





# **Asian Fast Moving Consumer Goods:**

A Sustainability Guide for Financiers and Companies

Commodities | Water | Packaging

#### On the cover

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WWF is one of the world's largest and most experienced independent conservation organizations, with over 5 million supporters and a global network active in more than 100 countries. WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

WWF's International Finance Programme seeks to support this vision by engaging directly with banks, asset managers and other financial institutions. It helps strengthen lending and investment criteria for key industry sectors, provides insights and data on environmental and social risks, fulfils critical research gaps and helps unlock innovation breakthroughs in sustainable financial products.

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# FOREWORD: CREDIT SUISSE

The January 2016 edition of the World Bank's *Global Economic Prospects* report forecasts economic growth in the East Asia and Pacific region and in South Asia at around 6.3 per cent and 7.3 per cent, respectively, in the period 2016-2018. In the context of current economic uncertainty, and while forecasts may change, we can



"The vulnerability of the FMCG sector to these risks is clear, reiterating the critical importance for companies and financiers involved in the sector to be better positioned to understand and manage such risks in the value chain"

be reasonably sure that economic growth will continue to be driven by increased private consumption.

As Asia has undergone significant economic, industrial and social change in recent years, transforming how people live and consume, the Asian fast moving consumer goods (FMCG) sector has emerged as an important economic growth engine and a key component of financiers' portfolios. Increased per capita consumption also increases our collective demands upon natural resources to source the commodities that feed our supply chains. The key issues of water management, and product packaging materials and waste management are also explored in this guide through the use of case studies.

Against this context of consumption, the World Economic Forum's *Global Risks Report 2016* revealed the global risks of highest concern over the next decade to be water crises, the failure of climate change mitigation and adaptation, extreme weather events and food crises. The vulnerability of the FMCG sector to these risks is clear, reiterating the critical importance for companies and financiers involved in the sector to be better positioned to understand and manage such risks in the value chain. Given the complexity and materiality of such key issues within supply chains, and the challenges of issue visibility and impact measurement, the guide's reference to robust sustainability certification schemes is particularly important.

Equally important is the active participation of companies and financiers through multi-stakeholder platforms to jointly develop and promote practicable and acceptable sustainability standards. The 2015 release of the Sustainable Development Goals re-emphasizes the importance of multi-stakeholder partnerships as part of necessary strategies to drive the sustainable development agenda. In the spirit of sharing industry good practices on policies and actions, and supporting collaboration between civic society and the private sector, Credit Suisse is pleased to support the publication of this guide.

## René Buholzer

Global Head, Sustainability Affairs, Credit Suisse AG

# **FOREWORD: STEWART INVESTORS**

FMCG companies can make wonderful investments. They can provide consistent and reliable cash flows, predictable margins and given they typically sell products people actually need, they perform well throughout the economic cycle. The prospect is bright for FMCG companies in Asia. As the disposable incomes of



"We would encourage all FMCG companies to read the report. The detail WWF goes into outlining the risks and opportunities, but also importantly the solutions and examples of best practice, should be insightful to all" tens of millions of Asians rise, so does the demand for more variety and convenience in food and other consumer goods. The sales of domestic companies serving local tastes, as well as those of multinationals producing western fares, have grown very quickly over the last 20 years.

We have been investing in Asian FMCG companies for over two decades and it's remarkable how much things have improved when it comes to sustainability. In the early days, getting a set of accounts in English was a challenge and sustainability reports were unheard of. But that is not to say Asian FMCG companies were not 'doing sustainability', it's just that they did it in their own way.

However, 'impacts' from Asia are now so great that Asian FMCG companies are compelled to evolve their approach. It is not just about the water or energy used in factories. The impacts of FMCG companies are being seen far and wide. The haze problems clearly evident from forest fires in Indonesia are inextricably linked to the supply chains of FMCG companies. At the other end of the spectrum, half of the 8 million tonnes of plastic that ends up in the ocean each year comes from China, Indonesia, the Philippines, Thailand and Vietnam, largely as a result of the products sold by FMCG companies.

These headwinds are extremely relevant long-term investment issues in Asia, not 20 or 30 years from now, but today. The concept of 'social licence to operate' is pertinent: whether they realize it or not, all companies depend upon an implicit acquiescence of society that they may undertake their operations. Those companies which pollute the environment, mistreat labour, avoid tax, bribe politicians or produce products which slowly poison their consumers risk endangering their licence to operate. We seek management teams which understand these points and businesses which are able to continuously replenish their implicit licences by contributing positively toward social and environmental outcomes, while making profits for shareholders.

WWF has done an excellent job outlining the business case for FMCG companies to do more to manage sustainability issues as it relates to environmental matters. They identify the sourcing of commodities, water risk and packaging as main areas of concern. The report clearly outlines the risks and opportunities presented by these sustainability issues and does a good job highlighting areas for improvement for FMCG companies, but also importantly for the finance sector.

We agree with many of the points raised by WWF and would go further to suggest that the approach companies take to managing these issues is a broad proxy for their overall quality of management and should feed into an investor's decision-making processes.

We would encourage all FMCG companies to read the report. The detail WWF goes into outlining the risks and opportunities, but also importantly the solutions and examples of best practice, should be insightful to all. We are convinced that companies that choose to strengthen their approach to sustainability issues will minimize risk and will be better placed over the long run to deliver improved shareholder value.

And we should not forget the role of the finance sector in addressing these long-term sustainable development challenges. The finance sector plays a very important role in society given the impact of its capital allocation decisions. This report should not only help the finance sector make better capital allocation decisions, but also help them be better lenders, investors and owners of companies.

Our role in the finance sector is that of an investor and we will certainly find the report useful in our dialogue with Asian FMCG companies and support them in their development of an in-context approach to these important sustainability issues.

## **Amanda McCluskey**

Stewart Investors

# **ABBREVIATIONS**

**AWS** Alliance for Water Stewardship BEI Banking Environment Initiative CGF Consumer Goods Forum CSA Corporate Sustainability Assessment **CSP** Coalition for Sustainable Packaging **CSR** corporate social responsibility **EPCI Environmental Paper Company Index** ESG environmental, social and governance **EPA Environmental Protection Agency EUTR** European Union Timber Regulation **FMCG** fast moving consumer goods **FMU** forest management unit FSC Forest Stewardship Council **GFTN** Global Forest & Trade Network GHG greenhouse gas **GRSB** Global Roundtable for Sustainable Beef **HPDE** high-density polyethylene HCV High Conservation Value **ICCR** Interfaith Center on Corporate Responsibility IFC **International Finance Corporation** MSC Marine Stewardship Council **NBIM** Norges Bank Investment Management **PEFC** Programme for the Endorsement of Forest Certification **PET** polyethylene terephthalate POIG Palm Oil Innovation Group PRI Principles for Responsible Investment R&D research & development **RSPO** Roundtable on Sustainable Palm Oil **RTRS** Round Table on Responsible Soy SPA Singapore Packaging Agreement SPC Sustainable Packaging Coalition WRI World Resources Institute

Zero Net Deforestation and Forest Degradation

ZNDD



# INTRODUCTION TO THE GUIDE

Asian fast moving consumer goods (FMCG) are an important growth sector for the Asian economies and hence an important component of financiers' portfolios. A 2015 report by PWC¹ estimated that the food, beverage and tobacco category in Asia will grow by 9 per cent per annum compared to a global average of 6.4 per cent, and that by 2018, Asia will account for US\$5.9 trillion, or 60 per cent, of global consumer expenditure in this category. The same report estimated that consumer spending on household and personal care goods will rise in Asia by an average of 8.5 per cent per year to reach US\$730 billion by 2018.

Extreme weather events, water and food crises, and climate change all feature in the World Economic Forum's top 10 global risks survey. Such environmental risks and accompanying trends will have a profound effect on Asian economies, some of which are already experiencing escalating problems related to water scarcity. The FMCG sector (defined as food and beverage, household and personal care) is particularly vulnerable to these risks through its long and diverse raw material supply chains.

In addition, Asian consumer and retailer attitudes toward the sustainability performance of consumer goods manufacturers are changing. Studies show that more consumers in Asia are considering the social and environmental impacts of the products they purchase. NGOs are launching more consumer awareness campaigns with calls to action focusing on the consumer's ability to choose wisely and responsibly. The recent move by retailers in Singapore to destock paper-based household products from a manufacturer linked to the haze demonstrates how access to market can be abruptly halted as retailers adopt responsible sourcing policies. Such actions can have significant negative impact on the revenues of the affected FMCG companies.

Awareness of these environmental and social issues and the related business value at risk is lower at many Asian FMCG companies in comparison to their international peers who have more ambitious sustainability profiles. Investor engagement on these issues and corporate disclosure by listed Asian FMCG companies are also generally lower. As such, it is imperative for Asian FMCG management and their financiers

(lending banks and investors) to embark upon a dialogue to promote sustainable practices and ensure the long-term viability of the industry.

This guide aims to help Asian FMCG companies and their financiers understand the environmental issues related to the three most important primary inputs impacting their gross margins and on which they can take immediate action - soft commodities (agricultural, forest and seafood commodities), water and packaging – and the commercial relevance of managing these issues. For each input, the guide provides an overview of existing initiatives in the finance sector, identifies key risks, sets out the business benefits of sustainable practices, and provides steps for managing related environmental risks.

AWARENESS OF **ENVIRONMENTAL** AND SOCIAL ISSUES AND THE RELATED **BUSINESS VALUE** AT RISK IS LOWER **AT MANY ASIAN FMCG COMPANIES** IN COMPARISON TO THEIR INTERNATIONAL PEERS WHO HAVE **MORE AMBITIOUS SUSTAINABILITY PROFILES** 

The guide does not address the climate impacts related to energy use since there are many other relevant publications addressing this topic. Energy is of course an important primary input for FMCG companies, being used in their operations, manufacturing processes and in the transport and refrigeration of their products, as well as in the production of the raw materials. FMCG companies should already be acting to reduce their overall energy demand (through efficiency and waste reduction), source their energy from non-fossil fuel sources (switch to renewable sources), take embedded energy into account in sourcing decisions, and help educate their customers. For those just starting to address energy and climate issues, the most obvious place for companies to begin is by working aggressively on efficiency which will reduce greenhouse gas (GHG) emissions and (likely) also lead to immediate financial savings.

The guide also presents an overview of the steps disclosed by 26 large Asian FMCG companies across nine countries to manage the issues around these inputs (a summary of which is included below).

Finally, the guide provides useful insight on hurdles faced by FMCG companies and good practice solutions to inspire Asian FMCG management to overcome these challenges.

Financiers are increasingly looking into the value chains of FMCG companies to better understand risks and opportunities that impact growth and valuations. They can use this guide when building an investment case, for conducting due diligence on FMCG portfolio companies, or as part of any ongoing dialogue or engagement. Companies can use the same questions and insights to strengthen their internal risk (and opportunity) analysis and practices.

