on the wider non-timber benefits of native broadleaves as well as financial benefits.

The 20% rule (if still in place) could be relaxed for potential NWS areas. On many poorer sites Yield Class 14 is not achievable but if the focus in NWS plantations in primarily on non-timber benefits the
focus on Yield Class may not be such an issue. A commitment to continuous cover forestry on these plots by the landowners might be of more benefit in encouraging high ecological value woodlands.

**What measures can be taken to help achieve increasing targets for new planting in the remaining years of the programme?**

An increase in the overall funding allocation for NWS and an easing of eligibility requirements for NWS Establishment including:
- a simpler application process for smaller scale plots,
- supporting applications on non-designated riparian sites
- focusing on potential farm nutrient runoff amelioration and minor flooding mitigation.

Teagasc supports an appropriate annual target for the restoration and expansion of native woodlands focusing on alluvial and sessile oak woodlands. The targeting of co-operative initiatives between neighbouring landowners/woodland owners could be deployed to extend planting adjacent to vulnerable stretches of river to protect and enhance water quality. This would provide complementary benefits in terms of habitat connectivity as well as efficiencies via economies of scale achieved.

**Forestry Promotion**

A strong and sustained promotion and awareness campaign is necessary to help ensure that planting targets are achieved. In addition to our current multi-faceted approach to encouraging sustainable afforestation, Teagasc is currently working together with the Forest Service and other stakeholders to develop a strong Forestry Promotion campaign 2017 – 2020. If this is to be successful it will need cross-industry support from farming and forestry organisations and industry representatives.

**Forestry Premium**

There was some concern at the outset of the current programme that reducing premium payments to 15 years may have a negative impact. However experience to date suggests that this is not a significant disincentive to farmers’ exploring a forestry option.

When comparing the percentage of farmers to non-farmers now planting, consideration should be given to how the definition of ‘farmer’ and the requirements to qualify as a farmer have changed over time and to how the incentive to achieve this status is no longer in place. Forest owners, who heretofore would have qualified themselves as ‘farmers’, may now be content to categorise themselves as ‘non-farmers’. To assess the impact of removing the ‘farmer’ status it may be worth further investigating the forest owner profiles before and after the implementation of this change.

When assessing investor involvement in afforestation it may be worth considering that following the financial crisis of the past decade landowners, including farmers, are now more cautious and astute in relation to decision making. Some have established family trusts and limited companies with some land assets transferred for financial, taxation and security purposes. Therefore the use of the words ‘trust’ and ‘limited’ and ‘fund’ in applications may not, in all situations mean, institutional investors.
**Land for Afforestation** The impact of limiting the planting of unenclosed land has put the burden of the afforestation effort on better land. This land is increasingly been sought for agriculture, investment, and other land use options and it is likely that this quality of land will become increasingly scarce. It is prudent to consider all land that can contribute to the overall achievement of the programme in a sustainable manner and use promotion efforts and new models of afforestation to encourage efficient use of land resources.

The work by Farrelly and Gallagher (2015) on land availability for afforestation could be further developed and used as a tool for assessing land resources and the evaluation of land use for afforestation. Further work on improving the scale of mapping, the use of productivity models for local scale use and the likely production of other tree species would be beneficial in informing future afforestation policies and their targeted promotion. This work would be useful for more specific targeting of land types for specific afforestation goals. The amount of afforestation in GPC 1 is low and there may be potential with the new classification system to reassess appropriate sites. GIS analysis (including environmental), in conjunction with relevant Forest Service data on forest owner profiles, may help to identify appropriate regions/owners for suitable promotional initiatives:

- Owners of less intensive farming systems with marginal agricultural land, involved in livestock rearing have previously been shown to be a cohort more likely to plant.
- Relatively young farmers with larger farms may be ideal candidates to inform as they are likely to have a range of land types on their farms and are more likely to optimise their usage of land.
- Those not participating in GLAS may have more opportunity in the short term.

The application of a range of promotional approaches (as outlined in the Teagasc Afforestation Campaign proposal) to such farmers could include more extensive use of Champion Forest Owners as appropriate role models and providing information via a Better Farm Forests programme. This should include promoting the financial aspects of forestry using a holistic whole farm approach.

- **How can the average size of new planting be increase closer to the target level of 7.2 hectares?**

A simple approach may be to provide a financial incentive to plant over a certain area. Previous experience may provide insight into the success or otherwise of such an initiative (Forest Environmental Protection Scheme). This could also be structured as a premium or grant linked to increased output potential.

