Submission from Dingle Hub to the Department of Agriculture, Food and Marine in respect of their new Statement of Strategy (2023-2026)¹

1. Background

The Government has supported the establishment and operation of more than 400 Digital Hubs, that are currently operating across the country, particularly in rural towns. These hubs are actively engaged with rural communities, including farming communities and, to varying degrees, enabling change, in accordance with many of the policies outlined in the Statement of Strategy of the Department of Agriculture, Food and the Marine (DAFM). In particular, some of the hubs are involved in addressing climate change at local community level, in addition to digitalisation and sustainability of rural and farming communities. These hubs are partially supported by Exchequer funding and there are currently more than 100 of the hubs connected to the <u>Connected Hubs Network</u>². This network of hubs is a network of very important assets that are located across the country with strong links into the local communities and strong links back to Government Departments and agencies. It would make sense if the hubs were seen by DAFM as potential assets that could be utilised to assist the Department in the rollout out of its policies and strategies.

The <u>Dingle Hub</u>³, is one of hubs which is part of the <u>Connected Hubs Network</u>⁴. In addition to the standard functions carried out by all hubs, Dingle Hub has a specific initiative called <u>Corca Dhuibhne</u> <u>2030</u>⁵, with the aim of *'creating a more sustainable future for the Dingle Peninsula, both environmentally and economically, and to transition our beautiful peninsula into a low-carbon society'*.

The Dingle Hub has a significant programme of engagement with the <u>local community (including the</u> <u>farming community</u>)⁶ and this includes not only <u>agriculture</u>⁷, but also <u>sustainability</u>⁸, <u>digital</u> <u>transformation</u>⁹ (including using <u>connected sensors on farms, as part of an EU Ploutos project</u>)¹⁰, <u>energy</u>¹¹ (including <u>bioenergy</u>¹²), <u>rural transport/sustainable mobility</u>¹³, <u>sustainable tourism</u>¹⁴, Farm-to-Fork, and <u>Creative Climate Action</u>¹⁵ (an initiative involving 10 farm families addressing climate change on the farms, through a creative process, working with an embedded artist).

The Dingle Hub acts as a focal point in the community, helping to sponsor and support various initiatives and bringing together people from various sectors across the community. It has enabled the farming community to engage with technology and energy companies and has led to the establishment of the <u>West Kerry Dairy Farmers Sustainable Energy Community</u>¹⁶ involving the 120

¹ https://www.gov.ie/en/consultation/bf945-public-consultation-process-for-the-statement-of-strategy-2023-2026/

² https://connectedhubs.ie/hubs/search

³ https://dinglehub.com/

⁴ https://connectedhubs.ie/hubs/search

⁵ https://dinglepeninsula2030.com/

⁶ https://dinglehub.com/projects/sustainability/#agriculture

⁷ https://dinglepeninsula2030.com/projects/agriculture/

⁸ https://dinglehub.com/sustainability/

⁹ https://dinglepeninsula2030.com/projects/agriculture/euploutos/

¹⁰ https://dinglepeninsula2030.com/projects/agriculture/euploutos/

¹¹ https://dinglehub.com/projects/sustainability/#energy

¹² https://dinglepeninsula2030.com/projects/energy/bioenergy/

¹³ https://dinglepeninsula2030.com/projects/transport/sustainable-travel/

¹⁴ https://dinglepeninsula2030.com/projects/tourism/sustainable-tourism/

¹⁵ https://dinglepeninsula2030.com/projects/creativeclimateactionproject/

¹⁶ https://dinglepeninsula2030.com/projects/agriculture/westkerrysec/

dairy farms of the peninsula. The Hub has developed a good record of <u>engaged research</u>¹⁷ and it has published a large number of <u>learning briefs</u>¹⁸, helping to diffuse the learning experiences from the Dingle Peninsula.