Figure 1: Asian FMCG companies' disclosure of their steps to address sustainability issues

	Sourcing	Water footprint*			
	certified commodities	Direct water use	Agri supply chain water use	Consumer water use	Assessment of packaging design to protect products
Amorepacific Corp	YES	YES		YES	
Charoen Pokphand Foods PCL	YES***	YES			
China Mengniu Dairy Co Ltd		YES			
Dutch Lady Milk Industries Bhd	YES	YES			
Emami Ltd					
Fraser & Neave Holdings Bhd		YES			
Fraser & Neave Ltd		YES			
Godrej Consumer Products Ltd		YES			
Hindustan Unilever Ltd	YES	YES	YES	YES	
Indofood CBP Sukses Makmur Tbk PT		YES			
Masan Consumer Corp					
Mayora Indah Tbk PT					
Nestlé Malaysia Bhd	YES	YES	YES		YES
Orion Corp/Republic of Korea					
Petra Foods Ltd	YES				
San Miguel Corp		YES			
Super Group Ltd/Singapore					
Thai Beverage PCL		YES			
Thai Union Frozen Products PCL	YES***	YES			
Tingyi Cayman Islands Holding Corp		YES			
Tsingtao Brewery Co Ltd					
Ultrajaya Milk Industry & Trading Co Tbk PT					
Unilever Indonesia Tbk PT	YES	YES	YES	YES	
Universal Robina Corp					
Vietnam Dairy Products Joint Stock Company		YES			
Want Want China Holdings Ltd		YES	YES		

Packaging**			
RESPONSIBLE SOURCING OF MATERIALS		Design	End of life and
Use of certified paper-based packaging	Use of recycled materials	optimization	recycling infrastructure
	YES	YES	YES
		YES	
YES	YES		YES
YES			
	YES	YES	
	YES	YES	
YES	YES	YES	YES
	YES	YES	YES
YES	YES	YES	YES
	YES		
	YES	YES	
	YES	YES	
YES	YES	YES	YES
YES			

- \*Companies with 'yes' have disclosed some steps to address the issues around water, although most are focusing on water footprint rather than water risk.
- \*\*Note that for sustainable packaging, a systems-based approach must be adopted and the four strategies shown here need to be considered within this context and not as standalone strategies.
- \*\*\*Note that Charoen Pokphand Foods PCL and Thai Union Frozen Products PCL use certification standards that are not supported by WWF. Refer to chapter 1 for attributes of credible and effective standards that WWF supports.

# **ABOUT THIS GUIDE**

# **TARGET AUDIENCE**

This guide is intended for senior decision-makers and implementing teams across various contexts:

- Investors: risk officers, portfolio managers, analysts covering the consumer goods sector, environmental, social and governance (ESG) analysts;
- Banks: credit officers, industry coverage bankers, investment/research analysts covering the consumer goods sector, sustainability officers;
- FMCG companies: board members, senior executives (for example, CEOs, CFOs, and operations and procurement directors), sustainability officers.



## **OBJECTIVES**

The objectives of this guide are to:

- Highlight major environmental issues for three main inputs in FMCG supply chains;
- Provide an overview of the levels of disclosure by large Asian FMCG companies and enable financiers to compare relative quality of disclosure and performance between companies;
- 3. Highlight the current level of finance sector focus and initiatives on these issues to demonstrate the increasing emphasis on them by financiers;
- Demonstrate to companies and financiers the business benefits of tackling the identified issues through sustainable operating practices;
- 5. Provide frameworks for companies to address their key issues and for financiers to assess the relative performance of companies;
- Provide background information on the issues and identify resources, including collaborative initiatives, where companies and financiers can obtain further information and support;
- 7. Provide examples of existing good practices to inspire FMCG companies to take action.

## **METHODOLOGY**

This guide undertakes a review of the information disclosed by 26 FMCG companies from nine Asian countries on the topics of soft commodities, water and packaging. A sample of three or four companies, each of them with a minimum market capitalization of around SG\$1 billion, was selected for each of the nine countries. In each case the review is based on public disclosure that the company has made available through annual or sustainability/corporate social responsibility (CSR) reports, or through its corporate website. The research used information published prior to 20 November 2015, particularly from the most recent annual reports. The companies were not interviewed and have not verified the information contained in this report.

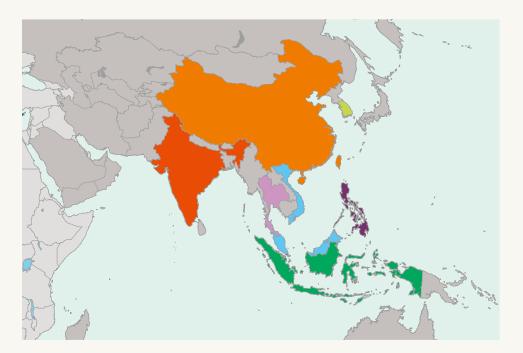
Only English language disclosure was reviewed, which may not provide a comprehensive overview of the companies' sustainability performance compared to local language disclosure. However this was done expressly to understand what type of information international investors had access to. It was also done to make the point that companies should disclose sustainability information in English as well as in the local language, in the same way they do for financial information, given material ESG issues are in effect business issues that should be brought to investors' attention.

In addition, WWF did not assess the quality of disclosure apart from assessing if there was indeed disclosure on the particular issue. WWF did not assess whether the steps disclosed or their implementation were adequate. We have provided examples of what the companies disclosed at face value to inform investors about the extent and quality of information available in the context of what WWF has described as good practices in the chapters. The side by side listing of disclosed information is to facilitate comparison and engagement by financiers. This is done expressly to promote dialogue and to allow financiers to adopt the relevant frameworks and insights and do their own analysis. There is no intention to grade or score the actual performance of the FMCG companies in this report.

The guide cites certain FMCG companies as examples of good market practice, however WWF does not endorse any company or the company's practices as a whole.

Organizations reviewed come from the following nine countries:

- China • India • Indonesia • Philippines Malaysia
- Singapore • South Korea • Thailand • Vietnam



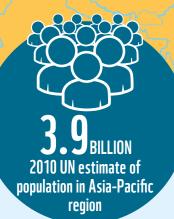
# RECOMMENDATIONS

WWF recommends that financiers assess their portfolio companies as well as potential new investments/ clients as an urgent priority using the frameworks and insights provided, and begin an immediate dialogue with Asian FMCG company management to spur action.

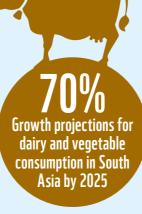
By tying the cost of and access to capital to more sustainable practices and using their influence as shareholders and lenders to engage with companies, financiers can ensure that the growing Asian FMCG sector can be robust and viable in the long term, contributing to the sustainable development needs of the region.

WWF urges Asian FMCG companies to take immediate steps to address the core issues in their supply chains pertaining to commodities, water and packaging. Based on the multiple examples provided of existing market practice and the commercial arguments for sustainable practices on these three fronts, there is no reason why Asian FMCG companies cannot take steps now to improve their performance. WWF calls on these companies to publish ambitious targets and action plans and to report on progress achieved.

Through our guides, insights and active involvement in platforms concerning certification of commodities, water stewardship and sustainable packaging, WWF stands ready to support companies on their sustainability journey. We will also monitor commitments and results achieved by FMCG companies in this area and will publish summaries of performance in future years.



**Expected number of** middle class in Asia by 2030



TRILLION US DOLLARS Expected spending of Asian middle class bv 2030

# **ASIA: A BOOMING REGION** A SOARING FMCG SECTOR

Asia has undergone significant economic, industrial and social change in recent times, transforming where and how people live – and prompting a notable expansion of the FMCG sector.

Asia's recent history is a story of growth. According to 2010 UN estimates, 3.9 billion people live in the Asia-Pacific region.<sup>3</sup> Globally, the number of people classified as 'middle class' continues to increase. In 2009, 1.8 billion consumers globally were classified as middle class; by 2030 the number is expected to rise to 4.9 billion, spending US\$55.7 trillion annually. By then, Asia is expected to account for two-thirds of the global middle class and three-fifths of their spending.4

Many in Asia, particularly the growing middle class, are moving to cities. By 2010, Asia's urban

population numbered almost 1.6 billion, an urbanization rate of 40 per cent,5 which will continue to grow. Other changing trends include more women in the workforce.

With these statistics, it is no surprise that the Asia-Pacific region has become the single largest user of natural resources in the world.6

# FMCG SECTOR GROWTH, **ENVIRONMENTAL IMPACTS**

The FMCG sector is rapidly growing to cater for this growing middle class urbanized population and their changing preferences.

Demand has shifted, particularly among the middle class, from consuming staple carbohydrates such as rice, to processed or packaged convenience foods including chilled goods, meat and dairy products. 7 In South Asia, growth projections to 2025 are 70 per cent for dairy and vegetable consumption and 100 per cent for meat consumption.8

There is also a growing focus on food safety and traceability. Middle and upper income consumers are willing to pay more for products that comply with health standards, and that meet their expectations for taste, appearance and packaging.9

Urbanization has increased transportation requirements and given rise to new distribution channels, particularly supermarkets. During the 2000s, annual growth of supermarket retail sales in China, India and Vietnam averaged 28 per cent to 50 per cent. 10 This sales increase is composed of growth within individual retail chains as well as increases in the number of retail chains. The growth in number of supermarket outlets has created additional distribution points for food, beverage, household and personal care items, which has helped to drive consumer demand.

Such socio-economic changes have environmental and social impacts. For example they exacerbate the demand-supply imbalance of water as more water is needed to produce









# SOCIO-ECONOMIC CHANGES HAVE ENVIRONMENTAL AND SOCIAL IMPACTS. FOR EXAMPLE THEY EXACERBATE THE **DEMAND-SUPPLY IMBALANCE OF WATER AS MORE WATER** IS NEEDED TO PRODUCE MEAT AND DAIRY, AND TO PROCESS AND PACKAGE CONVENIENCE FOODS COMPARED TO TRADITIONAL DIETS

meat and dairy, and to process and package convenience foods compared to traditional diets. 11 Bottled juice, water and soda are also becoming popular in Asia, 12 all of which require large amounts of water.

# **RISKS TO FMCG COMPANIES**

These lifestyle and economic conditions have intensified the demand on natural resources and increased the type and complexity of environmental challenges and business risks FMCG companies face across their value chains.

FMCG companies contribute to environmental pressures through unsustainable practices, from which they may be able to emerge unscathed in the short run. However, these pressures may materially and reputationally impact businesses in the medium and long term due to their reliance on natural resources for their long-term viability and growth.

For example, it has been estimated that agriculture, forestry and other land uses account for 20-24 per cent of global anthropogenic emissions of GHGs.<sup>13</sup> As such, the unsustainable production of soft commodities used by FMCG companies contributes to climate change, which in turn has a negative impact on FMCG companies via negative shocks to raw material availability/pricing and water availability. South and Southeast Asian countries are also particularly vulnerable to the effects of climate change. The type and severity of effects vary by country, but include temperature increases, and greater prevalence of droughts, floods, typhoons and unpredictable precipitation.14

These factors can impact on ability to grow the crops, rear the livestock, and produce the seafood on which FMCG companies depend. 15 FMCG companies need to address this negative feedback loop if they are to remain viable in the long run.

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# 1. INTRODUCTION AND SUMMARY

From palm oil and sugar to dairy and seafood, Asian FMCG companies depend heavily on soft commodities to maintain and grow their business. In fact, FMCG companies are typically the largest users of these commodities. Companies need a reliable, good quality, reasonably priced and reputational risk-free supply of raw materials to allow them to manufacture, brand and sell their goods.

However, environmental degradation, problems with local communities and labour, and mounting issues such as climate change are making it more challenging for producers to provide consistent and growing supplies of commodities. Furthermore, many common soft commodity production practices are exacerbating these environmental and social challenges. This will have a direct impact on FMCG companies' ability to source raw materials.

