YOUR M&S
marksandspencer.com/PlanA

WWF

Good water stewardship:
guidance for agricultural suppliers

Good water stewardship: guidance for agricultural suppliers

This guide has been produced by WWF and Marks and Spencer to help you, as agricultural producers, start to better understand your water risks and how to reduce these risks through ***good water stewardship***. It aims to help you identify ways to improve the use and management of the freshwater resources that are critical to the sustainability of your business. While it has been written for suppliers growing both irrigated and rain-fed crops, some sections are more relevant for those abstracting water for irrigation.

Introduction

Water scarcity and sustainable water resource management is quickly rising to the top of the agenda for many businesses. Population growth, climate change, changing consumption habits and the expansion of economies are all increasing competition for scarce water resources. These factors are creating a set of emerging risks for business: supply chains and operations will be threatened if businesses are unable to access enough water of the right quality, at the right time. But the risks extend beyond physical water supply. For instance, the reputation of a brand can be severely damaged if it is associated with poor water use in an area where local people struggle with water scarcity or where the ecology of rivers and lakes is being damaged.

Every farmer appreciates the dependency of agriculture on water: to a large extent, the quantity, quality and timing of water from rain, rivers, aquifers or streams, and the technologies available to deliver water, determine productivity and crop yield. Recognising this reality, there is a strong business case for producers to invest in solutions that will improve the availability of water for production when it is needed, through on-site water capture, storage and use, while reducing impacts on other water users and on freshwater habitats. M&S would like to promote water efficiency techniques and solutions to all of its suppliers and as such have produced a 'Water Efficiency Guide', which provides a number of recommendations for improving water efficiency on farms.

While a clear business case can be made for focusing on operational efficiency, it is critical that businesses recognise that internal efforts alone will not reduce water risks. Surface water sources and aquifers are connected systems, so the availability and use of water in one place will affect those in other areas. In other words "we all live downstream". This reality forms the basis for the concept of shared water risks, which can only be effectively addressed by collective action.

Nearly every farmer is likely to depend on the cooperation of other farmers, water users, government and stakeholders in a catchment area to receive the necessary volume and quality of water at the right time. If farmers, together with these other stakeholders, manage their water resources responsibly on a collective basis, water of adequate supply, quality and timing is more likely to be a reality, to the benefit of all. This concept is at the heart of water stewardship.

WWF is a pioneer in the sustainable management of water resources, from working in river basins across the world to engaging in global-level water policy debates. With its sound understanding of water science and policy, and the needs of business, people and the environment, WWF is leading private, public and NGO actors in a joined-up approach to help mitigate the water challenges we face.

M&S is addressing its direct water use impacts by improving the efficiency of water used in its business operations. However, this alone is not enough to reduce risk to the business and improve sustainability. As part of Plan A, and through working in partnership with WWF, M&S is committed to working with its suppliers to improve their water efficiency and encourage good water stewardship. The partnership will be initially focused on working with suppliers that operate in key 'water hotspot' sourcing regions, and has begun the process of engaging with stakeholders in Kenya and Spain.

What is water stewardship?

Good water stewardship for the individual is about understanding how they can:

- ***Minimise their impacts on the water environment by as much as is realistically possible;***
- ***Engage and collaborate with other users to also reduce their impacts***
- ***Help strengthen the way in which water resources are managed***

This approach is consistent with the perspectives of the growing number of NGOs, public policy bodies and private sector organisations that are involved in global water policy debates, through initiatives such as the Alliance for Water Stewardship and CEO Mandate (see links in the last section).

This following image illustrates the inter-linkages between users in a river basin, and the pressures that they, and a changing climate, place on water resources.