2. <u>How could the Department's services to the agri-food, forestry and marine sector be further</u> <u>enhanced?</u>

From our experience, there could be significant benefits for the Department of Agriculture, Food and the Marine (DAFM) if there was more engagement with the 400 Hubs that are located throughout the country. The Hubs have the potential to be utilised much more to engage with the local communities and to help build capacity and capability for innovation (including supporting the digital transformation) and encouraging engaged research, while also assisting with addressing the challenges of climate change in rural communities.

Engaged research with strong community engagement providing co-created solutions, is hugely powerful and impactful even at local level. It would really help if funding bodies also appreciated the importance of this, as currently most of the funding (including DAFM) specifically excludes engaged research and support for community engagement.

The current system of support from DAFM and Teagasc should be reviewed and the importance of working with the communities (including the farmers) in co-creating solutions should be prioritised and supported in a meaningful way, including funding, for that community engagement (as currently there is no such support).and there should be funding for community engagement (as currently there is no such support).

Encouraging and supporting communities to engage with the <u>European Innovation Partnerships</u>¹⁹ (as is done for other EU projects) has the potential to be transformative for local communities and ensuring that the structures and processes that are put in place for the projects can continue to be supported after the project ends, would be critical, or the huge efforts put into the projects could be seen to have been in vain.

Another way that DAFM could help would be to speed up the development and deployment of new technologies, practices and value/supply chains. The key way to do this is to identify, screen and get experience with options. All of this helps to reduce the risk of change. A robust farming-community embedded living lab that acts as an accelerator around that would be very useful.

We have clear feedback that agri-tech companies would benefit from having more access to 'test'n'trial' opportunities with farmers. This has led to the Dingle Hub providing commercial trials for some companies. We have also received strong feedback that more support should be provided for agroecology teaching, which will be essential to deliver changes to the traditional farming practices.

¹⁷ Engaged Research describes a wide range of rigorous research approaches and methodologies that share a common interest in collaborative engagement with the community. It aims to improve, understand, or investigate an issue of public interest or concern, including societal challenges. Engaged research is advanced with community partners rather than for them.

https://www.campusengage.ie/our-work/making-an-impact/engaged-research/

¹⁸ https://dinglepeninsula2030.com/learningsandreports/

¹⁹ https://research-and-innovation.ec.europa.eu/strategy/past-research-and-innovation-policy-goals/open-innovation-resources/european-innovation-partnerships-eips_en

From our experience on the Dingle Peninsula, we are exploring the re-use of farm-based outputs in new supply chains into horticulture and also, for example, with hemp, as a source for high value products. Hemp has significant carbon sequestration potential and can be utilised as natural/sustainable inputs for use in the construction sector and, in the materials' sector, it can be utilised as a substitute for non-sustainable products, such as fibre glass. The requirement to replace non sustainable products with natural/sustainable products is increasing hugely and rapidly and agriculture could have a key role to play here.

Another way to look at the change agenda is to establish how quickly alternative income streams in farming can be grown and sustained, to ensure a thriving economically viable agriculture sector well connected to society. That could be a great lens to look at all the developments around renewables/solar, anaerobic digestion, valorisation of slurry, circular use of biofuels and organic materials, Farm to Fork, environmental and biodiversity services, etc.

Enough policy attention is not being paid to developing alternative income streams for those involved in agriculture and this should be addressed. For example, the current <u>TAMS support for agriculture</u>²⁰ will support the construction of larger storage tanks for slurry but it will not support the construction of an Anaerobic Digester (AD). The AD has multiple benefits, in that it is capable of turning the slurry waste into a very valuable energy input; it can also reduce the emissions into local waterways; and it can also provide a source of digestate for use on the land, thereby reducing the cost of fertiliser. While this circular economy approach is appreciated by DAFM, the funding supports for farmers do not appear to reflect this type of integrated approach. Certainly, joint actions and co-support by the different responsible agencies that transect the rural, marine and farming environments is necessary to drive sustainable transition and unlock the potential for farming, food, climate and ecosystem services creating positive societal impacts. The Hub ecosystem of farming, village and marine communities is an ideal environment to study and implement innovative solutions. The achievements to date in the Dingle Peninsula through its Dingle Hub, demonstrates the merit of this approach. We are more than happy to engage, partner, advise or counsel similar initiatives elsewhere.