## ASIA FALLING BEHIND GLOBAL FMCG COMPANIES

Global FMCG companies are among the leaders in implementing sourcing policies to remove these risks from their supply chains and take advantage of related opportunities. Global investors and banks have been engaging with global FMCG companies to promote responsible sourcing. This plays a role in mitigating systemic risks, such as climate change, water scarcity and deforestation. It also reduces risks and enhances quality of earnings at portfolio companies.

However, Asian FMCG companies have only started to identify and manage these issues; they remain behind global leaders and may have vulnerabilities in

# AWARENESS OF NEGATIVE IMPACTS OF SOFT COMMODITIES IS RISING

- Awareness of the negative environmental and social impacts of soft commodities and how these affect businesses is increasing. Of the 162 Global 500 companies that reported to the CDP Global Forests Report 2014, 74 per cent recognized at least one material business risk associated with the key commodities driving deforestation. In terms of the types of risks recognized, 55 per cent of companies recognized at least one reputational risk across commodities; 51 per cent of companies recognized at least one operational risk and 45 per cent of companies recognized at least one regulatory risk.<sup>16</sup>
- In line with the growing awareness of the need to address these concerns, 14 US-based FMCG companies, including General Mills, Mars Inc and PepsiCo, signed a joint letter in November 2015 calling on world leaders to adopt a strong global climate deal at the COP21 climate conference in Paris.<sup>17</sup> In this letter, the companies stated that government, civil society and business need to play their part in tackling climate change and one of the three commitments they disclosed was focused on boosting their efforts to make their supply chains more sustainable.





OF THE 162 GLOBAL **500 COMPANIES** THAT REPORTED TO THE CDP GLOBAL **FORESTS REPORT** 2014, 74 PER CENT RECOGNIZED AT LEAST ONE **MATERIAL BUSINESS RISK ASSOCIATED** WITH THE KEY COMMODITIES DEFORESTATION

Figure 2: Companies' disclosure of their sourcing of certified responsibly produced commodities

\*Note that Charoen Pokphand PCL and Thai Union Frozen Products PCL use certification standards that are not considered credible by WWF. Refer to page 38 for attributes of standards that WWF supports.

their supply chains. They urgently need to employ the strongest management approach possible: time-bound, quantified procurement targets based on third party certification standards.

This chapter:

- Reviews finance sector initiatives in commodity supply chains;
- Sets out the major environmental and social issues linked to commodity production;
- Reviews certified responsible commodity production;
- Reviews the uptake of certified responsibly produced commodities, in particular by Asian FMCG companies;
- Highlights the business benefits of sourcing certified responsibly produced commodities;
- Identifies solutions and existing market practices to the hurdles some companies may encounter.

The following table shows which large Asian FMCG companies are disclosing their sourcing of certified responsibly produced commodities.

Companies disclosing their sourcing of certified commodities	Companies NOT disclosing their sourcing of certified commodities		
Amorepacific Corp	China Mengniu Dairy Co Ltd		
Charoen Pokphand Foods PCL*	Emami Ltd		
Dutch Lady Milk Industries Bhd	Fraser & Neave Holdings Bhd		
Hindustan Unilever Ltd	Fraser & Neave Ltd		
Nestlé Malaysia Bhd	Godrej Consumer Products Ltd		
Petra Foods Ltd	Indofood CBP Sukses Makmur Tbk PT		
Thai Union Frozen Products PCL*	Masan Consumer Corp		
Unilever Indonesia Tbk PT	Mayora Indah Tbk PT		
	Orion Corp/Republic of Korea		
	San Miguel Corp		
	Super Group Ltd/Singapore		
	Tingyi Cayman Islands Holding Corp		
	Thai Beverage PCL		
	Tsingtao Brewery Co Ltd		
	Ultrajaya Milk Industry & Trading Co Tbk PT		
	Universal Robina Corp		
	Vietnam Dairy Products Joint Stock Company		
	Want Want China Holdings Ltd		

# SOURCING RESPONSIBLY PRODUCED COMMODITIES: THE BUSINESS BENEFITS

The sourcing of responsibly produced commodities offers a wide range of benefits to FMCG companies.

## **Operational benefits**

Evidence from studies across several commodities is that certification processes result in higher yields and more stable long-term supplies. Through supporting their suppliers to undergo certification, FMCG companies can create more resilient supply chains, with greater transparency, and higher quality control.

## Reduced reputational risks

As markets mature, brand value represents an increasingly large percentage of a company's market capitalization. Asian companies that do not make an effort to source responsibly produced commodities run the risk of being seen as laggards by civil society stakeholders, financiers and consumers – with negative consequences for their reputation. Those that move ahead may find new opportunities.



# Positive branding opportunities

Evidence from product take-up and marketing surveys finds that products made with responsibly produced commodities can have a marketing advantage over conventional products. Nielsen found that Asia-Pacific is the region with the strongest propensity to buy socially responsible brands.<sup>18</sup>

### Anticipating tighter retailer sourcing policies

An increasing number of retailers in developed markets have pledged to use responsibly produced commodities in private-label products and also in the products that they stock on shelves. This presents a risk for Asian FMCG companies if they are not able to meet these requirements. It also represents an opportunity to increase their market share by developing a base of sustainable products to serve the demand.

## Reduced regulatory risks

There are a number of risks that may result from sourcing commodities not produced in accordance with regulation. Estimates vary but a significant proportion of palm oil is thought not to be in compliance with domestic law. Risks include supplier disruption, direct fines, reputational risks, and restrictions on market access. All certified responsibly produced commodity standards reduce these risks as they require compliance with the law.

ASIAN COMPANIES
THAT DO NOT
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TO SOURCE
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PRODUCED
COMMODITIES
RUN THE RISK OF
BEING SEEN AS
LAGGARDS BY
CIVIL SOCIETY
STAKEHOLDERS,
FINANCIERS AND
CONSUMERS

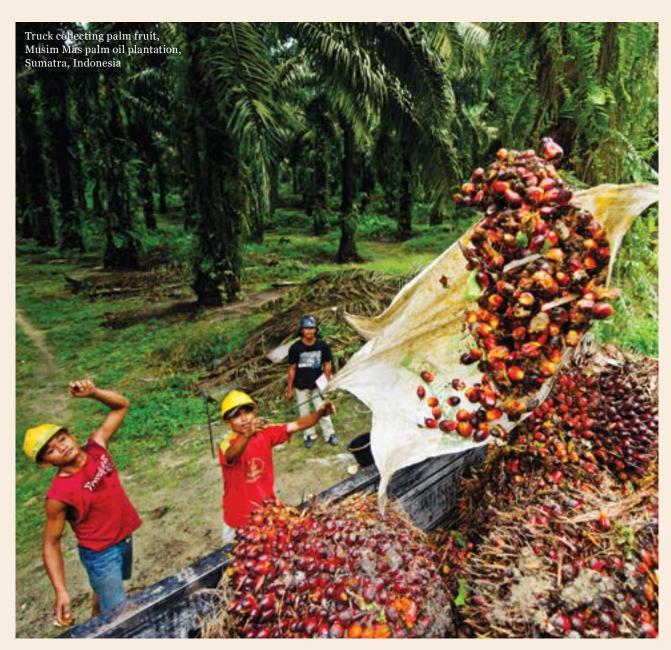
## STEPS TO ACHIEVE THESE BENEFITS

Companies are adopting a number of strategies to take advantage of opportunities and create more resilient supply chains. FMCG companies should consider the following steps:

- · Build internal capacity to understand environmental and social issues in the supply chain.
- Map and assess raw materials supply chains to identify where these issues present risks and/or opportunities to the company.
- Consider the resilience of suppliers to environmental and social shocks.
- Establish the cost of various certification schemes.
  - o Consider suppliers' needs for capacity building, training and financing.
  - o Consider synergies to be achieved through partnering with suppliers and other buyers.
- Establish the potential marketing benefits of products with sustainable attributes.
- Assess which customer markets have the highest potential for sustainable products and potential impact of sustainability leadership on brand value and customer loyalty.
- Develop a sustainable sourcing policy and formulate plans to implement the policy. The best policies include:
  - o Quantified and time-bound key performance indicators;
  - o Sourcing based on certification standards that are international, credible, independent and have input from multiple stakeholders;
  - o Complementing certification by participating in platforms such as the Palm Oil Innovation Group (POIG) to innovate and stretch the certification schemes and make commitments to achieve higher levels of performance, for example the Roundtable on Sustainable Palm Oil (RSPO) NEXT criteria;
  - o Clear protocols regarding supplier codes of conduct.
- Set out an internal governance structure with clear responsibilities for reviewing the policy and monitoring and reporting on its implementation.

# **ENGAGEMENT QUESTIONS FOR INVESTORS**

- What are the most significant environmental and social risks and opportunities in the company's supply chain, production and marketing processes?
- How is the company identifying and addressing these risks with its policies? How is it capturing opportunities?
- What are barriers to implementation?
- How does the company decide what to disclose about its supply chain-related policies?



# 2. EXISTING FOCUS ON RESPONSIBLE SOFT COMMODITY PRODUCTION AND PROCUREMENT BY THE FINANCIAL SECTOR

The finance sector is working to address the concerns related to soft commodity production (and procurement) through direct engagement as well as a variety of collaborative forums, including the Banking Environment Initiative (BEI), finance sector membership of the RSPO, initiatives of the UN-backed Principles for Responsible Investment (PRI), CDP's Forests Program, and Ceres.

In addition, the finance sector has produced a number of guides on responsible investment in various soft commodities, such as the International Finance Corporation (IFC)'s Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources. 19

## **COLLABORATIVE INITIATIVES**



#### The Banking Environment Initiative

The BEI's mission is "to lead the banking industry in collectively directing capital toward environmentally and socially sustainable economic development".

Major work streams include the BEI and the Consumer Goods Forum (CGF)'s Soft Commodities Compact which has been signed by 12 banks including Barclays, Deutsche Bank, UBS, Rabobank, JP Morgan and Standard Chartered.<sup>20</sup> The Compact requires the banks to work with and consider financing solutions for their customers so that by 2020 their customers comply with RSPO, Round Table on Responsible Soy (RTRS) and Forest Stewardship Council (FSC) standards21 in the palm oil, soy and forest products sectors respectively. The Compact aligns the banking industry with the CGF's resolution to achieve zero net deforestation in their supply chains by 2020.

The BEI's Sustainable Shipment Letter of Credit is one of the first tangible results of the Compact. This is a financing solution banks can use to incentivize the international trade of sustainably produced commodities. The IFC has confirmed it will offer preferential terms for this type of shipment to its partner banks, piloting the facility for the palm oil sector, where it will offer potential reductions in the cost of capital.<sup>22</sup>



### Roundtable on Sustainable Palm Oil

The RSPO's primary mission is to advance the production, procurement, finance and use of sustainable palm oil products. The RSPO has 1,700 members representing palm oil producers, processors and traders, consumer goods manufacturers, retailers, banks/investors, and environmental and social NGOs.

Fifteen financial institutions are RSPO members. Of these, 12 are banks/credit institutions and three are investors. Financial members' commitments include abiding by the RSPO Code of Conduct; establishing relevant internal policy; specifying a time-bound plan for providing financial services/products to clients that are RSPO members who provide certified sustainable palm oil or derivative products; reporting progress on an annual basis; and requiring or encouraging clients to be members of the RSPO and promoting the RSPO as the preferred certification standard for their clients.



#### **CDP Forests Program**

At the time of its 2015 report, the CDP Forests Program acted on behalf of 298 investor signatories representing US\$19 trillion in assets. Under the programme, companies with forest commodity supply chains complete a survey that helps them better understand and manage related deforestation risks. The commodities covered are palm oil, timber, soy, beef and biofuels.