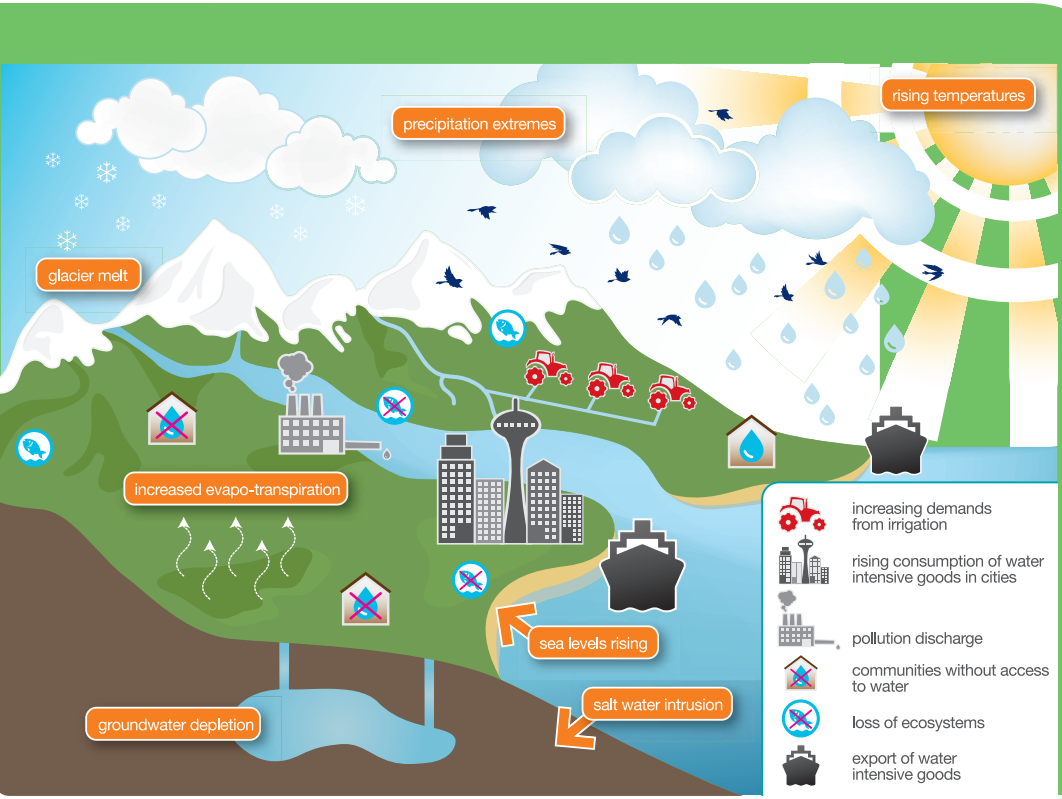
The water stewardship approach is relevant whether a producer is motivated by an imminent water crisis, sees increasing risk over time, wishes to develop an ethical market advantage, or is motivated by a sense of social responsibility.

While the path of water stewardship may at first sight seem daunting, it is important to recognise that this is a long term process, aimed at reducing what might be an increasing level of risk, so it is important to make a start. This inevitably begins with improving your own operational practices, and exploring the water risks facing you and other water users in the local area.

The key questions to answer are:

- *How well do you understand your current and emerging water risks?*

- *What level of activity and engagement is necessary to reduce these risks?*



The water stewardship journey

For an agricultural supplier, the water stewardship journey may look like this:

- ***Begin with 'getting your house in order' by examining water use and risks in your farm and factory operation***
- ***Next, engage local water management schemes, policy processes, and other water users in the local area who face similar risks.***
- ***Finally, ongoing engagement with regional and national water-focused groups and processes, including those run by governments.***

Getting your house in order	Engage local stakeholders	Engage regional and national stakeholder and policy processes
Your Operation	***Your Scheme***	***Your Catchment***

Stage 1

Understanding water risk

1.1	1.2	1.3	1.4	1.5
Where do you get your water from and where does your wastewater go?	Who are the other water users?	What is your impact on these water resources and other users?	Which groups are active in water?	How might future trends affect risks?