In addition Teagasc advisers currently highlight the financial benefits accruing from economies of scale. This benefit could be further highlighted e.g. by case studies but care would need to be taken as this could have the impact of discouraging those with smaller forests from establishing as they would interpret their own proposals as being sub-optimal.

- **What changes are needed to the Forestry for Fibre GPC? What findings from recent research can be applied to this scheme to improve its outcome?**

The introduction of the Forestry for Fibre GPC is to be welcomed as a very positive measure by the Forest Service in their attempt to address the issue of projected shortfall in the supply of fibre and timber. Concerns were raised at the launch of the scheme regarding the permanency associated
with afforestation in both the Agroforestry and Forestry for Fibre GPCs. It was considered that this condition would make these categories unattractive to potential applicants due to the higher element of risk involved and the lower overall incentives:

‘While the proposals to introduce two new pilot GPCs for agro-forestry and forestry for fibre are very welcome as measures to prevent/mitigate runoff, sequester carbon, fibre supply, provide habitats etc., the proposed permanent nature under the provisions of forestry legislation is likely to cause some concern and act as a disincentive to uptake.’ (Teagasc submission to the Forestry Programme 2014 - 2020).

As currently structured, issues such as the replanting obligation, the limited number and rate of premiums, the lack of crop familiarity (farmer and professional foresters) and the retention of relatively productive land to produce fibre have all acted as disincentives. Increasing the number of years of premium payments would be an improvement but may not be enough to overcome the other barriers outlined.

In the context of their experience with other fibre schemes (Willow and Miscanthus), landowners are cautious when considering the merits and risks of any energy/fibre schemes. Some farmers with Miscanthus crops have been vocal in airing their disappointment with yields and markets and have publicised the significant costs they incurred in reverting to conventional agriculture. Removing the permanence associated with the current GPC may result in enhanced uptake by a cohort of innovative farmers and landowners.

Research is ongoing on suitable species eg Pauwlowia, spacings and management practices for Irish conditions and science-based outputs from this should in time inform the scheme. Consideration should also be given to having demonstration plots established in target areas.

- **What alternative agro-forestry systems other than silvopasture should be included in the agro forestry GPC?**

Although Teagasc forestry advisers have had enquiries regarding the Agroforestry GPC, once details of scheme are explained the vast majority of landowners have decided not to progress their applications. This decision is on the basis of the payments involved, the permanence of the afforestation decision and the lack of experience/knowledge (practical and financial returns) of agroforestry under Irish conditions.

In relation to the specifications it may be important not to over complicate (or specify) the schemes with too many options, but allow for flexibility within the Agroforestry GPC and the design of the plantation itself.

**Research and Demonstration**

Additional research is necessary to develop agroforestry systems best suited to the Irish situation (soils, climate, agriculture and forestry). Teagasc has the capacity to carry out and support such research with our competencies in applied agriculture, forestry and agroforestry.

Farmers and forestry contracting/consulting companies are relatively unfamiliar with agroforestry. This can be addressed by developing a range of demonstration and pilot sites throughout the
country. These sites would need to be supported with robust information on technical details, environmental impacts and financial returns including a whole farm economic analysis.

Other systems are worth assessing under Irish conditions:

a. Silvopastoral systems with wider spacings and configurations suited to modern farm machinery and grassland management practice.
b. Free-range poultry or pigs under trees.
c. Designs of silvoarable/alley cropping systems e.g. planting 2/3 lines with wider alleys for tillage/mowing.
d. Linking with organic production system.
e. Linear woodlands along field boundaries may provide significant potential for agroforestry. This would help achieve broadleaf planting targets and allow e.g. intensive dairy farmers to plant trees in combination with agriculture to address carbon balances at farm level. A simplified scheme with smaller overheads undertaken by farmers themselves may be appropriate and would also increase their familiarisation with planting trees possibly encouraging further afforestation.

Should the Renewable Heat Incentive, expected to be introduced in 2017, stimulate interest in energy crop planting, a combination of tillage and fast growing broadleaves for fuel-wood may become attractive. This might provide the opportunity for a hybrid GPC between the Agroforestry and Forestry for Fibre categories.