The survey questions focus on business risk management, covering areas such as risk assessment and analysis, measuring and monitoring of production, traceability, and governance systems. Questions on policy include high-level policy statements, membership of certification bodies/multi-stakeholder initiatives, and level of engagement with suppliers.



## **Principles for Responsible Investment**

PRI has an Investor Working Group on palm oil. This comprises 28 investors with US\$2.8 trillion under management, who directly engage with companies on ESG issues in palm oil supply chains. The group is represented on the RSPO through Generation Investment Management, which chairs the working group. Generation reports on the group's activities through its Annual Communication On Progress. The investor group commenced activities in 2010 engaging mainly with buyers in the EU. Subsequently it has engaged with buyers in India and China, and is now moving upstream to engage with producing companies. PRI also has a working group<sup>24</sup> which developed guidance for farmland investment, which was subsequently integrated into PRI in July 2014.



## Ceres

Ceres is a US-based non-profit organization that advocates for sustainability leadership. It works with investors, companies and public interest groups to accelerate and expand the adoption of sustainable business practices. Ceres' work includes

coordinating the filing of shareholder resolutions. In 2015 there were 10 resolutions relating to deforestation in the supply chain of FMCG companies, of which eight referred specifically to responsible sourcing of palm oil. There were seven such resolutions in 2014 and 10 in 2013. $^{25}$ 

Figure 3: Examples of shareholder resolutions coordinated by Ceres in relation to FMCG companies

Company (Year)	Resolution	Filer	Result
Kraft Foods Group Inc (2015)	Shareholders request the Board to prepare a public report, at reasonable cost and omitting proprietary information, by 1 December 2015, describing how Kraft is assessing the company's supply chain impact on deforestation and associated human rights issues, and its plans to mitigate these risks.	Domini Social Investments LLC	Vote: 30.3 per cent.  Information on the Kraft Foods Group website states that the company is working with its suppliers and "Kraft's leading suppliers are making strides in tracing their palm oil supply to identify which mills provide oil and to assess the sustainability risks related to those mills, including the likelihood of deforestation and human rights violations." 26
Avon Products Inc (2015)	Shareholders request the Board prepare an annual public report, at reasonable cost and omitting proprietary information, providing metrics and key performance indicators demonstrating the extent to which Avon is curtailing the impact of its palm oil supply chain on deforestation and human rights. <sup>27</sup>	Domini Social Investments LLC	Withdrawn, company will address.  Avon Products Inc updated its Avon Palm Oil Promise in July 2015 with commitments to deforestation-free and conflict-free palm oil. <sup>28</sup>
McDonald's Corp (2015)	Shareholders request that the Board prepare an annual public report, by 30 November 2015, at reasonable cost and omitting proprietary information, providing metrics and key performance indicators demonstrating the extent to which the company is curtailing the actual impact of its palm oil supply chain on deforestation and related human rights.	Green Century Capital Management	Withdrawn, company has addressed this. <sup>29</sup> McDonald's has presented its Sustainable Palm Oil Action Plan, including targets and metrics measuring progress, on its website. <sup>30</sup>
Target Corp (2015)	Shareholders request that Target report annually, beginning 30 November 2015, at reasonable cost and omitting proprietary information, providing key performance indicators demonstrating the extent to which the company is curtailing the impact on deforestation and human rights of its palm oil supply chain for its private-label products.	New York State Common Retirement Fund	Filed.  The company's policy and targets on palm oil are available on its website but no key performance indicators are stated. <sup>31</sup>
Wendy's Co (2015)	Shareholders request that the Board of directors adopt and implement a comprehensive sustainable agriculture policy that includes, inter alia, a target date for sourcing 100 per cent of key agricultural commodities sustainably and the use of credible and relevant third party standards and metrics.	Calvert Asset Management Company Inc	Withdrawn, company will address.  The company's Statement on Responsibly Sourcing Palm Oil is available on its website and indicates Wendy's recently applied for RSPO membership. <sup>32</sup>
Tyson Foods Inc (2015)	Shareholders request that the Board prepare an annual public report, initially by 1 May 2015, at reasonable cost and omitting proprietary information, providing metrics and key performance indicators demonstrating the extent to which the company is curtailing the actual impact of its palm oil supply chain on deforestation and human rights. These indicators would include the percentage of palm oil RSPO certified (including percentage GreenPalm, Mass Balance and/or Segregated).	New York State Common Retirement Fund	Vote: 9.7 per cent.  No information was found on this topic in Tyson Foods' public information.

Company (Year)	Resolution	Filer	Result
Yum! Brands Inc (2015)	Shareholders request the Board prepare an annual public report, at reasonable cost and omitting proprietary information, providing metrics and key performance indicators demonstrating the extent to which Yum! is curtailing the actual impact of its palm oil supply chain on deforestation and human rights.	Trillium Asset Management	Withdrawn, company will address. <sup>33</sup> The company's policy on palm oil is available on its website but does not state key performance indicators. <sup>34</sup>
Energizer Holdings Inc (2015) (makes batteries, shaving, skin care and tanning products)	Shareholders request that Energizer Holdings develop and implement a comprehensive sustainable palm oil sourcing policy. This policy should be communicated publicly within six months of the 2015 annual meeting.	Sisters of the Presentation of the Blessed Virgin Mary	Vote: 29 per cent.  No palm oil policy was found on the company's website.
Kellogg Co (2014)	Shareholders request that the Board prepare an annual public report, at reasonable cost and omitting proprietary information, by 1 October 2014, providing metrics and key performance indicators demonstrating the extent of progress on the company's stated commitment regarding "minimizing the carbon footprint of our palm oil supply chain and to respecting human rights including no forced or child labour, slavery or human trafficking."	Green Century Capital Management	Withdrawn, company will address.  Kellogg updated its Palm Oil Commitment in February 2015 to include information about its progress but this does not mention carbon footprint or human rights. <sup>35</sup>
JM Smucker Co (2014)	Shareholders request the Board to prepare a public report, at reasonable cost and omitting proprietary information, by February 2015, describing how Smucker's is assessing the company's supply chain impact on deforestation and associated human rights issues, and the company's plans to mitigate these risks.	Clean Yield Asset Management	Withdrawn, company will address.  The company's updated Palm Oil Policy was welcomed by investors and media in July 2014 following this withdrawn resolution. <sup>36</sup>
International Flavors & Fragrances Inc (IFF) (2015)	Shareholders request that IFF report annually at reasonable cost and omitting proprietary information, on key performance indicators demonstrating the extent to which the company is curtailing the impact of its palm oil supply chain on deforestation and human rights.	Calvert Asset Management Company Inc	Withdrawn, company will address.  The company's website and Policy on Sustainable Palm Oil do not state key performance indicators or progress on this topic. <sup>37</sup>

# SIGNIFICANT ACTIONS BY INDIVIDUAL INVESTORS ON SOFT COMMODITY ENVIRONMENTAL AND SOCIAL ISSUES

## Government Pension Fund Global's responsible management

Government Pension Fund Global's (Norwegian sovereign wealth fund with a market value of NOK7,019 billion (US\$805 billion) at the end of Q3, 2015<sup>38</sup>) investment mandate with Norges Bank Investment Management (NBIM) specifies certain elements of responsible management that the Bank must undertake on behalf of the Fund, including exclusions, development of principles, contribution to and alignment with international standards, and environment-related investments.<sup>39</sup>

In addition to ethics-based exclusions, the Fund divests from certain companies on the basis of environmental and social risk. There have been 114 such divestments in the past three years. Deforestation risk led to divestment of 27 Malaysian and Indonesian palm oil producers in 2012, 11 Indonesian coal companies in 2013, and five Indian coal companies in 2014. In August 2015, the Fund excluded four Asian companies from its investment universe due to the risk of severe environmental damage through conversion of tropical forest to palm oil plantations in Indonesia. 40 In addition, NBIM's document Climate Change Strategy: Expectations to Companies<sup>41</sup> sets out the steps it believes companies should take to manage relevant climate change-related risks.

## Institutional investors and consumer brands call on RSPO to strengthen its standards

In June 2015, institutional investors representing over US\$5 trillion in assets<sup>42</sup> joined some of the world's largest and most recognizable consumer brands to call on the RSPO to strengthen its standards for certifying the sustainable production of palm oil, in particular the criteria around deforestation and planting on peat. The investors included APG, PGGM, Swedish National Pension Fund, New Zealand Superannuation Fund, Aviva and Allianz Global Investors, while the brands included five of the top 10 corporate purchasers of palm oil globally: Colgate-Palmolive, Kao Corporation, PepsiCo, The Procter & Gamble Company, and The Johnson & Johnson Family of Consumer Companies.

The letter was organized by the office of New York State Comptroller Thomas P DiNapoli and Green Century Capital Management, both members of Ceres' Investor Network on Climate Risk – a group of more than 110 investors focused on addressing the financial risks and seizing the economic opportunities associated with tackling sustainability challenges.

# APG approaches Wilmar and its customers to enhance sustainability of palm oil operations

APG Asset Management, the Dutch-based pension fund manager with €428 billion of assets under management as of May 2015, highlights in its 2013 Responsible Investment Report<sup>43</sup> its successful engagement with Wilmar International. APG along with other investors convinced Wilmar to enhance the sustainability of its operations after a challenging two-year period of negotiations. In order to maximize its influence, APG approached not just the company itself but also its customers. APG felt that Wilmar had a duty to comply with the requirements agreed by producers, investors and civil society organizations during roundtable discussions on sustainable palm oil.

Under Wilmar's new policy, it intends to cease all further exploitation of peat bogs and contributions to deforestation. It also plans to provide local people with better information and to give them more opportunities to put their views across. The new policy applies not just to Wilmar itself, but also to its palm oil suppliers.

# Interfaith Center on Corporate Responsibility works with companies to reduce environmental impacts

The Interfaith Center on Corporate Responsibility (ICCR) frequently engages with companies with the aim of reducing environmental impacts. ICCR has engaged portfolio companies to promote sustainable palm oil sourcing and has seen some success: in 2015 Panera Bread announced it would issue its first palm oil policy after more than a year of dialogue and Yum! Brands committed to sourcing 100 per cent of its palm oil from sustainable sources by 2017. Progress has also been made with International Flavors & Fragrances and Sysco in their sustainable palm oil procurement policies.<sup>44</sup>

# RobecoSAM looks at deforestation and water risks across commodity supply chains, and engages with food companies

RobecoSAM uses its Corporate Sustainability Assessment (CSA) for over 2,000 companies to identify how well equipped they are to identify and respond to emerging opportunities and risks resulting from global sustainability trends. The CSA results serve as the basis for the construction of the prestigious Dow Jones Sustainability Indices. RobecoSAM is aware of the ESG issues in agricultural supply chains and states that "companies active in these commodity chains must have sound policies to combat deforestation and limit adverse effects on water availability". It has declared that it will engage with 18 food and agriculture companies, including Carrefour, Wilmar and Nestlé, on the most relevant commodities for their businesses. 45

# BNP Paribas's palm oil and wood pulp policies extend beyond lending to cover asset management

BNP Paribas, like several other global banks, has a palm oil sector policy<sup>46</sup> and a wood pulp sector policy.<sup>47</sup> However it is one of the few banks that extends such policies to cover its asset management business in addition to lending and other financial services. It states that: "BNP Paribas entities managing third party assets (with the exception of index-linked products) reflect this policy and develop standards adapted to their businesses which will exclude any stock or issuer that does not comply with their standards. External asset managers are actively monitored and strongly encouraged to implement similar standards." These policies list mandatory ESG requirements and recommend certification by the RSPO, FSC and Programme for the Endorsement of Forest Certification (PEFC) as part of the evaluation criteria.