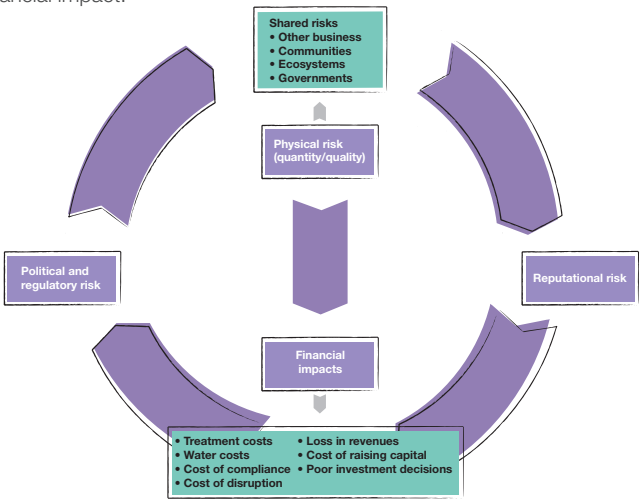
To be able to tackle water risks, you first need to understand them.

Producers face three broad categories of water related risks:

– Direct ***physical*** risks related to the availability, reliability and quality of water supply.
– ***Regulatory*** risks caused by changing allocation of abstraction and discharge licences, which are often politically influenced.
– Associated ***reputational*** and ***market*** risk linked to the perceived ecological and social impacts of water withdrawals and discharges.

The relationship between risks

This diagram shows how all these risks start from physical risk and can result in financial impact.



The following questions help you to better understand these risks.

1.1 Where do you get your water from and where does your wastewater go?

It is important to understand the sources of the water which you use and the legal rights and obligations you have to that water. Water may either come from a local surface water source or aquifer, be transferred from a different part of the basin, or come from a completely different basin altogether. You should also consider the point of discharge of your return water flow i.e. the water that leaves your holding to rejoin the publically available water resource. For producers who rely on significant inputs from other producers, it may be relevant to assess the water resources these producers are using.

In all of these situations, it is important to know the answer to the following questions:

1. How much water do you use and when do you need it?
2. How much water and of what quality are you legally entitled to abstract or discharge?
3. From which water resource or scheme do you get your water?
4. How much should you be paying for your water rights and under what circumstances can they be taken away?
5. Which organization or institution is responsible for managing water and regulating abstractions and discharges?
6. What services are you receiving in exchange for your water charges?

If you do not have a legal entitlement to use water or are not paying the set charges, obtaining a permit and paying for water should be your initial goal – without such a permit, water might be taken away from you very easily. The information above should be readily available in your area from a local water users association or the relevant government agency. Answering these questions will help you keep your local government accountable to you for the services it provides.

Understanding water risk continued

1.2 Who are the other water users?

Individual water users by themselves typically do not have a major impact on a surface water source or aquifer, but the cumulative abstraction of all users does. It is important to understand which other sectors are using water from the water source you rely on as these are both your possible competitors for water and your potential partners in stewardship.

You should find out the nature of their current use and their future needs. In addition you should determine the political importance of other users (for example household water supply in cities may be a priority over agricultural supply in the eyes of the current government).

Key questions to address are:
1. Who are the other key water users in your area?
2. How significant are they in terms of use/impact?
3. Are they upstream or downstream of you in the river basin?
4. What is their social/political importance?

1.3 What impacts do you and other water users collectively have on water resources?

The following are primary ways in which agricultural production might impact water resources:

- Reducing water availability in rivers, aquifers and lakes as a result of abstraction (legal & illegal)
- Polluting surface and ground water sources and the environment with chemicals and soil particles in return flows
- Degrading environment services by planting in wetlands and close to riverbanks, and by diverting river channels for irrigation.

These impacts are cumulative, and good water stewardship involves working with other users and stakeholders to understand the cumulative impacts, the ecological needs of rivers and wetlands, and the ways in which the environment may be maintained sustainably. It is also important to understand the environmental services that wetland ecosystems can provide – such as naturally improving water quality, recharging aquifers and providing breeding grounds for fisheries, which can be vital to local populations. Neglecting the cumulative use of water may lead to social unrest, reputational damage, or unfavourable changes to water regulations, in particular if the water resource is over-allocated i.e. permits for use of water exceed what is available.

