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RISING TO THE LAND-USE CHALLENGE: ISSUES FOR POLICY MAKERS

Thank you for the opportunity to contribute to this consultation paper on 'Rising to the Land-use challenge'.

As a retailer, Marks and Spencer has a wide range of social, environmental and ethical issues to manage across diverse product ranges and global supply chains. Developing a more environmentally and economically sustainable system of food production and consumption is central to Marks & Spencer's future strategy.

In response to this and to help tackle the enormous challenges we all face, Marks & Spencer has developed Plan A – a 100 point plan, encompassing detailed commitments against five pillars :-

- Climate Change
- Waste
- Sustainable Raw Materials
- Fair Partner
- Health

This plan, which was launched in January 2007, has been internationally recognised for its comprehensive approach to the issues customers and society face.

However, since the launch of Plan A we find ourselves increasingly called upon to respond to multiple and complex demands for increased food security, improved environmental performance, adaptation and mitigation strategies to address climate and the provision of healthier diets. We seek to respond to such challenges based on best available sound science and we have developed our social, economic and ethical strategies over a number of years working with leading stakeholders including NGO's, Government Departments and others. We are not afraid to face up to difficult issues and invest in industry leading research. For example, we know air-freighting food presents environmental issues, yet others would argue for the social benefits that are accrued in the source country. We have invested over the last 4 years in a post graduate research programme to help us resolve this complex matter.

We do recognise that there is currently a gap in understanding of land-use challenges. We therefore very much welcome the lead that RELU has taken in this area. We are particularly encouraged by the joined up approach that RELU has taken in addressing this issue.

Based on our experience over the last 18 months of Plan A, we believe there are a number of areas where we can constructively contribute to this discussion. Rather than respond point by point, to you discussion document, I have structured this response three areas:-

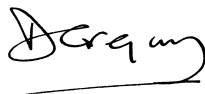
- Making effective use of the science base
- Engaging the farming community (and the important role retailers can play)
- Engaging consumers

In order to help you navigate this response, I highlight below which specific points in your document we comment on:-

DOC SECTION	M&S INITIATIVES REFERENCED*	RELEVANT SECTIONS IN DISCUSSION DOCUMENT
Making effective use of the science base	<ul style="list-style-type: none">- Growing new crops in UK- M&S and WWF water footprinting	Section 3 a – The carbon challenge, what role for land ? Section 3e – What policy adjustments are needed at the tactical level ?
Engaging the farming community	<ul style="list-style-type: none">- M&S Supplier exchange- Biofuels policy- Dairy pool carbon footprinting- Supporting Anaerobic Digestion	Section 1 a – What more do we need to know about behaviours ?
Engaging consumers	<ul style="list-style-type: none">- M&S 'Green' Customer research	Section 1e - What mix of mechanisms do we need to tackle market failure ? (Point 1.26 specifically)

We hope you find this input constructive and helpful. Please do not hesitate to get back to us if you require more information or further clarification.

Yours sincerely



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Making effective use of the science base:

**How can our use of land and water help tackle climate change:
What policy adjustments are needed at the tactical level ?**

Defra is increasingly focusing not only on mitigation activities to tackle climate change but also on adaptation strategies. Support for applied research and development in agriculture is critical if we are going to make progress in both these areas.

Adaptation to climate change – M&S experience of developing new crops

- Under Plan A, Marks & Spencer is also looking at innovation opportunities as a result of changing climate. Extending the British season for crops has been a goal of Marks & Spencer for over 40 years and we have had a strong track record in encouraging UK growers to work with us to meet customer demands and avoid importing foods unnecessarily.
- For example, the asparagus season has always been from May to 22 June. If this pattern wasn't followed it had a severe effect on the following year's crop. Even in season, cold spells have sometimes meant topping up stocks with asparagus flown in from Peru. But for the past 5 years we have worked with Flamingo UK and Cobrey Farms in Herefordshire to extend the growing season on M&S asparagus. They use south and north facing slopes to vary the production time, (south facing slopes produce earlier, north facing ones produce later) and for the very earliest crops they cover the asparagus with a low plastic tunnel, which naturally traps the heat and enables earlier shooting. So this year, we can offer British asparagus to our customers from March until Mid/late July. We are the only major retailer to be 100% UK asparagus during the season.
- We have now started a number of research projects looking at growing new crops and successfully grown and sold sugar snap peas, melon and sweet potatoes in the UK.
- Most UK retailers' sugar snap peas are grown in Peru, Guatemala and Kenya and air-freighted to the UK all year round. This makes them a key target for Plan A carbon reduction work. Our skilled agronomy team worked with our growers William and Martin Haines in Gloucestershire to grow sugar snap peas. The growers gave the plants extremely close attention to ensure that they flourished in the UK climate, especially during the extreme rainfall in the first 2 months of the growing season.
- However, the variable weather over the last 12-18 months has made this more challenging. For the future, we believe a robust UK agricultural and horticultural research and development base is essential if we are going to make progress in this area.