# 3. ENVIRONMENTAL AND SOCIAL CHALLENGES RELATED TO SOFT COMMODITIES

Agricultural, forest and seafood products are very important for generating social and economic development in producing countries. However, their potentially devastating environmental impacts mean they need to be produced according to certain sustainability criteria in order to be socially, environmentally and economically sustainable over time.

Agricultural production (including cattle farming) has one of the largest environmental and social impacts of any economic activity.<sup>48</sup> Agriculture drives 80 per cent of deforestation worldwide. 49 It also accounts for 70 per cent of freshwater withdrawals globally,<sup>50</sup> leaving over a third of the world experiencing water shortages.

Seafood also poses issues. More than 3 billion people<sup>51</sup> rely on it as a primary source of protein, but 53 per cent of the world's fisheries are fully exploited, and 32 per cent are overexploited, depleted, or recovering from depletion.<sup>52</sup>

Demand for natural resources has doubled since 1966, and the global economy is currently using the equivalent of 1.5 planet Earths in natural resources. At the same time, global biodiversity declined by 52 per cent between 1970 and 2010, as measured by WWF's Living Planet Index in its 2014 Living Planet Report. 53 Biodiversity loss is greatest in the tropics, which have seen a 56 per cent decline.

It is vital that soft commodities are produced sustainably - not only to deal with these massive challenges, but to keep companies viable. Soft commodity yields are very sensitive and dependent on a stable and robust ecosystem. Changes in temperature, floods and droughts caused by climate change can have significant impacts on yields.

Producers failing to adopt responsible production methods are damaging their own future viability and FMCG companies not sourcing certified responsibly produced soft commodities are sending the wrong signals to producers and making their own supply chains less resilient.







**FMCG COMPANIES** NOT SOURCING CERTIFIED RESPONSIBLY PRODUCED SOFT COMMODITIES **ARE SENDING THE WRONG SIGNALS TO PRODUCERS AND** MAKING THEIR OWN **SUPPLY CHAINS LESS RESILIENT** 

# WHICH COMMODITIES ARE MOST PROBLEMATIC?

WWF has identified 15 globally traded soft commodities that pose some of the greatest threats to biodiversity, carbon sinks and watersheds, particularly in the world's most important places for conservation. Many small producers and people depend on the production of these commodities, while at the same time systems of production may



pose a threat to small businesses and producers. Livelihoods can be impacted positively or negatively depending on the level of sustainability within production systems.

The commodities identified include:

- The high footprint commodities palm oil, pulp and paper, timber, beef, and soy, which are the five largest drivers of tropical deforestation and associated carbon emissions globally;
- 'Thirsty' crops sugarcane and cotton, which are major withdrawers from the world's water table;
- Key wild-caught seafood commodities tuna and whitefish;
- Farmed shrimp and salmon which have an increasing footprint, with aquaculture being the world's fastest-growing source of animal protein and recently overtaking wild-caught fish as the largest volume of seafood globally.

# 4. ADDRESSING ENVIRONMENTAL AND SOCIAL CHALLENGES IN SOFT **COMMODITIES THROUGH CERTIFICATION**

Fortunately it is possible to produce the commodities FMCG companies and people need while conserving the environment, respecting the rights of indigenous communities and providing decent livelihoods.

This requires a more considered approach to production processes, employing methods such as more efficient use of water, improving seed varieties, setting aside forests, and maintaining and improving soil quality. It also includes considering social issues such as land rights for local communities, legal production, and labour rights for workers.

Within this, deforestation is a central concern. There is much debate and ambiguity over what should qualify as deforestation-free and how it should be verified. However, an overly narrow focus on deforestation risks drawing attention away from other threats (such as forest degradation and the loss of non-forest habitats) and other dimensions of sustainability (such as health and safety, human rights and social welfare). For these reasons WWF sees 'deforestation-free' as a critical aspect of sustainability, but not a proxy for, or superior trait to, full sustainability. Certification against credible, multi-stakeholder standards is one of the best ways to ensure that all major aspects of sustainability are dealt with. See page 62, appendix on deforestation, for more details.

To assist in the transition to more responsible production systems, WWF has worked with various multi-stakeholder initiatives, where stakeholders along the supply chain agree on principles and set standards for better social, ecological and economic management practices that are effective on a large scale. This has resulted in several robust and credible voluntary standards. These require independent, third party certification, and are internationally recognized tools to provide supply chain transparency.

A number of certification standards working to reduce deforestation are shown in the following table.



Figure 4: Certification standards working to reduce deforestation

# **Standard**

# Criteria regarding deforestation



Forest Stewardship Council<sup>54</sup>

Timber/pulp and paper

Criteria to maintain high conservation value (HCV) forests and severely limit
the conversion of natural forest to plantation or other uses
 Criteria to maintain
or restore ecosystems, their biodiversity, resources and landscapes
 Criteria to
respect traditional rights and indigenous people and their dependence on forests



Bonsucro<sup>55</sup>
– **Sugar** 

• Criteria to prohibit cultivation of sugarcane on areas of critical conservation value (including HCV categories 1-6) and areas legally protected • Key environmental issues (biodiversity, ecosystem services and soil, for example) are covered by an environmental impact and management plan



 Criteria regarding environmental responsibility and conservation of natural resources and biodiversity
 Criteria on responsible development of new plantings (not in HCV areas or primary forest and plans to minimize GHG emissions)
 For RSPO NEXT, additional criteria of no deforestation, no planting on peat or High Carbon Stock areas, no community conflict from land clearance



 Criteria regarding the expansion of land (not in native forests, and HCV area assessments need to be done before expansion in other areas)
 Criteria on safeguarding of on-farm biodiversity

# 5. PRODUCTION AND UPTAKE OF RESPONSIBLY PRODUCED **COMMODITIES IN ASIA**

As new standards are developed the challenge becomes encouraging consumers, manufacturers and producers to adopt certified commodities so as to mainstream them. Globally there have been production increases in certified materials across a range of commodities. There are no consistent regional production or consumption statistics for certified commodities, however there is enough information to highlight growth in certified production and consumption across Asia.



## **PRODUCTION**

#### Palm oil

Palm oil production, which is focused largely in Malaysia and Indonesia, has seen dramatic growth in the adoption of responsible practices in recent years, with RSPO certification now accounting for around 20 per cent of global production.<sup>58</sup>



### Pulp and paper

Although complete numbers on responsibly produced paper in the region are missing, it is clear that the production of certified responsibly produced pulp and paper is increasing.\* In Asia there were already more than 8 million hectares of forests/ plantations which are FSC-certified in 2015, and the number of FSC chain of custody certificates of manufacturing companies and retailers has been growing steadily in China. China currently holds the world record in FSC chain of custody certificates, with over 4,000 companies being certified.



### Sugar

Certified sugar has yet to show progress in the region, though more than 40 per cent of sugar worldwide is produced and consumed in Asia. The recently launched Better Sugar Cane Initiative (Bonsucro) is estimated to cover 3.8 per cent of global sugar production as of January 2016. To date, a few sugar mills have been certified in India and a few pre-audits have been done in Thailand. In comparison, Brazil has already certified 10 per cent of its sugarcane plantations according to Bonsucro standards, and both certified ethanol and sugar have been reaching Brazilian markets and international markets.

<sup>\*</sup> Much of this is to standards that WWF does not consider to be credible, such as PEFC.

Figure 5 shows the certification schemes related to FMCG products that have recently entered the market, and the percentage of each soft commodity certified.

Figure 5: Certification schemes



Voluntary standard system (with launch date)	Commodity	Indicator	Baseline (2009)	Status Jan 2016
FSC	Timber	% hectares of global production forest FSC certified	8.4%	15.7% <sup>59</sup>
Forest Stewardship Council (1994)	Pulp and paper	% FSC-certified hectares	4% FSC (virgin fibre) (Ha.)	7% FSC (virgin fibre)
			51.9% recycled	55.1% recycled <sup>60</sup>
Round Table on Responsible Soy (2004)	Soy	% RTRS-certified tonnes	0%	0.71% <sup>61</sup>
Roundtable on Sustainable Palm Oil (2003)	Palm oil	% RSPO-certified tonnes	1%	22.5% <sup>62</sup>
Bansucro (2004)	Sugar	% Bonsucro- certified tonnes	0%	3.83% <sup>63</sup>
Global Roundtable for Sustainable Beef (GRSB) (2012)	Livestock	% GRSB-certified tonnes	0%	0%
CERTIFED LESS STANDAUE STANDAU	Tuna	% MSC-certified tonnes	0%	14% <sup>64</sup>
Marine Stewardship Council (MSC) (1997)	Whitefish	% MSC-certified tonnes	19%	67% (priority whitefish) 53% (whitefish) <sup>65</sup>
Aquaculture Stewardship	Salmon	% ASC-certified tonnes	0%	14.71% <sup>66</sup>
Council (ASC) (2009)	Shrimp	% ASC-certified tonnes	0%	2.06% <sup>67</sup>

# **UPTAKE**

Large international FMCG companies have led the uptake of certified commodities, with many of them introducing time-bound commitments for implementing certification across their major commodities. However, much more needs to be done in Asia, where companies' uptake of responsibly produced commodities is limited.

Among companies globally, the level of risk recognition on soft commodity procurement is high. For example, the CDP Global Forests Report 2015<sup>68</sup> highlighted that of the 171 companies it analyzed, 75 per cent recognized at least one supply chain risk associated with forest risk commodities with the potential to generate a substantive change in business operations, revenue or expenditure.

Steps have been taken toward sustainable procurement too. Seventy per cent of companies in the CDP report said they had a commitment to addressing deforestation and forest degradation and 88 per cent reported opportunities related to the sustainable production or sourcing of forest-risk commodities. Among the manufacturers and retailers which responded to the CDP Program, 77 per cent reported having procurement standards for their sourcing of forest-risk commodities and 85 per cent of those with a procurement standard factor compliance against it into supplier selection.

However, there are gaps in implementation, especially in terms of requiring certification. The CDP report states that standards often lack details and only five respondents explicitly mentioned the training of their procurement teams on what their policies imply for commodity sourcing. On the specific topic of certification for palm oil sourcing, only 18 per cent of respondents require it while 18 per cent prefer it and 64 per cent of respondents encourage it. However the report states that 25 per cent of companies with a commitment to source certified palm oil are yet to get any into their supply chains and this figure reaches 50 per cent for soy.



WWF's Palm Oil Scorecard<sup>69</sup> confirms a limited participation of Asian companies in buying certified sustainable palm oil. Yet an increasing number of Asian companies are becoming members of the RSPO, such as Kao Corporation, Ajinomoto Co Inc and Charoen Pokphand Foods PCL.