Key questions to address are:
1. What are the pressures on your water sources?
2. How effectively are you using water?
3. Has the environment or specific ecosystems been significantly degraded
4. Has the access to water for social use (households and communities) been impaired?
5. Do any other users lack a reliable water supply?
If the answer to any of these questions is yes, then you are likely to face water risks and need to consider how to managed these risks.

1.4 Which groups are active in water?

There are three main types of group that are important for water stewardship.

1. Local and regional government bodies – these agencies are mandated to apply the rules for managing water according to public policy.
2. Farmer, business and community associations – these often form in response to public policy or specific local issues, which may include water management.
3. NGOs – there are often a number of NGOs concerned about the environment, social equity and water usage, with a range of activities including convening local stakeholders to find collaborative solutions.

It is important to engage with the appropriate institutions, not only to affect change, but also to learn about current and emerging policies, shared risks, and environmental impact and good practice in the local area. These organisations can help to provide you with insights and information to answer some of the questions posed in 1.3. If no specific stakeholder platform for water exists, then you should consider how you might address water risk through your local agricultural or business association, or even consider how such a platform can be established.

Key questions to address are:

1. Who are the major players in water, and what are there roles power and influence?
2. Which stakeholder engagement platforms exist for water?
3. If no platforms exist, which bodies could have their mandate extended to include dialogue on water, or how could such a platform be set up?

1.5 How might future trends affect risks?

Changing climate, demands and impacts of human development and evolving regulatory policy will all influence the quantity, quality and timing of water available to users in future. Understanding these changes will be critical to maintaining current operations and planning future investments. Beyond your immediate operations, you should understand the ways in which these changes will impact the ecological environment and local communities in your area.

The best way to learn about the water future of the area is to engage the three institutions listed above (government, associations and NGOs) to understand the extent to which they have assessed potential climatic, economic, social, and ecological changes. Where there are gaps in understanding, jointly commissioning studies into water resources could be a good way to start to build relationships with these institutions.

In addition to what occurs in your local area, you need to be aware of changes to markets for your products, such as rising ethical and environmental standards and increasing awareness of water-related risks amongst buyers, retailers and investors.

Key questions to address are:

1. Have the future climate and development pressures on water resources in your catchment been assessed? If not, is there scope for jointly assessing them?
2. How might these affect current risks and what new risks might these create?
3. What are the changes to trends in the demands and perceptions of your customers regarding water and how might these affect you?

By answering the questions in stage 1 concerning your operations, your social and environmental context, your impact, your available engagement platforms, and your potential water future, you are poised to answer the following questions, which are critical to the water stewardship journey:

a. What are the nature and levels of your water risks?
b. Where should your water stewardship response focus on?

Stage 2

Responding to water risk at a local and catchment level

The previous section guides the assessment of risk. This section guides the water stewardship response to that risk.

2.1 What does stewardship mean for you?

Your business operations, the local water resource and the wider catchment should be your primary focus for water stewardship. Your approach to water stewardship will be influenced by the following factors:

1. The current and future water risks you are exposed to
2. How advanced you are in getting your own house in order
3. Your influence in the area and the scale of the catchment
4. Existing stakeholder platforms
5. The policy and practice of water management in your area

Within this context, you should pursue the twin objectives of guaranteeing your water entitlement and ensuring, insofar as possible, adequate water supply for social and ecological requirements. These goals can only be achieved through positive water governance at a local, catchment and national level, which depends on sound policy, effective public officials and active stakeholders. Good governance requires active engagement from local user groups, which includes you!

2.2 How should you engage with local stakeholders?

There are a number of ways that you as an individual user may engage. These avenues vary by region but start with the following:

1. Talk to your neighbours – a good starting point is to talk to your neighbours about water risks in your area. Doing so will help you understand the risks that you face and what others are doing to address them.