**MEASURE 2: NeighbourWoods**

- **How can the NeighbourWoods (NBW) scheme be improved upon to make it easier for interested parties to submit applications?**

Active promotion and provision of information (literature and attendance at public events) targeting community groups and local actors that clearly explain the requirements and stages involved, is likely to be very beneficial. These include document checks, criteria, site requirements, development stages and sources/availability of help. In addition, adjusting the annual timelines/closing dates to provide more flexibility in the application process would be helpful and would allow an extended period for consultation (beyond 14 days) prior to acceptance of the Letter of Approval. This would facilitate feedback from stakeholders who are currently involved in NBW development projects allowing them to glean further insights before progressing.

- **How can local communities be mobilised to develop forests in their area?**

Teagasc advisers currently promote this scheme where they are in contact with local development organisations as a follow up to local queries, but it generally tends to be on a more ad hoc and reactive basis. There may be merit in proactively driving this initiative and it may be an option for the Forest Service or their agents to develop/improve linkages with Local Authorities at County Manager level to promote NBWs in the context of sustainable rural town/village social and environmental development. The inclusion of NBWs in County Development Plans should be encouraged. In addition, NBWs should be promoted to the LCMA (Local County Managers Association) including facilitating site visits to and promotion around successful NBW examples.
Training could also be provided for local Heritage and Environment Officers so that they can promote the scheme and to broaden knowledge of the scheme.

A specific campaign to promote the benefits of NeighbourWoods would be useful. This could build on the success of the RDS Awards in this category. It could cultivate the idea of ‘active/working NeighbourWoods’ for example with demonstrations of traditional skills and crafts. More involvement with schools in terms of incorporating into a wide range of school subjects would help to enhance the educational benefits of NeighbourWoods. The linkages with existing forest owner groups should be nurtured to promote and develop potential local projects as many of those involved are also strong community actors. Teagasc can also provide support in this endeavour.

Case studies and examples of how other groups developed NeighbourWoods and overcame issues including insurance/risk etc. would be very useful. As the number of NeighbourWoods funded under the current scheme increases opportunities to use such resources will also increase. In general those involved are very happy to share their experiences and showcase their own developments with other groups. There may be a need for support to bring these groups together and facilitate shared understanding of issues.

- **Can the scheme be improved to increase the level of native woodland afforestation?**

It is possible that a more integrated approach, combining with native woodland objectives, would increase the overall attractiveness of the NBW scheme and therefore uptake levels. A streamlining of procedures in the approval process for projects being developed involving the planting and/or restorative management of native woodlands as well as developing facilities for appropriate access, amenity and interpretation, would also be beneficial. The challenge would be to have a sufficiently flexible process to address the various aims and objectives of interested stakeholders.

**MEASURE 3: Forest Roads**

- **What measures can be taken to help improve the amount of forest roads being built?**

While the requirement for planning may be a contributory factor to the decline in forest roads being built, the cost of construction is still a significant issue particularly on difficult sites. Owners are reporting that it is becoming increasingly difficult to get a forester to take on their roading applications and that they are not encouraged to take up this measure. In this context it would be worth re-examining factors such as the specifications and/or the level of grant.

Improving the attractiveness of the measure by improving the financial support or amending the technical specifications to make them more financially viable will help improve the uptake of this measure. In addition providing greater flexibility in terms of grant eligibility based on crop age where a cluster of forests (adjoining or in close proximity) of different ages including sites over 5 years from harvesting would benefit from economies of scale by building road/s now. The current planning issues will need to be addressed and simplified.
• Are there any changes to the roads scheme that could be introduced that could help make better use of existing infrastructure in neighbouring forests?

The development of an online forest road tool that allows prospective road grant applicants to view the location of existing and planned forest roads (both Coillte and private) in their vicinity would be beneficial and would allow for further exploration of the potential for co-operative roading. The incorporation of appropriate GIS spatial layers in the tool would also facilitate efficient planning.

• Are there any modifications required to address any environmental issues associated with forest roads or thinning in general?

Protection of water quality is the major environmental challenge during road construction and harvesting. The current grant support for “Special construction” of culverts and bridges is welcome but is inadequate in certain situations. This may result in a forest owner abandoning the thinning and even the clearfell of the all or part of the crop because of the cost of providing access for harvesting and/or road construction. This has a cumulative negative impact on timber mobilisation and downstream timber processing. Consideration for additional funding on a site by site basis is a pragmatic approach with long term vision that should be considered by DAFM to facilitate timber mobilisation and longer term forest management in to the 2nd rotation.