3. <u>What forthcoming market and other challenges should the Department prioritise?</u>

Addressing decarbonisation and reduction of emissions from farming and addressing the biodiversity issue, will require new approaches to farming, for example, with less intensive farming in areas, greater use of precision farming (including through the use of technologies), more organic/regenerative farming, more local circular economies (with local abattoirs, Farm-to-Fork, integrated with local restaurants and shops, more tracking and traceability of food products, etc.) The environmental requirements are only set to increase and greater use of integrated, connected technologies (as demonstrated on the <u>Dingle Peninsula²¹</u>), with sharing of data through the cloud with other public bodies (such as DAFM, EPA et al), will require significant new investments and upskilling of the farmers. This should be recognised in the supports being made available.

Integrating technologies into rural communities and farming, such as Anaerobic Digestion, has the potential to be transformative, as it could reduce the spreading of slurry and nitrates entering waterways; it could provide increased supply of biogas for use in, for example, farm vehicles; it could

²⁰ https://www.gov.ie/en/service/targeted-agriculture-modernisation-schemes/

²¹ https://dinglepeninsula2030.com/projects/agriculture/euploutos/

provide a revenue stream for farmers; and it could accommodate the disposal of such products as abattoir waste (which would allow for local abattoirs to be built).

We would suggest that, irrespective of the market and other challenges, it is important to have a subcounty presence in local communities (through the Hubs) to help the local communities to work together in addressing the significant changes that are required to be undertaken, not least due to decarbonisation/climate change and the digital transformation. If this is done successfully, it will then be possible to exploit the opportunities from these two sectors, utilising the same Hub structure.

- The challenge is about building capacity and capability in the local community (including among the farming community) and helping with lifelong and lifewide education across the community²², upskilling certain groups within the community and building innovation into the day-to-day activities of all sectors. The Hubs can provide the local focal point, bringing the various parts of the community into contact with each other.
- The hubs could also provide a channel for communicating with the local communities (including the farming and fishing communities), so that they can understand the challenges and become sufficiently knowledgeable and skilled to address them, not just individually but collectively as a community.
- From feedback from the local farmers, the plethora of compliance and environmental initiatives require healthy mature dialogue between parties and with local communities. If cocreating solutions with local farming communities is to be taken seriously, mindful communications and relationship building is necessary. All parties, in particular lead organisations such as the Department have a responsibility to review how they approach communications to ensure productive and beneficial relationships in this time of change.

4. <u>Are there opportunities, new developments, or innovations that the Department should</u> <u>consider when developing the 2023-2026 strategy which would advance the achievement of</u> <u>our mission, vision, and objectives across the agri-food, forestry, and marine sectors?</u>

The EU and Irish Government have both recognised, in the <u>Economic Recovery Plan (2021)</u>²³, that a twin track approach is required to address the challenges facing the Irish economy. The twin challenges of climate change/decarbonisation and digitalisation transition (and associated behavioural changes) will significantly alter the economy and it is critical that all communities are prepared and supported to address these challenges.

The Department's list of policy documents that are referenced in the Statement of Strategy consultation²⁴ is noted but policies and strategies do not, of themselves, result in actions. There is a need for a delivery and accountability mechanism, that reaches into the local communities and engages with people in their communities. It is proposed that the Hubs can play a significant role in this, if supported to do so.

Seeing the Dingle Peninsula as a Living Lab,²⁵ Dingle Hub has developed a concept called <u>'Scaling Deep'</u>, which Dingle Hub defines as 'a process of regional development fusing enterprise, infrastructure and

²² The lifelong dimension indicating that the individual learns throughout a lifespan. The lifewide dimension recognises formal, non-formal and informal learning.