2. Engage your local water user association – in many countries, water user associations or similar organisations play an important role in managing the water resource in local catchments and are most often made up of local users such as yourself.
3. Talk to your local government body – local departments often have stakeholder engagement initiatives, which actively seek out the input of local users in decision processes.
4. Seek out stakeholder engagement platforms – these platforms are a good resource to find current information on the state of water and policy initiatives in your area. Many NGOs help facilitate these processes and may be able to assist in accessing funding for pilot projects for water stewardship.

Through these avenues, your ultimate goal is to change how water is managed and used in order to be more socially, environmentally and economically sustainable – ultimately the only way to reduce shared water risks. If you are motivated by resolution of shared risk and clearly communicate your intentions to other stakeholders, a process of building trust and cooperation can begin, which is fundamental to positive change.

2.3 How can you engage at a catchment scale to encourage good governance?

National or provincial government usually has a mandate for water resources management and may have a regional or catchment office responsible for all water resources in an area.

Remember the following when engaging these institutions:
1. Your local platform is the best way to make your voice heard
2. Policy makers need consistent feedback from water users to make good water policy
3. Look to build long-term relationships with these entities. A shared understanding of the challenges and how to overcome them is critical.

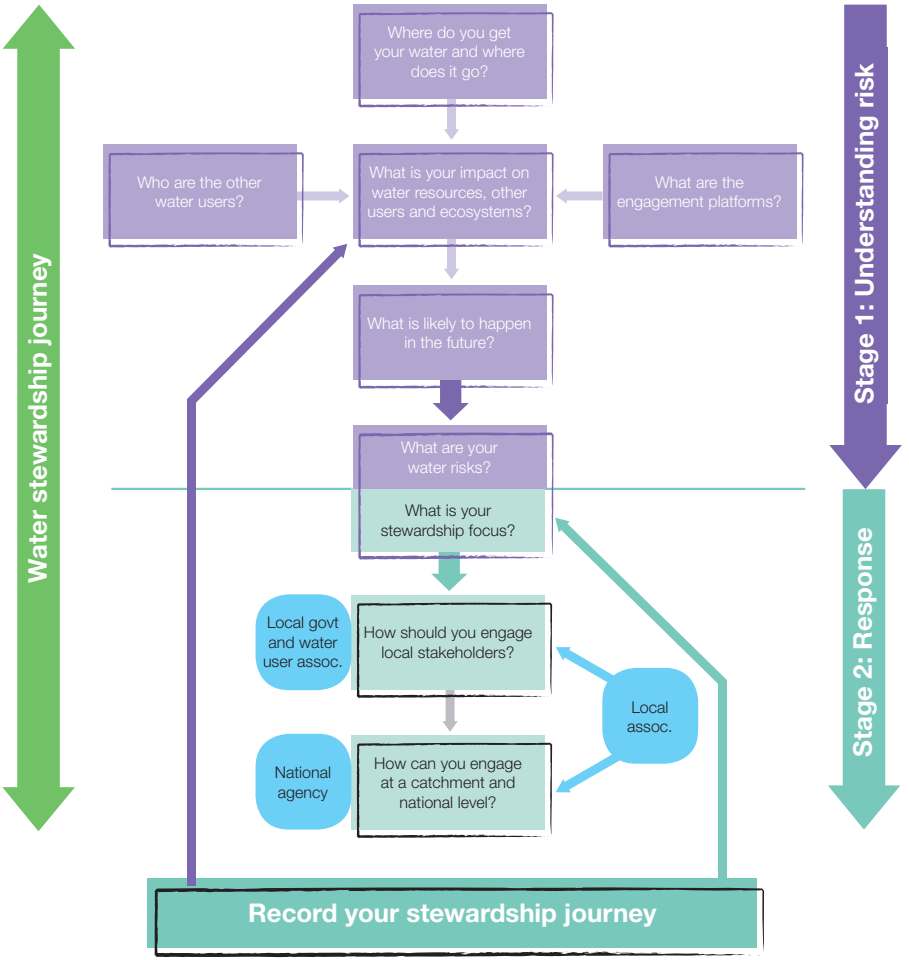
In many areas, local, provincial, and national government water management bodies may lack capacity and be unable to enforce water management regulations. A key consideration should be the degree of engagement that is required to ensure positive water stewardship in the catchment. A business decision for this sort of engagement will depend on the level of water risks you face, the likely future pressures, the strength and involvement of other stakeholders, and the policy and institutional context.