**MEASURE 4: Reconstitution**

Teagasc has made a detailed submission to DAFM on the review of the Reconstitution Scheme (Chalara).

Teagasc would like to use this opportunity to suggest that consideration should be given to extending the Reconstitution scheme to reconstitute plantations affected by deer damage. This would help address the issue in forests that have failed to pass the 4-year inspection where the 10% broadleaf component is no longer present because of persistant deer damage.

**MEASURE 5: WIS**

• How can the scheme be improved to help reach the targets set?

It would be beneficial to allow applications for smaller areas (under 2ha), where only thinning is been considered, to be applied for by owners themselves, without the requirement for the involvement of a registered forester. The current additional overhead of having a registered forester involved makes the economics of managing such sites unattractive at present.

• Are there further opportunities under this scheme to support those forest owners that wish to transition to continuous cover forestry?

It would be beneficial to introduce flexibility in to the scheme to facilitate the planting of additional species in the understorey (e.g. beech, hornbeam) or in small coupes to provide side shade and help
control epicormics and ground vegetation as a potential precursor to transformation to a CCF silvicultural management system.

**MEASURE 6: Native Woodland Conservation**

- *What improvements can be made to the scheme to increase participation levels and make a greater contribution to the environment?*

Teagasc forestry advisers have many queries from forest owners who have small-scale native woodlands that they would be interested in conserving. However, the scheme requirements are very onerous for such small-scale applicants and the provision of a simpler scheme with lower overheads (e.g., cost of forester and ecologist) for such situations could be considered.

The general feedback to our advisers is that premium of €350/ha for 7 years is not a sufficient incentive for such a long term and labour intensive project. A higher premium over a longer period, e.g., 10 years, may help to overcome this barrier. Emergent woodland applications should also be considered for eligibility on better quality peats, as well as on mineral soil (currently required), on a case by case basis.

- *Are there additional training requirements needed for this scheme?*

Additional training should be provided to practitioners on:

- Close to nature management and continuous cover forestry,
- Coppice management,
- Realising a range of and potential commercialisation of wood products from native woodlands

- *What changes are required to this scheme in order to support the Woodlands of Ireland document “A Strategy for Native Woodlands in Ireland 2016-2020”*

From a promotional viewpoint, the spatial targeting of suitable locations which incorporate multiple potential applicants (e.g., along a sensitive watercourse) is recommended. Promotion of the benefits of multiple owner involvement in native woodland projects, especially farmers, would help achieve more efficiencies, environmental impacts and economics of scale in an area. This may also necessitate providing some additional incentive in terms of co-operative woodland conservation.

**MEASURE 7: Knowledge Transfer and Innovation Actions**

Continuous Professional Development (CPD)

- *What further training issues need to be addressed under this measure?*

Firstly it is important to establish specific training needs and then allocate resources judiciously. Stimulation and analysis of feedback through the Teagasc Stakeholder group and through relevant events (e.g., National Ploughing Championships, Talking Timber Events etc) would assist in establishing such needs.
Possible follow-on incentives for operatives to undertake harvesting machine operative course, eg Ballyhaise simulator course, leading to certification or inclusion on an approved ‘harvesting operators list would progress the objectives of this measure.

- **What further initiatives could be introduced under this measure to promote the mobilisation of timber and biomass?**

Greater emphasis could be placed on forest management for conifer and hardwood crops (e.g. thinning and pruning). Dedicated courses on thinning control and timber marketing for both foresters and forest owners – possibly through Forest Owner groups - would help promote and build confidence in best thinning silvicultural practice and support efficiencies within the harvesting sector.

- **How can this measure be used to further enhance the understanding private forest owners have in relation to the role their forests have in protecting and enhancing the environment?**

Teagasc suggests the provision of a dedicated short course based on the new Environmental Requirements for Afforestation, (part of) which could be used in other circumstances e.g. part of KTG Programme and forestry management/harvesting extension events.

- **What support framework would be best suited to encouraging private forest owners to certify their forests?**

Teagasc suggests extension services on the benefits of certification combined with a clearly defined modus operandi based on the outputs from the pilot certification KTG’s as appropriate to encourage certification uptake.

- **How can the forestry programme support awareness amongst forest owners of information that is already available in relation to managing and selling their timber?**

Teagasc suggests upskilling in terms of IT and access to online material for an appropriate and receptive cohort of owners.