Initiatives encouraging uptake

## **Consumer Goods Forum**

The CGF is leading the industry in terms of encouraging uptake. It is a platform of 400 global FMCG retailers, manufacturers, service providers and other stakeholders across 70 countries whose member companies have combined sales of over €2.5 trillion. In 2013, the CGF Board pledged "to mobilize resources within our respective businesses to help achieve zero net deforestation by 2020". The recommends that its members source certified palm oil,71 pulp, paper and packaging72 and soy.73

On 1 December 2015 the co-chairs of the CGF Sustainability Working Group issued a statement explaining the necessity for individual companies to collaborate with governments on public-private partnerships to reach the common objective to reduce deforestation.74 The statement indicated that CGF members intend to follow what they call a 'produce and protect' approach through which they will prioritize their commodity sourcing from areas where jurisdictional forest and climate initiatives have been designed and are being implemented. Only a few Asian FMCG companies are members of the CGF, mainly Japanese companies.

### Palm Oil Innovation Group and national initiatives

The POIG states that it both builds on RSPO standards and commitments and demonstrates innovation in order to support and go further than the RSPO.<sup>75</sup> The POIG has 16 members, including FMCG companies Danone and Ferrero, alongside palm oil companies such as Musim Mas, and NGOs. The fact that Danone and Ferrero recently joined the POIG shows how FMCG companies can innovate to influence the adoption of voluntary best practices for sourcing commodities.<sup>76</sup>

There are also national initiatives on sourcing sustainable palm oil which impact FMCG companies operating in those countries. These include initiatives in Belgium, France, Germany, Denmark, the Netherlands and the United Kingdom which have made commitments to source sustainable palm oil.<sup>77</sup>

### The Global Forest & Trade Network

The Global Forest & Trade Network (GFTN) links over 200 companies, communities, NGOs and entrepreneurs in more than 30 countries around the world. Its goal is to create a new market for environmentally responsible forest products. Since 1991, market-driven demands from GFTN participants have increased the economic incentives for responsible forest management. This is helping to ensure that millions of hectares of forests are independently and credibly certified, guaranteeing that the forests are well managed and that their products come from legal and sustainable timber harvests. This has enhanced the ability of participating FMCG companies to manage deforestation and forest degradation risks by increasing the amount of FSC-certified wood products available and the number of companies on track to become certified.



FMCG COMPANIES' UPTAKE OF RESPONSIBLY PRODUCED COMMODITIES IN ASIA IS STILL LIMITED BUT IS GROWING WWF's GFTN-North America programme has collaborated with Kimberly-Clark on its long-standing commitment to a 100 per cent certified fibre supply, with a preference for FSC-certified fibre supply. In 2014 FSC-certified virgin fibre accounted for 52.4 per cent of the total fibre used in its tissue products globally, with an additional 32.2 per cent made up of recycled fibre.<sup>78</sup>

### Uptake in Asia limited but growing

The table opposite shows the steps disclosed by major listed Asian FMCG companies on sourcing of responsibly produced commodities, highlighting that FMCG companies' uptake of responsibly produced commodities in Asia is still limited but is growing.

Figure 6: Companies' disclosure of commitments on certified commodities



Company name	Disclosure on sourcing of certified commodities
Hindustan Unilever Ltd <sup>82</sup>	Unilever Group:  Committed to sourcing all agricultural raw materials sustainably by 2020 in line with Unilever Group's commitment to achieving zero net deforestation associated with palm oil, soy, paper and board, and beef no later than 2020.*  Extended commitment to tea business and supply chains using Rainforest Alliance and Trustea (industry code to embrace sustainability, safety and quality in tea sourcing) certifications with a target of 100 per cent certification of tea bags by 2015.  Hindustan Unilever:  All the palm derivatives of Hindustan Unilever have RSPO certificates.  Nearly 90 per cent of paper and board used for packing products is from certified and sustainably managed forests. The paper and board mills selected are FSC chain of custody certified. All carton supply partners are FSC and PEFC certified.  Unilever has joined the Bonsucro roundtable with Hindustan Unilever set to become the first food and beverage company to use sustainable sugar in India.  *NOTE: Unilever Group states on its website <sup>83</sup> that because each of its agricultural raw materials has a different growing method it has developed detailed guidelines for its key crops, published in its Unilever Sustainable Agriculture Code, which it requires all its suppliers to follow in the absence of a credible external standard.  Examples of how Unilever aims to meet its target to source all agricultural raw materials sustainably by 2020 include: (1) Purchasing all palm oil sustainably from certified, traceable sources (Unilever helped to establish RSPO); (2) Taking 100 per cent of the paper and board for packaging from certified sustainably managed forests or from recycled material (75 per cent by 2015); (3) Sourcing 100 per cent of Unilever's tea, including loose tea, from Rainforest Alliance-certified estates.
Nestlé Malaysia Bhd (All information pertains to Nestlé Group) <sup>84</sup>	<ul> <li>Nestlé Group's Commitment on Deforestation and Forest Stewardship states that Nestlé will use the 'cut off' dates established by the FSC, RSPO and RTRS for conversion of forests and HCV areas, to determine when the company will not source products from plantations/ farms converted from forest land.</li> <li>By September 2013, Nestlé Group met its commitment to source 100 per cent RSPO-certified palm oil, two years ahead of schedule. This includes RSPO Segregated (16 per cent) and GreenPalm certificates (84 per cent), which it has now decided to phase out.</li> <li>Nestlé Group has Responsible Sourcing Guidelines<sup>85</sup> which reinforce its specific commitments on deforestation and forest stewardship, rural development and water stewardship. It uses FSC certification to demonstrate compliance with its guidelines.</li> <li>For palm oil, its Responsible Sourcing Guidelines go beyond the RSPO standard by making explicit provisions for the protection of peatland and high-carbon forest.</li> <li>Nestlé Group states that by 2014, 28 per cent of the volumes of its 12 priority categories of raw materials were responsibly sourced in accordance with its guideline requirements.<sup>86</sup></li> </ul>
Petra Foods Ltd <sup>87</sup>	<ul> <li>Subsidiary Delfi Cocoa Brazil is currently producing and distributing Rainforest Alliance-certified cocoa in Brazil.</li> <li>Facility in Hamburg also processes Rainforest Alliance beans.</li> </ul>

Company name	Disclosure on sourcing of certified commodities				
Thai Union Frozen Products PCL <sup>88</sup>	<ul> <li>Set target for 100 per cent of its fishery and aquaculture raw materials to come from internationally certified or responsible sources by 2020.</li> <li>Set target to source 100 per cent Marine Catch Purchasing Document fishmeal raw materials for its shrimp feed products by 2015.</li> <li>At its subsidiary Chicken of the Sea Frozen Foods, Global Aquaculture Alliance Aquaculture Certification Council-certified shrimps accounted for 67.53 per cent of US sales in 2014. The company plans to increase the proportion of certified shrimps to 100 per cent by 2020.</li> <li>NOTE: WWF does not support these certification standards. WWF supports credible standards such as ASC and MSC.</li> </ul>				
Unilever Indonesia Tbk PT <sup>89</sup>	<ul> <li>Unilever Group:</li> <li>Committed to sourcing all agricultural raw materials sustainably by 2020 in line with Unilever Group's commitment to achieving zero net deforestation associated with palm oil, soy, paper and board, and beef no later than 2020.</li> <li>Extended commitment to tea business and supply chains using Rainforest Alliance and Trustea certifications.</li> <li>Unilever Indonesia:</li> <li>Since 2012 all palm oil sourced by Unilever Indonesia is RSPO-certified and 63.8 per cent of sourced tea is Rainforest Alliance-certified tea blend. 90</li> <li>*NOTE: Unilever Group states on its website 91 that because each of its agricultural raw materials has a different growing method it has developed detailed guidelines for its key crops, published in its Unilever Sustainable Agriculture Code, which it requires all its suppliers to follow in the absence of a credible external standard.</li> <li>Examples about how Unilever aims to meet its target to source all agricultural raw materials sustainably by 2020 include: (1) purchasing all palm oil sustainably from certified, traceable sources (Unilever helped to establish RSPO) (2) taking 100 per cent of the paper and board for packaging from certified sustainably managed forests or from recycled material (75 per cent by 2015) (3) sourcing 100 per cent of Unilever's tea, including loose tea, from Rainforest Alliance-certified estates.</li> </ul>				

Note that we do not assess the performance of these companies on responsible sourcing but have included their disclosure to facilitate comparison and engagement by financiers on this issue. For example, some companies have made more general commitments to sustainable sourcing without reference to specific certification  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ standards for all commodities or without time-bound targets.

# 6. THE BENEFITS OF RESPONSIBLY PRODUCED COMMODITIES FOR FMCG COMPANIES

The sourcing of responsibly produced commodities offers a wide range of benefits to FMCG companies, outlined below.

### A. OPERATIONAL BENEFITS

Evidence from studies across several commodities is that certification processes result in higher yields and more stable long-term supplies. Through supporting their suppliers to undergo certification, FMCG companies can create more resilient supply chains, with greater transparency, and higher quality control.

### More secure supplies

Many FMCG companies are realizing that certification leads to more secure supplies of several different commodities.



#### Cocoa

The cocoa economy provides an excellent example of how certification can lead to more robust supplies. Its challenges are well known: low productivity, poor farm management practices, and outdated production systems – all contributing to frequent shortfalls in supply. 92

**RobecoSAM** states that for "producers that deliver directly to consumers or that have a brand name to protect, having good insight into the production processes is important for managing sustainability in the supply chain. In addition, declining availability of land and water for irrigation can lead to instability in supply and higher prices, posing a direct risk for food producers, as they cannot always pass higher prices onto consumers. Olam International, an important producer of a large number of commodities and trader in cocoa has, revealed that demand for cocoa, for example, is growing by 3 per cent per year whereas supply is steadily decreasing because of the declining number of farmers producing cocoa."<sup>93</sup>

In order to guarantee quality supply of cocoa, companies including Mondelēz International Inc, Mars Inc, Nestlé SA and Barry Callebaut AG have committed to investing in initiatives around the production and science of responsibly produced cocoa in the coming years.

- **Barry Callebaut AG** works with farmers to increase cocoa productivity by providing training on certification requirements and yield enhancements and other technical support. The company states: "The future of the cocoa sector depends on the improvement of productivity on cocoa farms" and that "average yield of cocoa farms (in West Africa) vs biological potential is 13 per cent".94
- Mars Inc also recognizes the supply challenge and uses certification as a tool, saying: "Demand for cocoa is rising and unless something is done supply will soon not keep pace... we can help farmers produce better crops and make more money for their families. Ultimately, this will create a sustainable supply of quality cocoa as farmers are empowered to reinvest in their businesses and communities. Mars Inc has pledged to certify 100 per cent of its cocoa as sustainably produced by 2020."95
- Similarly, Mondelez International Inc states: "We want to help maintain the long-term stability of the cocoa supply chain and improve the welfare of cocoa farmers and farm communities... One part of our strategy is to support certification. In 2012 we were the world's largest buyer of Fairtrade cocoa and among the largest buyers of Rainforest Alliance-certified cocoa. Buying certified commodities is just one of the ways we promote sustainable farming, support farmers and enable consumers to make informed choices." 96

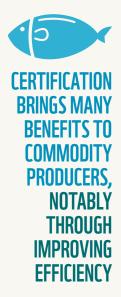
Mondelēz has also developed a palm oil sourcing policy in consultation with WWF and the United Nations Development Programme. 97 In October 2015, Mondelēz also started a collaboration with Cargill in Indonesia which aims to improve the livelihood of smallholder cocoa farmers in the country as well as to drive their adoption of sustainable farming practices.98



### Sugar

Sugar supply faces similar issues. The Coca-Cola Company states on its website: "Through our global suppliers, our system buys millions of tons of fresh fruit, corn, tea, sugar, coffee and other ingredients every year. The future of our business depends on a reliable long-term supply of those ingredients... The challenges facing agriculture, along with increasing global demand for some commodities, can have very real impacts on our business. For example, some crops may decrease in availability and increase in cost as the agricultural productivity of certain regions is constrained by changing weather patterns."99

The Coca-Cola Company, in cooperation with WWF, is making long-term investments into sustainable agriculture in its supply chains, focusing on its most important commodities, including sugarcane and corn in China and elsewhere. The company is not only engaging in pilot projects to improve production and farm practices, but also developing and beginning to implement the Bonsucro standard and certification system, "one of a growing set of agricultural certifications we support". 100



### Seafood

Abba Seafood AB – a Sweden-based cannery company – imports longtail tuna from Thailand. The company routinely evaluates the status of every fish stock it sources from, including the fishery methods, status of stocks and how the fishery is managed. The information they received from their suppliers was not enough to guarantee that the fishery was sustainable on these fronts. 101 To address this problem and underpin its supplies, Abba Seafood AB established a fishery improvement project in 2011 with stakeholders in Thailand. 102 Partners included the Sustainable Fisheries Partnership, an NGO that provides technical assistance on sustainable procurement and fisheries improvement, and the Swedish International Development Agency. As Abba Seafood AB's in-house expert on food legislation and declaration Maria Aberg put it: "If there is no fish in the future there is no Abba."