Responding to water risk at a local and catchment level continued

2.4

Keep a record of your journey

It is important to keep a record of your water stewardship journey. Such a record can help assess whether your effort is making a difference. Simply keeping a record of the amount, quality, and timing of water at your farm can help to demonstrate improvements in water management. This information you collect will help you focus your water stewardship efforts and better engage your neighbours and other stakeholders.



Case studies

Horticulture in Kenya

Lake Naivasha is the center of the horticulture industry in Kenya, which is the largest contributor of foreign exchange to the country. The lake is the second largest in Kenya and has traditionally been a valuable resource for irrigation, fishing, farming, livestock grazing, and geothermal energy. However, as a result of over-abstraction, pollution and declining biodiversity, the water catchment area has come under significant stress jeopardizing industry and livelihoods there. There are large irrigators who conduct commercial horticulture, pastoralists who live a nomadic existence in the region, a vibrant tourism industry, water service providers who supply potable water to local residents, and commercial users, such as the state utility KENGEN, who use water for geothermal electricity. Given these different players with differing interests, only a collective approach can be taken to begin to address the water stress in the region.

Industries around Lake Naivasha have taken the initiative to address water use and environmental management by helping to implement Kenya's national water policy, which promotes decentralised governance by user groups. The Lake Naivasha Growers' Group (LNGG), which includes companies such as Homegrown, funded a Water Allocation Plan to guide the establishment of multiple local Water Resource Users' Associations (WRUAs). The LNGG has supported the WRUAs in the area, particularly those in the upper catchment, who significantly impact water availability and quality, in adopting water conservation measures and environmentally friendly livelihood strategies. LANAWRUA, the WRUA responsible for Lake Naivasha and the immediate area around its perimeter, is currently seeking funding with the assistance of the government, CARE International and WWF, to broaden its activities and undertake components of its own Sub-Catchment Management Plan to improve positive water management in the region. This case illustrates the benefits of a group of companies getting together to help implement what is a good national water policy on paper, to help reduce shared risk around the lake.

Bottling company in Honduras

In the Manchawala watershed in Honduras, water quality and availability have been negatively impacted by overusage by industries in San Pedro Sula and poor forestry management and agricultural practices by communities in the upper areas of the watershed. This difficulty has worsened over time as more industries require water and the rural population has grown creating additional sedimentation in the system. This also impacts the functioning of the ecologically and economically important Meso American Reef (the world's second largest reef system) off the east coast of Central America.

Anchored by an engagement with Cervezeria Hondurenea, a subsidiary of SABMiller and bottler of Coca-Cola products, WWF-Central America adopted a two-stage approach to the problem. First, WWF assisted the bottler in implementing more efficient water usage practices in its operations. Second, WWF engaged with the local communities and encouraged better forest management by teaching better subsistence agricultural practices, which do not harm the forest cover and reduce soil erosion. WWF, with funding from USAID and the Coca-Cola foundation, facilitated the payment of communities to plant and maintain trees with the assistance of grants. These practices have led to reduced sedimentation and increased availability of supply in the pilot phases of the project. The later phases will incorporate more communities enhancing forest cover and more industries contributing to the payments for ecological management.

Case studies continued

Fresh produce suppliers in Spain

The Almeria catchment area in southern Spain is one of the most arid regions of the EU, but it also has a high agricultural output as a result of favourable year-round growing conditions. Agricultural production is the backbone of the local economy, and the allocation of precious water resources is a sensitive topic. In an attempt to provide more water, the government has developed a number of transfer schemes and desalination facilities, but despite these efforts, groundwater resources have seriously deteriorated and the environment has suffered.