- A KTG that could be implemented for new entrants – may get owners over the line, only paid once afforestation has been taken up - post Form 2
  - Designed with various inputs from those involved why forest owners plant
    - Timber production
    - Carbon abatement
    - Recreation
    - Etc.
MEASURE 8: Setting up of new producer groups.

There are 20 active Forest Owner groups around the country, with almost 1000 members. This has been a very positive and critical development, lead by Teagasc, for private forest owners over the past number of years. Teagasc welcomes this measure as supporting the development of new groups in other parts of the country and a recognition of the important role of established groups.

This is necessary so that local owners can identify with their neighbours and is a necessary step in the evolution of forest owner groups in Ireland. It may be that encouraging (artificially forcing) amalgamations too early in the process can be counter-productive and result in disengagement by forest owners and also they may feel that they are losing ‘ownership’ of their groups. This amalgamation may evolve naturally at a later stage and there is evidence in some more established groups that this is beginning to happen.

Further expansion of existing groups and the development of a number of new groups to meet spatial deficits at the moment may be of use. It is stated that “there may be a requirement instead to amalgamate existing groups”. DAFM’s drive to mobilise the timber resource through engaging with producer groups is to be commended. However transferring knowledge and building a forestry culture amongst forest owners should be the priority without over-focussing or manipulation of the structures involved.

MEASURE 9: Innovative Forest Technology

Teagasc fully supports the recent launch of the Variable Tyre Pressure Scheme to provide funding to timber hauliers to fit some of the haulage fleet with this technology to reduce potential damage to weak road surfaces during timber haulage. There has been a low initial level of interest in the scheme and it is essential that DAFM actively promotes it to all parts of the industry as an important element of the wider timber mobilisation strategy. The VTP scheme is an important confidence building measure for all stakeholders and in particular the Local Authorities with whom there is ongoing positive communication and interaction through the activities of FITG on which Teagasc is represented.

Pilot funding of new and innovative small scale harvesting equipment, including the design of a bespoke broadleaf harvester, for private owners could be considered, with a grant requirement for the evaluation and demonstration of technologies deployed by successful applicants.

In addition, this measure has the capacity to be available for innovative decision support tool development and possibly marketing hubs. It may also have the potential to link with EIP Operational Groups in this development.

Support could also be considered in relation to technology to deliver efficiencies in private timber sales and timber security such as geofencing and other electronic timber tracking/security systems.
Measure 10: Forest Genetic Reproductive Material

An indoor birch seed orchard was established in 2016. As a result of the research, partially funded by DAFM, carried out by Teagasc, 2016 was the first year birch was grant-aided for forestry provided the plants used were derived from the Improvement Programme. Accepted categories for grant-aid include selected and qualified. None So Hardy Nurseries established an indoor seed orchard in Wexford with birch supplied to them by Teagasc under licence in 2016. This orchard should have the capacity to supply the current demand when in full production, but it is envisaged that demand will increase in the coming years for various reasons.

What changes are needed to this scheme in order to increase participation rates?

A major effort is required to address the underachievement in seed stands/orchards relating to many of the programme measures.

The establishment costs for a purpose built indoor seed orchard are high. The grant covers 50% of costs up to a maximum €50,000. Teagasc recommends consideration of the provision of an annual premium for indoor seed orchards, during their establishment phase and up to the stage where seed production increases to encourage interest and potential participation by smaller private or commercial entities.

What species need to be supported under this scheme?

Teagasc recommends support for Oak, Sycamore, Wild cherry and Sorbus as well as all of the important conifer species including Sitka spruce, Norway spruce and appropriate minor pine species. It recommends a focus on improved genetic resources for species such as Sycamore whose performance is disappointing on many forest sites.

Concise information is needed based on best scientific evidence with regard to Norway spruce, Douglas fir, Western hemlock and Western red cedar. The establishment of a series of provenance experiments is needed to identify best sources to use.

In the meantime, Teagasc recommends that the best seed stands should be rigorously identified with options of selecting seed for import based on desirable characteristics.

Limited information is currently available on timber quality for SS and other diverse conifers. A similar resource for hardwoods would be desirable. Further research needed in this respect.

Measure 11: Forest Management Plans (FMP)

How can this measure be used to help support private non grant aided forest?

A financial incentive to support management plan development and adoption for non grant aided forests may be worthy of consideration.
How can this measure be used to encourage private forest owners to develop FMP according to the new template?