### Efficiency gains for suppliers to FMCG companies

A number of studies show that certification brings many benefits to commodity producers, notably through improving efficiency.

Examples of efficiency gains companies have achieved are outlined below.

Palm oil plantations seeing efficiency benefits of certification

Palm oil plantations have seen a number of advantages of certification, according to the RSPO. For example, a report by WWF in collaboration with UK development corporation CDC and the Dutch development bank FMO shows:103

- Certification can reduce the risk of disruptions due to community protests. For a processing facility, this can result in millions of dollars of cost savings.
- Certification can also reduce turnover of workers, in one case by 6 per cent.
- Certification can lead to productivity improvements cooperative leaders believed they achieved improvements of up to 70 per cent, with one smallholder group experiencing a 186 per cent increase.

Positive social impacts of FSC certification

Released in April 2014, the CIFOR-WWF study Social Impacts of the Forest Stewardship Council Certification: An Assessment in the Congo Basin<sup>104</sup> confirmed that:

FSC-certified logging concessions are consistently associated with a range of additional social benefits over and above those provided by non-certified forest management units (FMUs).

• In non-certified FMUs, only constrained by the law, there is a more lax implementation agenda, almost no verification of social standards and more conflict with local populations.

The study concludes that these positive social outcomes materialized because certification pushes companies to maintain a permanent channel of communication with local populations. This avoids unexpected disruptions and social conflicts that might not only interfere with normal operations, but also increase the company's reputational risk.

Certification makes business sense for soy producers

According to a KPMG report  $^{105}$  in collaboration with WWF, IDH, FMO and IFC, A roadmap to responsible soy: approaches to increase certification and reduce risk, certification makes business sense for soy producers because:

- The investment in certification is on average paid back in as little as three years.
   This can go down to one year for best-prepared large producers, while less-prepared medium-sized producers may achieve return on investment in less than five years.
- Markets are growing for certified soy with an increasing number of end users committing to certified soy. Producers can also obtain access to discounts on agricultural inputs and finance.
- Certified producers can benefit from the implementation of improved agricultural
  practices in fertilizer use and crop rotation, which can result in reduced input use,
  fewer incidents of chemical spills, and productivity improvements.

FMCG companies can support their suppliers

In some cases producers need support from FMCG customers to fund the initial investment. The FMCG companies can recoup related costs through more secure supplies and potentially lower costs as commodity production volumes increase as well as the ability to meet customer demands.

The *Global Forests Report 2014*<sup>106</sup> highlighted that 100 per cent of producers, processors and traders reporting on palm oil claim to be engaging in capacity-building activities in their supply chain to provide or use sustainable materials. However, this number goes down to 68 per cent for manufacturers and retailers, suggesting room for greater action by FMCG companies and retailers.

Smallholder producers of soy and cotton in India have low productivity. A partnership of FMCG companies and NGOs invested in improving their production practices, and smallholders taking part have reported significant productivity increases of up to 54 per cent.<sup>107</sup> Since these farmers make more effective use of inputs and increase outputs, the cost of production per tonne is likely to be lower.



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### **B. REDUCED REPUTATIONAL RISKS**

As markets mature, brand value represents an increasingly large percentage of a company's market capitalization. Asian companies that do not make an effort to source responsibly produced commodities run the risk of being seen as laggards by both their civil society stakeholders and their consumers - with negative consequences for their reputation. This could affect companies' stability of earnings and future growth potential. Conversely, those that move ahead may find new opportunities.

Research shows that in the US, opposition from social movements leads to a negative impact on share price for companies. 108 There may be a similar risk for Asian FMCG companies. Risks relating to food safety are well known; however, there are a growing number of reputational issues relating to sourcing that are relevant for Asian FMCG companies, not just the global brands. Examples include:

- Thai Union Frozen Products PCL was linked to a 2014 Associated Press investigation on the use of slave labour on fishing boats supplying the Thai seafood industry109 and cut ties with the supplier named in the report in early 2015.110 Following a 2015 article in the New York Times on slave labour in its supply chain, Thai Union Frozen Products PCL has implemented a new, more stringent code of conduct and stricter monitoring and compliance protocols.  $^{\scriptscriptstyle 112}$  It is partnering with trade associations and NGOs to influence regulators to adopt stronger laws against forced labour and also to raise awareness across the industry on the issue of human rights abuses.
- Charoen Pokphand Foods PCL was implicated in a 2014 Guardian investigation alleging that it bought fishmeal, which it feeds to its farmed prawns, from some suppliers that own, operate or buy from fishing boats manned with slaves. 113
- Tata Tea Ltd, which owns the Tetley brand, was implicated in a 2014 report by Columbia Law School alleging that its tea pickers were living in inhumane conditions. 114 This led the company to commission an independent assessment to determine the facts and recommend necessary actions. 115

Responsibly produced commodities with chain of custody systems and certification are more transparent than conventional commodities. This significantly reduces reputational risks for FMCG companies as well as increasing their ability to offer the consumer insight into the product source. One notable benefit of transparency is providing assurance on food safety issues to the end customer.

### C. POSITIVE BRANDING OPPORTUNITIES

Products made with responsibly produced commodities have a potential marketing advantage over conventional products. There are solid examples in more developed markets with lessons that may increasingly apply in Asia.

A 2014 study by Nielsen showed 55 per cent of global online consumers across 60 countries say they are willing to pay more for products and services provided by companies that are committed to positive social and environmental impact. It found that the propensity to buy socially responsible brands is strongest in Asia-Pacific (64 per cent), Latin America (63 per cent) and the Middle East/Africa (63 per cent). The 64 per cent figure for Asia-Pacific in 2014 compares to a 55 per cent figure in 2011, suggesting growing consumer awareness.<sup>116</sup>

Asian customers perceive green products as higher quality compared to conventional products. A willingness to pay for products with sustainability attributes is confirmed by studies in the Philippines,<sup>117</sup> China<sup>118</sup> and Japan.<sup>119</sup> Market potential varies depending on the type of product and the consumer market segment.

Asian FMCG companies not using responsibly produced commodities in their products risk missing these business opportunities, particularly to international competitors that already have responsible sourcing plans in place.

Specific examples of marketing benefits include:

- Unilever NV reported an increase of market share for Lipton Tea of 1.8 per cent in the UK and 1.6 per cent in Australia after launching a campaign promoting its sustainability efforts. 120 According to Michiel Leijnse, manager of Global Brand Development for Lipton, the company has experienced more than 10 per cent sales growth in Italy and Sweden in the first year since the introduction of certified tea into its brands in Western Europe. 121
- **McDonald's Corp** collaborated with the MSC to advance positive environmental and economic practices in its seafood supply chain. <sup>122</sup> The company, which uses MSC-certified wild-caught Alaska pollock for its Filet-O-Fish sandwich, began displaying the MSC ecolabel on product packaging, in-restaurant communications and external marketing beginning in 2011 in Europe and 2013 in the USA.
- Japanese retailer Aeon Co Ltd has increased its range of MSC-certified fish products and expanded its private-label MSC merchandise, demonstrating to customers its commitment to securing the long-term availability of these fish products by promoting the recovery of marine fisheries. <sup>123</sup> The company has stated it recognizes its responsibility to protect marine resources and has committed to communicating in store in partnership with the MSC to help change customers' shopping behaviour. <sup>124</sup>
- If well managed, the issue of deforestation can strengthen a company's reputation
  and turn a risk into an opportunity. Danone SA has adopted a leadership position
  on palm oil sourcing by joining the Palm Oil Innovation Group in 2015. Danone
  uses its sustainable sourcing policies to differentiate itself with its consumers, and
  communicates these credentials on its customer facing website, Down to Earth. It



also states that it develops a competitive advantage based on a licence to operate and a positive differentiation between itself and its competitors. 125

• In Vietnam's coffee sector, **Nestlé SA**, **Mondelēz International Inc** and others work together with IDH (the Dutch Sustainable Trade Initiative) to offer farmers free training and higher prices for certified beans. Nestlé has trained about 40,000 growers. Adopting more sustainable farming in Vietnam could boost production among individual farmers by 10 per cent and incomes by 30 per cent on average, according to IDH. <sup>126</sup> In addition, the companies are able to meet end customer demands for higher quality and more sustainable commodities. "Consumers want to feel good about the coffee they are drinking," said the European director of sustainability at Mondelēz International Inc. "They expect big buyers like us to take action. We also need to secure the right quality."

### D. ANTICIPATION OF TIGHTER RETAILER SOURCING POLICIES

An increasing number of retailers in developed markets are pledging to use responsibly produced commodities in private-label products. This presents a risk for Asian FMCG companies if they are not able to meet the new retailer sourcing policies. It also represents an opportunity to increase their market share by developing a base of sustainable products to serve the demand.

Retailers including Carrefour,<sup>128</sup> Delhaize,<sup>129</sup> Ahold,<sup>130</sup> Waitrose,<sup>131</sup> Walmart,<sup>132</sup> Tesco<sup>133</sup> and Marks & Spencer<sup>134</sup> have committed to using sustainable raw materials in their own-label products. For example, Tesco,<sup>135</sup> Waitrose<sup>136</sup> and Marks & Spencer<sup>137</sup> are already sourcing 100 per cent certified sustainable palm oil for their own-label products (although not yet from Segregated sources).

The annual haze in Southeast Asia has resulted in growing consumer and retailer concerns about selling and consuming products linked to deforestation and open burning. Asia Pulp and Paper's products were removed from three retail chains in Singapore<sup>138</sup> due to the parent company being investigated for its links to the forest fires. This is a clear example of an FMCG company failing to meet stricter retailer sourcing policies even for non-private label products and this having an impact on revenues.

### E. REDUCED REGULATORY RISKS

Without certification, FMCG companies may be sourcing commodities that are not in compliance with domestic laws of producer countries. For example, a 2011 assessment by an Indonesian government task force<sup>139</sup> found that 81 per cent of palm oil plantations were operating without required Forest Relinquishment Permits from the Ministry of Forestry. According to research by WWF<sup>140</sup> 5 to 50 per cent of globally traded food commodities (the percentage depends on the specific commodities) are not

produced legally in the country of origin. Recent research 141 estimated that food fraud affects 10 per cent of the worldwide commercial food supply and a study by WWF<sup>142</sup> found that between 17 and 31 per cent of global seafood is not produced legally.

