

# International Food Security:

Teagasc Policy and Strategy for Research and Knowledge Transfer



# SUMMARY

Over the coming decades global agriculture will be challenged by declining natural resources, the impacts of climate change and the absolute requirement to produce a secure, safe and sustainable supply of food, biomass and fibres for a growing population. In particular, the challenge of food security and sustainability will impact on countries and regions of the world least able to cope.

As a result, the issue of global food security and sustainability now feature prominently on the international policy agenda, and indeed on the national agenda. The latter is reflected in:

- Agri-food business initiatives on food security and sustainability supported by the Department of Agriculture, Food and the Marine
- Irish Aid's priority on the eradication of hunger and undernutrition
- The inclusion of a strategy for "the internationalisation of Irish agri-food expertise" in the implementation of the Food Harvest 2020 strategy.

As the national body responsible for agricultural research and knowledge transfer in Ireland, Teagasc has a responsibility to support the national

effort aimed at strengthening agricultural development and reducing hunger and undernutrition in underdeveloped countries. In a time of significant resource constraints, this agenda can be best pursued by aligning and coordinating our efforts and resources with those of other national and international organisations, in particular with those of Department of Agriculture, Food and the Marine (DAFM) and Irish Aid.

This draft policy and strategy document outlines the opportunities and challenges for Teagasc in relation to research and knowledge transfer initiatives in the area of international agricultural development. It proposes five criteria for Teagasc engagement with such initiatives, i.e: 1) alignment with Teagasc's own Statement of Strategy; 2) focus on development of local capacity in research and knowledge transfer; 3) based on partnership – in which Teagasc contributes its own specific expertise; 4) alignment with Irish Aid's hunger agenda; and 5) focus on Irish Aid's nine programme countries.

It is envisaged that Teagasc's engagement will consist of focused contributions by way of a flexible network of staff members and coordinated by an internal Food Security Committee.



## INTRODUCTION: THE GLOBAL CONTEXT

After many years of neglect agriculture and food security are back on the international development and political agendas. In 2011, for the first time, the agriculture ministers of the Group of 20 (G20) countries met and agreed to work together to tackle food price volatility and food insecurity. As an indication of the growing global importance of food, both China and India continue to increase their spending on food security and agricultural production. Some 20 African countries have adopted national agricultural and food security investment plans in which they will devote 10 percent of their national budget to agriculture to achieve agricultural growth of six percent a year. The US Agency for International Development (USAID) progressed its Feed the Future Initiative, begun in 2010, and the World Bank maintained its recent increased annual commitments to agriculture and related sectors at about US\$6 billion. The Consultative Group on International Agricultural Research (CGIAR) undertook a major restructuring of its research programs in 2011 and is engaged in a process designed to establish better coordination with National Agricultural Research Systems. The ultimate expression of this new-found interest in global food security is manifest in the UN Secretary-

General's Zero Hunger Challenge, which invites all nations to work for a future where everyone enjoys the right to food and all food systems are resilient.

More broadly, agriculture is increasingly understood as part of a larger context, contributing not only to food production, but also to human nutrition and health - conditions that in turn can affect agricultural productivity and overall economic growth. Agriculture also has strong links to water, land, and energy, which are, like agriculture itself, under increasing pressure. Moreover, food security - that is, availability of and access to sufficient, safe, nutritious food to maintain a healthy and active life-is linked to other notions of security, including economic security, socio-political security and environmental security.

The role of agricultural research and innovation in tackling these interlinked challenges has been highlighted by numerous international organisations and reports. There is a broad consensus that large-scale public and private investments in research and development are required today to develop and disseminate the technologies and information that producers need to increase their returns through systems that improve efficiency and reduce waste and pollution. In this

context, the distinction traditionally drawn between national research programmes and agricultural research for development is becoming less significant as emphasis grows on making the most efficient and effective use of all agricultural research. Nor does the challenge end with research alone. Reaching smallholders is a major challenge in countries where extension services have been severely reduced or eliminated due to low investment in agriculture or reforms of public institutions, so the need for investment and rebuilding in extension is also a priority.