In response to this growing crisis, the Food Ethics Council held several multi-stakeholder workshops, anchored by an engagement with Prima-Flor, a company producing leafy vegetables, aimed at creating a better understanding amongst water-related stakeholders of the water issues for the Prima-Flor – M&S supply chain. The workshops were attended by local representatives from NGOs, the water provider, the farmer's union and the public administrator. Delegates jointly conducted exercises like mapping the flow of water from physical to virtual forms, and assessing stakeholder power in the supply chain, affecting water availability.

The Food Ethics Council found that the primary incentive these farmers had to participate was to be 'ahead of the game' in shifts in quality standards demanded by supermarkets, so as to stay competitive. Stakeholders agreed that retailers should use water criteria to assess their suppliers, including elements of water legality, aquifer status, total water availability, and the use of efficient irrigation systems. The stakeholder group agreed that these indicators should be designed with the equal participation of suppliers, other farmers, supermarket buyers, policymakers and competing water users, to explore how water risks can be minimised. M&S have already included water as an agricultural indicator in their Field to Fork and TRAK farming protocols. A range of stakeholders including LEAF, WWF and farmers were involved in the creation of these indicators. In the future, M&S plan to further develop these indicators with water being one of the key areas of focus.

Photography credits and acknowledgements

Front/back cover	River Kennet - © Jiri Rezac/WWF-UK
Page 2	Children playing in polluted river Jakarta Raya, Indonesia - © Rob Webster/WWF
Page 6	River Itchen - © Jiri Rezac/WWF-UK
Page 8	Image courtesy of Flamingo
Page 9	Image courtesy of Flamingo
Page 10	River Kennet - © Jiri Rezac/WWF-UK
Page 11	Top: WWF - HSBC Wetland Programme 2003: Chihuahua Desert, Mexico. © Edward Parker/WWF-Canon Bottom: ©Edward Parker/WWF-Canon.
Pages 14/15	Agricultural land in Kathmandu valley. Nepal. © Simon de Trey-White/WWF-UK

Where you get additional information

Water efficiency
M&S Water Efficiency Guide (available to download from Supplier Exchange)

Water risk:
WEF http://www.weforum.org/en/initiatives/water/index.htm
WWF http://www.panda.org/what_we_do/how_we_work/conservation/freshwater/

Water stewardship:
AWS http://www.allianceforwaterstewardship.org/
CEO Mandate http://www.unglobalcompact.org/Issues/Environment/CEO_Water_Mandate/

Water and agriculture
Water for Food, Water for Life: A Comprehensive Assessment of Water Management in Agriculture
http://www.iwmi.cgiar.org/Assessment/

If you would like to discuss these issues with M&S contact:
- Lauren Orme, Sustainable Development Manager: lauren.orme@marks-and-spencer.com
- Louise Nicholls, Head of Responsible Sourcing for M&S Foods: louise.nicholls@marks-and-spencer.com
- Jo Wiggett, Food Plan A Delivery Manager: Joanne.wiggett@marks-and-spencer.com

If you would like to find out more about WWF's work on water stewardship contact:
- Robin Farrington, Water Policy Advisor, WWF-UK: rfarrington@wwf.org.uk
- Dave Tickner, Head of Freshwater, WWF-UK: dtickner@wwf.org.uk

FSC
Recycled
Supporting responsible use of forest resources
Cert no. SGS-COC-003156
www.fsc.org
© 1996 Forest Stewardship Council

This document is printed on Revive uncoated, a 100% recycled paper made from post–consumer collected waste. Revive uncoated is manufactured to the certified environmental management system ISO 14001.

Plan A DOING THE RIGHT THING

MARKS & SPENCER

The mission of WWF is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by

- **conserving the world's biological diversity**
- **ensuring that the use of renewable natural resources is sustainable**
- **reducing pollution and wasteful consumption**

PlanA protecting the most valued natural resources for the future

Natural resources

This guide was prepared with the help of:

PEGASYS INTERNATIONAL

FOOD ETHICS COUNCIL

Flamingo

WWF

wwf.org.uk

for a living planet®

WWF-UK
Panda House, Weyside Park
Godalming, Surrey GU7 1XR
t: 01483 426444
f: 01483 426409

March 2010