Requirement for more applied agricultural R&D:

- As a retailer with a strong agronomy team and experience in working practically with our growers, we have directly observed the reduction in applied research from the UK and the decline in extension services available to UK farmers.
- Marks & Spencer recently presented at the New Crops, New Climate Seminar organised by Warwick University. Our observation was that while a number of people were talking about the potential implications of climate change for UK agriculture, ie that the UK growing season is extended by 1.5 days per year, there was very limited discussion or evidence of any focused and practical projects to investigate future new crops. Delegates expressed a strong desire for more applied research and development support in tackling climate change. Outputs of this discussion are available on the following website <http://www2.warwick.ac.uk/fac/sci/whri/research/climatechange/newcrops>
- Also a recent study by The Commercial Farmers Group 'The need for a new vision for UK agricultural research and development' outlines the need for a new approach to ensure UK agriculture is competitive and delivering environmental, reducing reliance on food imports and delivers environmental benefits. And government and industry need to work together to ensure this happens.
- In addressing climate change mitigation strategies, more research is required to understand methane and nitrous oxide emissions and reduction strategies. Marks & Spencer supported a recent bid by the University of East Anglia to host a nitrous oxide network, however this project has yet to obtain funding.

Water footprinting:

- Marks & Spencer recognise the importance of managing this issue in the future and have invested in carrying out a high level water footprinting study with WWF. Our experience to date is that this is a complex area and further practical research and data gathering is required to develop better modelling and decision making tools about land use.

Engaging the farming community:

**How do we achieve multiple objectives from land and water
What more do we need to understand about behaviours ?**

Our experience is that the supply chain is eager to demonstrate that farming can very much be part of the solution to challenges around climate change and energy, water and environmental security. At the moment, however there is confusion about what they should be doing and they are looking for guidance. The reality is that many are more influenced by their customers (the retailers) direction as that directly impacts the economic sustainability of their business. Government policy can effectively harness retailer influence to drive change in land use practices once the desired direction has been identified. Below we share some of our learning from relevant specific projects that have engaged our supply base over the last 18 months.

Marks & Spencer Supplier Exchange:

- Marks & Spencer has historically worked closely with the British farming industry to secure its future success. We have a significant presence at all the important Agriculture Shows, where we have dedicated sessions to meet our farming base, listen to their views and develop innovative approaches.
- Once we launched Plan A, we realised the need for more frequent and structured communication with our supply base. We have also set up a dedicated Supplier Exchange website where we can provide latest policy documents, showcase best practice and signpost the supply base to relevant external research or initiatives. We have run a series of conferences and masterclasses for our food supply chain since we launched Plan A. This year we have hosted masterclasses on carbon and water footprinting as well as a best practice sharing session which included a session on farming and water efficiency. We constantly seek feedback on the challenges and barriers that our producers are facing in the area of climate change.

We offer some observations as a result of this regular interaction.

- Producers are looking for clear direction and leadership. The challenges are too complex and interlinked for them to determine a course of action. There have been significant changes in agricultural policy and focus over the last few years and many are unsure of what the best long term approach for their business is.
- The majority of our producers are also unaware of schemes such as UK Climate Impacts Programme or Defra's Farming Futures programme. As a result, we are taking a more direct role now in signposting and promoting these schemes to our supply base.

Encouraging Anaerobic Digestion:

- Anaerobic Digestion delivers a number of climate change benefits by reducing organic waste, producing green energy with a by-product of (non-oil based) fertiliser as well as producing additional revenue stream for UK farmers. There are currently around 20 anaerobic digesters in the UK, compared to several thousand in Germany.
- In the last year, Marks & Spencer funded a study tour to Germany for 27 farmers and other interested parties to look at on-farm AD. Feedback from the supply base was that demonstration units and the ability for farmers to talk one on one is a more effective way of instilling confidence in new technologies rather than leaflets and conferences.
- We recently carried out a survey of our supply base at the 2008 Agricultural shows and the feedback was that the market opportunity has changed considerably with commodity price increases and uncertainty over security of feedstock supply. More recently, we have had specific feedback that the most attractive options for farmers are small scale plants which provide on-site farm electricity or heat rather than export to the National Grid.