## THE IRISH CONTEXT

Ireland is not immune to the impacts of food insecurity. We cannot divorce ourselves from the dynamics of food insecurity and the linked environmental challenges. We cannot take our own long-term food security for granted, nor can we abdicate our responsibilities as a nation to contribute to meeting the food security needs of poorer countries unable to raise their own food output. We are not immune from the impacts of possible disruption to food trade in the future and disruption in supplies of essential inputs such as phosphate. Accordingly, the issues of food security and sustainability now feature prominently on the national agricultural agenda and Ireland's overseas aid programme prioritises hunger reduction. As a further indication of a growing commitment, the "internationalisation of Irish agri-food expertise" and agri-food business is an explicit implementation strand of the Food Harvest 2020 Strategy.

The launch of the report of Ireland's Hunger Task Force (HTF) in September 2008 (<http://www.irishaid.gov.ie/media/irishaid/allwebsitemedia/20newsandpublications/publicationpdfsenglish/hunger-task-force.pdf>) led to a number of significant developments in Ireland's approach to the global food security crisis. In particular, the Government adopted hunger as a cornerstone of its foreign policy and a particular priority



of its overseas development programme, as well as pledging to spend at least 20% of its ODA on hunger by 2012.

A Hunger Unit was established in Irish Aid specifically to manage the Government's response, and a strong policy direction was adopted throughout the overseas aid programme and more broadly within the Department of Foreign Affairs to reflect this new prioritisation. Irish Aid prioritised three main actions in the fight against hunger, i.e.:

- Improving smallholder agriculture
- Preventing maternal and child undernutrition
- Promoting political commitment and leadership.

Irish Aid is managing well-established and highly-regarded development programmes in a number of priority countries. Nevertheless, following this realignment of Government priorities, it is recognised that there is an urgent need to further strengthen these programmes with agricultural and environmental expertise in order to deliver on the first two priority actions (improving smallholder agriculture and preventing maternal and child undernutrition).

As this expertise is largely unavailable within Irish Aid, the Hunger Task Force Report concludes:

*“While Government provides the lead, the proposed actions cannot be undertaken by a single agency in Ireland. The critical nature of the global hunger problem requires a response from all in Irish society. These include relevant branches of Government, NGOs, missionary organisations, higher education and research institutions, the private sector, and the citizens of Ireland who have so often responded with compassion to food crises in the developing world. The Hunger Task Force calls for creative and sustained efforts by all of these partners in Irish society, so that Ireland can show genuine leadership in making the global commitment to eradicate world hunger a reality. This is a shared task – dictated by present humanitarian imperatives, but also informed by our failures in the past to end the scourge of famine which has blighted the history of so many nations.”*

In particular, Irish Aid is committed to national and international partnership in the delivery of its research and knowledge transfer activities to improve crop varieties and yields, promote better farming methods, and support new knowledge on the links between agriculture and improved nutrition and health.




# TEAGASC RATIONALE

As the leading Irish agricultural research and knowledge transfer organisation, Teagasc has the knowledge, expertise and capacity to partner with Irish Aid in the delivery of its programmes. In addition, there is a clear and growing expectation at national policy level that Teagasc and other State agencies should use this capacity in support of the national overseas development programme.

In recent years, Teagasc has emphasised the need to consider the challenges to Irish agriculture within the context of the global challenges in relation to food security and climate change. The organisation's Statement of Strategy now describes Global Food Security as one of the key-drivers of the national policy context. One example of this was highlighted in the organisation's submission to the Climate Change Response Bill in which Teagasc demonstrated that attempts to pursue simple reductions in GHG emissions at national level could inadvertently lead to increased GHG emissions at global level. Indeed, it is increasingly recognised that regions at lower latitudes are having a key role and more scope to provide solutions to meeting the twin challenges of achieving food security and countering climate change.

In view of the many competing pressures and demands, it is now opportune for Teagasc to formally identify how it proposes to respond. Accordingly, in this document, we set out a detailed rationale and strategy governing our involvement in international agricultural development.

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*Teagasc's role will be to add expertise to partnerships, not to take sole ownership or do "solo-runs".*

## STRATEGY

In order to maximise bilateral benefits and efficiency and to manage and reduce the risks, it is proposed that Teagasc will only engage in international agricultural development initiatives that meet some or all of the following criteria:

1. They should be aligned with Teagasc's own Statement of Strategy, which describes global food security as a "Grand Challenge" and one of the central drivers of the national policy context. This means that the initiative should contribute to one or more of Teagasc's four goals, put in an international context:
  - i. Improve competitiveness
  - ii. Support sustainable farming and the environment
  - iii. Encourage diversification and quality of life in rural areas
  - iv. Enhance organisational capability and value for money
2. They should be strongly focussed on capacity building in local research, knowledge transfer and development in partner countries, including :
  - Provision of technical and operational expertise through short-term visits
  - Exchange programmes
  - Opportunities for international students to participate in Teagasc's M.Agr.Sc Innovation Support Programme.
3. They should be based on partnerships: Teagasc's role will be to add expertise to the partnership. The organisation should be uniquely placed to provide the expertise and not displace other actors that are equally qualified (e.g. national research institutes in various countries, NGOs).
4. The initiative should be aligned with, and feed into Irish Aid's development programme on eradication of hunger and DAFM's strategy on the internationalisation of agricultural. It should preferably target one or more of the nine programme countries of Irish Aid, i.e. Ethiopia, Lesotho, Malawi, Mozambique, Tanzania, Timor Leste, Uganda, Vietnam and Zambia. This will ensure local support, critical mass and programme coherence.
5. Partner with international research organisations, such as the CGIAR.



# MODUS OPERANDI

Typically, Teagasc's commitment to joint activities will aim to leverage its own expertise in agricultural research and knowledge transfer to maximum effectiveness, by combining its expertise with other complementary actors. This commitment can take the form of staff time (short-term only) or the provision of training or placements. Because of resource constraints, Teagasc will not commit to long-term placements of its staff or to making financial contributions. The organisation may commit to providing Walsh Fellowship

positions for externally funded projects or, in exceptional cases, through core-funding.

It is proposed that Teagasc's activities are coordinated by a new Food Security Committee, whose role will be to:

- Develop, oversee and review Teagasc's policy on international agricultural development;
- Evaluate requests / approaches from DAFM Irish Aid or other external institutes / organisations for collaboration against the five criteria set



out above, and make recommendations to the Senior Management Group (SMG);

- Maintain a skills database and link relevant initiatives to qualified Teagasc staff members (from all Directorates) who are willing and interested in being engaged, including selected retired staff;
- Facilitate training (if required) for staff members involved;
- Ensure, in liaison with their line-managers, that staff members are not inadvertently overburdened beyond capacity;
- Communicate the purpose, methods and outcomes of the Food Security initiatives in a positive light to Teagasc staff and relevant external stakeholders;
- Develop and submit for Senior Management approval operational procedures, including reporting formats and standards, to ensure that all initiatives involving Teagasc personnel are completed to the highest professional standards.