²³ https://assets.gov.ie/136523/03f31f12-10eb-4912-86b2-5b9af6aed667.pdf

²⁴ https://www.gov.ie/en/consultation/bf945-public-consultation-process-for-the-statement-of-strategy-2023-2026/

²⁵ https://enoll.org/

community development where the State (through various public bodies), a breadth of enterprise types (from large multinationals, to large corporates to SMEs) and the communities in which they are embedded, all pursue enduring growth and sustainable transition in an approach that is "rooted-in" the assets of place." We believe that this concept could provide a significant new approach for addressing the future sustainable development of rural Ireland.

The 'scaling deep' approach underpins the approach to developing the necessary skills in the local community, while also developing the opportunities for companies to work with the community and to scale accordingly. This has potential for rolling out at national level, with significant opportunities for rural communities to develop sustainable communities that incorporate local agriculture and marine (as is done in Dingle).

The growing importance of agroecology does not appear to be appreciated in the various policy statements and agroecology will be significant for the future, so it merits greater attention.

Likewise, the important role that can be played by the marine sector in respect of carbon sequestration and enhancing biodiversity does not appear to be considered. For example, rather than focussing solely on land based solutions to carbon sequestration, it may be appropriate to also look at the marine resources, such as, <u>Zostera marina</u>²⁶, which has a carbon sequestration capability of c. 35 times that of tropical forests and provides a very important ecosystem for flora, fauna, fish and shellfish. We have already initiated discussions with the <u>Ireland Strategic Investment Fund (ISIF)</u>²⁷ in this regard and there is interest from ISIF.

5. <u>What metrics should the Department use to measure our performance and monitor</u> <u>achievement of our strategic goals?</u>

Besides the standard economic metrics that have traditionally been used, there is a need to track the 'condition' (or 'state of community preparedness') of the local communities and to track this against what is required to affect the twin transitions of climate change/decarbonisation and digital transformation, in addition to the other policies/strategies enunciated in the DAFM consultation document.

Metrics should monitor (short, medium and long term) progress in respect of such issues as:

- (i) local capacity development for innovation;
- (ii) knowledge (across the community) of the challenges being faced by the communities;
- (iii) local skills and capabilities that are being acquired to address the challenges;
- (iv) level of 'engaged research' (with universities) and development of co-created solutions within the community;
- (v) level of engagement by the local community (e.g events, activities, initiatives)
- (vi) local entrepreneurial activities and businesses and increased income streams (e.g from agri tourism);
- (vii) progress of the local community on the decarbonisation and digitalisation journeys (as is done on the Dingle Peninsula); and

²⁶ https://www.seaweed.ie/descriptions/Zostera_marina.php

²⁷ https://isif.ie/

(viii) engagement of young people in the various activities, including upskilling in respect of Industry 5.0²⁸ (robotics, cobotics, 3D printing, virtual reality, augmented reality, artificial intelligence, etc.), all of which will impact significantly on current businesses and practices, including farming.

One way to speed up change is to develop suitable alternatives/options and reduce the risk in jumping from the current state to the new state.

6. Concluding comments

We consider that the experiences and lessons we have learned may be of particular interest as part of the process of developing a new Statement of Strategy. Dingle Hub has accumulated a wealth of experience in relation to the matters mentioned above, through local and wider collaborations to cocreate and share place-sensitive solutions that empower a resilient, productive and prosperous climate sensitive rural and marine community on the Dingle Peninsula. This response to the increased demand for community and agricultural sustainability, adaptation to climate change and digitisation, though not without its challenges, is already unlocking the necessary transitions on the peninsula. We would be very pleased to engage with the Department io Agriculture, Food and the Marine, the Department so wishes.

²⁸ <u>https://research-and-innovation.ec.europa.eu/research-area/industrial-research-and-innovation/industry-50 en</u> - Plans are currently being worked on to roll out a programme for schools starting in September 2023