Marks & Spencer Biofuels Policy:

- Back in January 2007 we believed that the use of bio-fuels could play a key role in Plan A. We undertook a small trial to explore the use of bio-fuels in our lorries beyond the legal minimum. One year on, there's a growing consensus that they may create new problems, such as loss of habitat and adverse impact on food supply. We recognise and support the need for ongoing research in this area. However as a retailer, we are aware that our stated intentions provide strong market signals. To ensure we don't continue to encourage unsustainable biofuel production, we've publicly announced our moratorium on biofuels until sustainable sources of supply have been identified.

Marks & Spencer dairy carbon footprinting:

- Marks & Spencer have a dedicated dairy pool. Our producers were keen to proactively respond to consumers concerns about environmental issues and so we initiated a carbon footprinting study with Dairycrest Direct.
- They used a paper based model developed by DairyCrest Direct with the Centre for Sustainable Energy, Forum for the Future and Jim Webb from AEA Technology. They had access to advice and support via Dairycrest Direct but no on farm consultancy was required. Over a period of seven weeks all of the dairy pool have completed self assessment carbon footprinting models. Individual results were compiled and each producer received an analysis of how their enterprise compared to others in the pool. This was based on a simple visual similar to the energy efficiency scale used on electrical goods.
- This has raised not only environmental but also economic competitiveness awareness among the pool who are now focusing on managing food, feed and fertiliser inputs more efficiently. On farm results are now being shared in small producer business groups on a regular basis. Producers tell us they value such small networks of other farmers to determine action plans and the sense of community enables them to understand areas they can improve further. This is very similar to the Ben and Jerry's Caring Dairy initiative which works well in the Netherlands.
- We will continue to evaluate this model, but so far found this network based farmer driven approach works well as an engagement mechanism for our producers and a useful structure which we can rapidly implement a particular direction or policy.

Engaging consumers

**How do we achieve multiple objectives from land and water?
What mix of mechanisms do we need to tackle market failure ?**

As a retailer, we stand at the centre of a unique spider's web that links our farming and manufacturing supply chains with our 21 million customers who consume and use our products. This input relates specifically to discussion point 1.26 in the discussion document.

Marks & Spencer customer research on 'green issues':

Our most recent research categorises consumer attitudes on green issues under four broad categories:

- 'Green crusaders' (11% of consumers and 24% of our 75,000 employees) – the most well informed and passionate group. 'Green crusaders' are already making a significant difference themselves and expect business to take a lead as well.
 - 'If it's easy' (27% of consumers and 54% of M&S employees) – increasingly positive people who recognise that there are issues to be addressed. They are willing to play their part provided it does not require significant personal change or sacrifice.
 - 'What's the point' (38% of consumers, 21% of M&S employees) – people who are increasingly concerned about environmental and social issues but don't believe that they personally can make a difference. They hope government, business and other groups will take a lead in addressing green issues; they may be willing to make changes themselves as part of an identifiable group in which their contribution is matched by others.
 - 'Not my problem' (24% of consumers and only 1% of M&S employees) – people who haven't engaged with green issues to date. Some of them doubt the scientific evidence behind issues such as climate change; others are simply unaware of the problem.
- Therefore in conclusion, we need to be careful about assumptions that customers are prepared to pay a premium. The challenge for the food supply chain is to balance improved environmental benefits with increased competitiveness. We know many opportunities exist to improve efficiency of inputs on farm which will also deliver cost benefits as well as improved environmental benefits.
 - To be successful in using improved environmental standards to differentiate Marks & Spencer food we know that we're going to have to 'take our customers with us'. Improved consumer awareness and literacy on environmental issues is critical to enable this to happen. There is currently confusion in the market place with many single point issues only being addressed through labelling and certification schemes. Any thinking on land use changes needs to find an effective way to ensure that the industry is not promoting initiatives which could have unintended consequences ie focusing on reduction of greenhouse gases to the exclusion of all other factors.
 - The recent Cabinet Office report was a good first step for government in presenting more a more joined up approach to food nutrition, food security and delivering environmental benefit. The next step will be to turn this into actual policies which the industry can work to and communicate to customers.