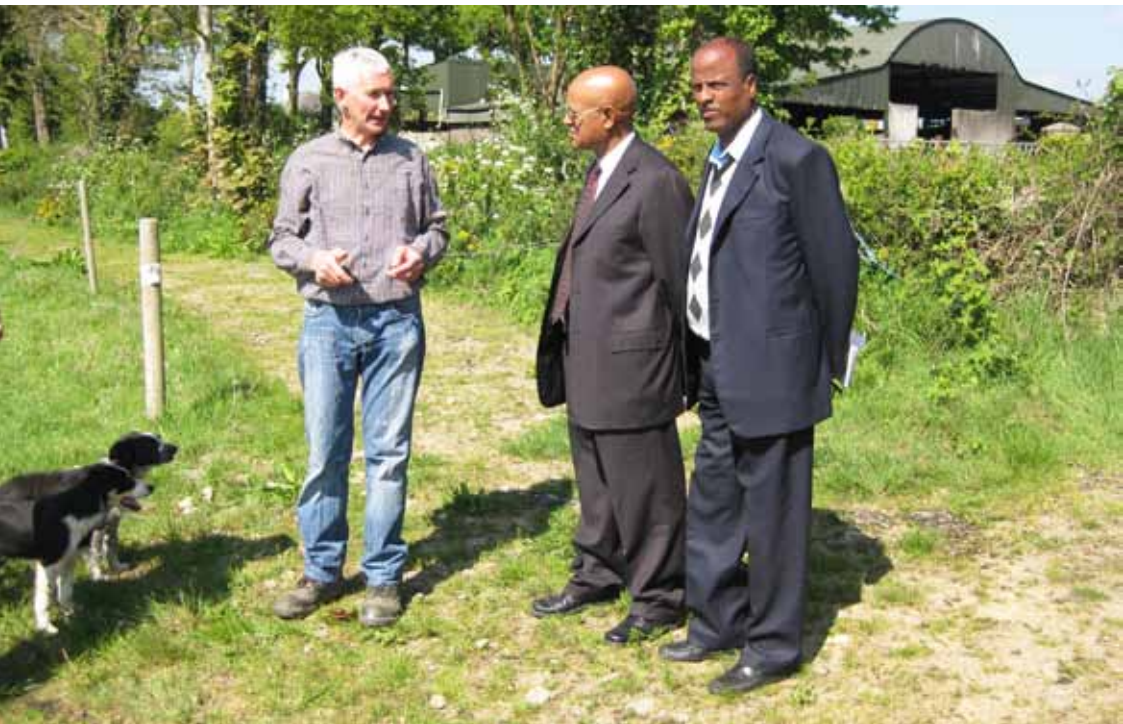
## RESOURCE CONSIDERATIONS

Engagement with developmental initiatives should not result in undue competition for resources with Teagasc's core activities: it is the responsibility of the Food Security Committee to ensure that the risks of competition are minimised. There are three models of resourcing individual initiatives:

1. Full-cost initiatives: all costs to Teagasc, including (permanent) staff time and administrative costs are externally funded.
2. Shared-cost initiatives: all direct costs (including contract staff costs, if and where appropriate) are fully externally funded, while Teagasc incurs the costs of permanent staff time.
3. Core-funded initiatives: in exceptional cases, Teagasc may engage in core-funded initiatives, e.g. through provision of Walsh Fellowships.

The Food Security Committee will evaluate and advise the SMG on the preferred resourcing model for each initiative.






## BENEFITS TO TEAGASC

The benefits to Teagasc of the engagement with Irish Aid's programme and with other prioritised food security initiatives are manifold:

1. It will provide a solid basis to substantiate Teagasc's aspiration to be a leader in global agricultural research and knowledge transfer: currently, the organisation is significantly involved in addressing global issues at high research policy level: an example is its involvement in the EU Joint Programme Initiative on Agriculture, Food Security and Climate. The organisation has also played a key role in facilitating what has become known as 'The Dublin Process' – an initiative led by the World Bank to deepen alignment and collaboration between Africa's agricultural research, extension and education programmes and the programmes of the CGIAR. By engaging in R&D on development issues – even if small in scale – we ensure that we “know what we are talking about” at high-end research policy level.
2. It will provide new international linkages with significant international research and knowledge transfer organisations. A current pilot project has

already resulted in new linkages and collaboration for Teagasc staff with renowned research and knowledge transfer institutes such as Wageningen University, the International Potato Centre (CIP), GFRAS and CGIAR.

3. At a limited scale, this collaboration may provide new opportunities for staff development by putting their current research and knowledge transfer portfolios in an international context (“widening horizons”, “thinking outside the box”).
4. Future funding opportunities: whilst outside the current scope of this document, engagement will make Teagasc an attractive partner for future collaborative research and knowledge transfer initiatives on development issues and will provide access to new research funding streams (e.g. Irish Aid, EU development funds).
5. Finally, this development represents an ideal opportunity to showcase Teagasc as a progressive organisation that a) dovetails its expertise efficiently with that of other government organisations and b) meets the expectations of corporate social responsibility.



*“currently, the organisation is significantly involved in addressing global issues at high research policy level”*



# RISKS

There are also significant risks associated with involvement in overseas R&D:

1. Coherence: In principle, there are countless opportunities (including funding opportunities) for Teagasc to get involved in. There is a real risk that this could lead to an incoherent programme consisting of many “ad-hoc” projects with insufficient connectivity, which could pose challenges in terms of coordination and management.

*Risk management: all new initiatives to be routed through the Food Security Committee, which will advise SMG.*

2. Resources: Teagasc’s programme, like that of other public sector agencies, is constrained by its human and financial resources. Any commitment of resources to R&D programmes in developing countries competes with resource allocations within the national context.

*Risk management: All initiatives to be considered by the Food Security Committee and to be allocated appropriate funding model.*

3. Stakeholder engagement: There is a significant level of “goodwill” and support amongst the general public, and indeed, Teagasc’s stakeholders towards contributing to the development of developing countries. At the same time, this goodwill is likely based on the implicit assumption that our engagement with overseas development will not compete unduly with our engagement with national priorities. Therefore, we must ensure that our involvement in overseas R&D has mutual benefits for the developing countries and Teagasc.

*Risk management: all initiatives to be evaluated by the Food Security Committee against the five criteria set out in this document. The Food Security Committee will devise an appropriate communication and outreach strategy.*

# NOTES

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