Teagasc recommends that the new FMP system need to be finalised and rolled out as early as possible, supported by appropriate information meetings for forest owners and stakeholders. This is important for timber mobilisation efforts as well as to increase awareness of the necessity of FMPs in management planning, efficient and timely forest operations and of particular significance an essential requirement of future forest certification.

FMPs need to be concise and straightforward documents/templates in order to facilitate adoption by forest owners and wider industry otherwise other methods could be considered, including Forest Service assessment to assist better estimates for National Forecasting efforts.

General questions to consider:

- What improvements could be introduced to schemes in order to a) increase value for money, b) further enhance the environmental contribution of these schemes including climate change mitigation, increased biodiversity, enhancement and protection of water quality c) increase participation rates and d) enhance forestry contribution to rural communities?

Ryan and O’Donoghue (2016) suggest an examination of the feasibility of structuring afforestation incentives to coincide with whole farm planning actions incentivising farm restructuring or greenhouse gas mitigation may help overcome some of the barriers that hinder land use change to forestry. The authors also describe a proposal that links carbon neutrality objectives; linking a reduction in tax payable to expanding dairy farmers on the increase in value of their herd if it was offset by afforestation. This would utilise the stock relief policy lever within the tax code. For such expansion to be considered carbon neutral, one hectare of new forestry would be required for every 5 additional livestock units.

The introduction of a multifunctional forestry mix could be considered e.g, like the Planned Recreational Forestry option that was briefly available in the 1990’s

A bonus be included for all forest applications that contained appropriate mixes and species at Form 2 stage. (retain the premium level but added extra if contained)

1. 100% Broadleaf mix
2. 100% Diverse species
3. Weighted average above a certain threshold
4. Consider a bonus payment for all Broadleaf & Diverse areas over certain area thresholds e.g. 5 ha

Develop innovative Apps. providing a range of forestry information including seasonal tips, events, directory, grants, videos and financial calculators.

What changes to land use policy should be considered in order to increase participation rates?
Teagasc believes that the better planning, development and promotion of new or revised farming schemes e.g. GLAS is essential to promote wider adoption of effective Whole farm planning. The recent COFORD report on land availability recognises a whole farm incentives approach ie linking forestry and agricultural incentives around actions such as land mobility or succession or the protection of watercourses using riparian buffers (Ryan and O’Donoghue 2016).

Teagasc recommends that DAFM explore options to allow some flexibility to the replanting obligation particularly in the case of measures involving shorter rotations e.g. Forestry for Fibre which may be a barrier to the uptake of these measures. Landowners might be reluctant participate in afforestation schemes (mainly the systems that will be harvested in a short period of time, such as Forestry for Fibre) because of the requirement to replant. It is understandable that land must remain under forestry and subject to a re-planting obligation in most situations, such as native woodlands, but Forestry for Fibre scheme may benefit from a less rigid and more flexible approach in relation to that obligation.

Consider taxation / reductions / benefits where forestry is a farm enterprise.

What possibilities exist for enhancing the species mix being used within the programme (Afforestation scheme, NeighbourWood scheme and Native woodland conservation scheme)?

Mixed species are being viewed in a somewhat negative light in terms of future management e.g. JL/SS mixes on heavy soils, Oak/EL where timely interventions were not undertaken. Further research and demonstration areas of appropriate working mixtures would be beneficial. Teagasc would see an important role for birch for example as a candidate mixture species. Teagasc research has a critical future role in informing future species mix enhancement and uptake with the BsilvRD Broadleaf Silviculture Research and Development. Of particular significance is the need for ongoing work on mixture establishment and provision of a network of well designed experimental/demonstration sites that can be used to inform future policy. Research into the potential of Douglas Fir as a suitable high yielding species in mixtures should also be considered.

Are there further opportunities for collaboration between forest owners?

Forest roads are critical to private timber mobilisation but there can be many challenges – economic, practical and environmental – facing forest owners who want to build a road to facilitate thinning and timber removal. A collaborative approach to forest roads needs to promoted more strongly with examples identified and case studies highlighted. Coillte need to be more proactive in this regard under their public good mandate to facilitate private timber mobilisation where possible using Coillte roads and DAFM should be prompting this at a high level.

The current Horizon 2020 project ‘AGRIFORVALOR’ can provide a template for bringing forest owners with an interest in good practice or new technology together in potential innovation partnerships which can support new value chains and encourage entrepreneurship.