Illegality can stem from access to the resource, labour rights, fraud, corruption, or regulations such as compliance with deforestation laws, but in all of these five cases the resulting illegally produced commodities can impact all stakeholders of the food producers. 143 Illegality can indeed encourage corruption and human rights abuses, and drive environmental degradation.

There are a number of risks that may result from sourcing commodities that are not produced in accordance with regulation. These include supplier disruption, direct fines, reputational risks, and restrictions on market access. Given the complexity of globalized supply chains, tackling illegality will take time. Responsible sourcing of commodities through certification is therefore a relatively simple and immediate step for FMCG companies to take so as to manage these risks. All certified responsibly produced commodity standards reduce these risks as they require compliance with the law.

The disruption risk may arise if suppliers are unable to ship products due to stronger enforcement of regulations in producer countries. A supply chain that excludes illegally produced commodities should effectively mitigate this risk.

Usually there are limited direct fines for FMCG companies that have sourced commodities from elsewhere that were illegally produced. The US Lacey Act has such provisions relating to timber. This proved a challenge for Gibson Guitar Corporation, a US-based guitar manufacturer. It was found to have breached the Act by importing ebony from Madagascar. 144 It settled two claims in August 2012 for US\$300,000 in penalties and a US\$50,000 charitable donation, as well as the forfeit of claims to wood items seized in raids by the authorities. The legal fees were reported as more significant.

Moves to limit access to goods made from illegally sourced materials include the following:

Note that the EU Timber Regulation, Lacey Act and Australian Act apply to pulp and paper products, which are part of some FMCG companies' product range.

• In October 2010, the EU adopted the EU Timber Regulation (EUTR) (Regulation 995/2010) to prevent sales of illegal timber and timber products on the EU internal market. Since March 2013, any operator who places timber or timber products on the EU market for the first time has to ensure they are legally produced. Certification provides an efficient way to fulfil parts of the due diligence requirements of the EUTR.145



**GIVEN THE COMPLEXITY OF GLOBALIZED SUPPLY CHAINS,** TACKLING ILLEGALITY **WILL TAKE TIME.** RESPONSIBLE **SOURCING OF COMMODITIES** THROUGH **CERTIFICATION** IS THEREFORE A **RELATIVELY SIMPLE AND IMMEDIATE** STEP FOR FMCG **COMPANIES TO TAKE SO AS TO MANAGE** 

THESE RISKS

- The Australian government passed the Illegal Logging Prohibition Act in 2012. The Act criminalizes the importation into Australia of illegally logged timber and timber products as well as the processing of domestic raw logs that have been illegally logged. The Illegal Logging Prohibition Amendment Regulation, in effect from November 2014, requires importers and domestic processors to have a due diligence system in place to minimize the risk of importing or processing illegally logged timber, 146 similar to the EU.
- The US Lacey Act, in effect since 2008, prohibits imports of illegal wood products. The Act makes it illegal to trade illegally sourced wood products in the US. Importers are required to declare country of harvest, genus and species, product volume and value in a phased-in schedule.
- In October 2012, the UK government and UK organizations signed an
  agreement to work to sourcing 100 per cent certified palm oil by 2015. In 2012, it
  was estimated that 52-60 per cent of the palm oil in the UK was certified.<sup>147</sup> In the
  Netherlands, France, Belgium, Norway, Sweden, Denmark and Germany there are
  (private sector-initiated) national commitments toward sustainably certified palm
  oil as well.<sup>148</sup>
- In March 2015 the **UK government** adopted the Modern Slavery Act 2015, which aims to ensure that products sold in the UK are slavery-free. The Act "require[s] businesses over a certain size threshold to disclose each year what action they have taken to ensure there is no modern slavery in their business or supply chains". 149

In Europe a survey commissioned by WWF in August 2015<sup>150</sup> across nine countries identified high support for better laws that ensure the legality of wood-based products on the market. Three-quarters of the respondents did not know products made from illegal timber could still be bought in the EU and 85 per cent said it was important to them that measures be put in place to make sure people could not buy products made from illegal wood.



## 7. OVERCOMING HURDLES TO RESPONSIBLE COMMODITY SOURCING

Below we outline a number of common hurdles to sourcing responsible commodities for FMCG companies – and how they can be overcome.



## HURDLE: CONCERN OVER THE COST OF SOURCING CERTIFIED RESPONSIBLY PRODUCED COMMODITIES

There are costs for both FMCG companies and producers. The producers typically recoup the certification costs via productivity gains, avoided stoppage costs, preferred purchasing, longer-term contracts, and in some cases, a premium for certified products.

For FMCG companies, implementing necessary changes at the management unit, auditing, certifying and tracing responsibly produced commodities through the supply chain comes at a cost. In some product categories the expense of auditing, labelling, tracing and physically separating products in segregated supply chains can be higher than the immediate (financial) benefits.

**Solution:** Where there are costs, these can be viewed as an investment to generate the multiple benefits outlined previously. In addition, by getting to know its supply chain and suppliers better, an FMCG company may identify new efficiencies or cost savings. This process often leads to longer-term supply chain relationships that benefit both suppliers and buyers in terms of certainty and quality.

FMCG companies can reduce such costs by working together with internationally recognized standards to minimize duplication of efforts. Industry-wide initiatives can create efficiencies in auditing, certifying, monitoring and tracing. These industry-wide initiatives can include upstream producers and by working together in a precompetitive manner, FMCG companies can create coordinated demand, for example through voluntary sector agreements, that will bring down the costs of sourcing certified commodities.

Traded certificates are also a way to stimulate certified production while limiting initial expenditure in traceability and segregation. This is a useful model for FMCG companies to start with, and certified producers will receive a direct financial stimulus. However, it does not convey the full range of benefits to companies.

**Examples:** All standards mentioned in figure 5 on page 38 are widely recognized certification schemes including different supply chain options (for example, physically segregated). Over time, as these certification standards become widely accepted, the costs of certification will also fall.



OF EFFORTS

In September 2015 WWF and the Chinese Forestry Industry Association jointly launched the China Sustainable Paper Alliance with 10 leading producers and buyers committing to increase production and purchase of FSC and recycled paper. 151 Founding members include 10 domestic and international companies active across the whole supply chain of China's pulp and paper industry: China Paper (China's biggest state-run paper company), Sun Paper (the country's largest private paper company), global producers Kimberly-Clark, International Paper, UPM, Stora Enso and Fibria, as well as buyers such as HP, Fuji Xerox and Ikea.

The Alliance will seek to engage strategic market players within the paper industry supply chain, including producers, converters and buyers, to commit to responsible paper products procurement and sales, and to create a coordinated demand for responsible paper products through a pre-competitive platform. To raise awareness, companies will collaborate with WWF on communication efforts targeting corporate buyers and consumers in China.



### HURDLE: LACK OF CONSUMER AWARENESS AND SUPPORT FOR SUSTAINABLY PRODUCED GOODS

There is a perception that Asian consumers are relatively less inclined to pay a premium for products made with responsibly produced commodities. This may partly be because Asian consumers are generally not aware of the environmental and social issues in the supply chains of the products they buy and are typically not pushing companies to tackle them. In addition, lack of clear labelling of products has impeded consumers' ability to act.

Solution: With increased prosperity for many Asian consumers, the opportunities for premium-priced brands that differentiate themselves with sustainability credentials are growing.



Companies should first consider their positioning carefully and obtain relevant research. This may identify that consumers are willing to pay a premium and help the company to identify product strategies. It may also require the company to educate consumers on the sustainability credentials of a product.

**Examples:** Consumers in Asia have indicated a 'willingness to pay' for responsible products. According to a 2014 Nielsen study, 64 per cent of the respondents in Asia-Pacific indicated a willingness to pay for products with positive social and environmental impact. 152 But there is a discrepancy between survey outcomes and actual behaviour. In practice, as in the West, customers may still favour low prices, food safety and health attributes over sustainability. However there are still many marketing opportunities, such as promoting the food safety assurance provided by chain of custody certification.



COMPANIES CAN
START WITH
A THOROUGH
ASSESSMENT AND
RISK ANALYSIS, AND
SUBSTANTIATE
THE OPERATIONAL,
REGULATORY AND
REPUTATIONAL RISKS
ASSOCIATED WITH
THE COMMODITIES
IN THEIR SUPPLY
CHAINS

**Examples:** Australian food company **Coles Group Limited** has committed to label palm oil where it is used in its own branded products, so as to educate its consumers and assist them to make informed purchasing decisions. Coles is now using only sustainable palm oil in its branded food and drink and aims to source Identity Preserved and Segregated certified sustainable palm oil as more becomes available in the future. <sup>153</sup> In seafood, Coles partnered with WWF<sup>154</sup> in 2011 to improve the sustainability of its supply, and educate consumers about sustainable seafood choices, including use of the MSC and ASC labels. In October 2015 Coles became the first major supermarket in Australia to offer customers certified sustainable seafood when they introduced ASC-certified fresh salmon and MSC-certified wild-caught prawns. <sup>155</sup>

**Ikea** announced in September 2015 that all seafood sold in its stores now comes from ASC- and MSC-certified sources. With 23 seafood species sold and served in the company's 47 markets, Ikea is the food service provider that offers the largest variety of certified seafood globally. Their commitment has enabled them to bring certified seafood to eight new markets, including Turkey, Thailand and the Middle East, where it was not available before. <sup>156</sup>

Nespresso AAA<sup>157</sup> is an example of a programme where a company has a 'story to sell' and has effectively used its responsibly produced commodity sourcing policy as a marketing tool. On its consumer facing website, it promotes its Positive Cup Vision<sup>158</sup> and highlights its sustainability commitments via its AAA programme, which it launched together with Rainforest Alliance in 2003. It gives support and technical assistance to farmers with the aim of improving sustainability (based on the Sustainable Agriculture Network standards) and productivity while maintaining high quality. In 2010, Nespresso was sourcing more than 60 per cent of its coffee from farmers that are part of the programme. Nespresso pays a premium of 30-40 per cent above the market price in line with its high value product segment.



## HURDLE: LACK OF UNDERSTANDING OF SUPPLY CHAIN ENVIRONMENTAL AND SOCIAL RISKS

Many FMCG companies lack insight into the environmental and social risks in their supply chains and how they may be exposed to these risks. For example, CDP's *Global Forests Report 2015* 159 showed that companies further along the commodities supply chain are less likely to recognize operational risks to their business, with only 35 per cent of manufacturers identifying operational risks associated with soy when 83 per cent of producers see that same risk.

Due to outsourcing and the widespread use of commodity traders, many companies do not have relationships with their soft commodity producers and may not know where their products come from.

For example, for palm oil, the lack of transparency is inherent in all parts of the supply chain - mills buy origin-unknown fresh fruit bunches from outgrowers; plantation companies do not disclose how much land bank they have or where it is; related companies, subsidiaries and joint ventures are not clear; traders accumulate; FMCG companies substitute palm oil with other vegetable oils from other suppliers on a daily basis; and retailers do not label their products as containing certified sustainable palm oil.

Solution: Companies can start with a thorough assessment and risk analysis, and substantiate the operational, regulatory and reputational risks associated with the commodities in their supply chains. By understanding their own footprint and which suppliers are within their supply chain, they can begin engaging with them to develop and implement appropriate policies and practices.

**Examples:** WWF has developed a Supply Risk Analysis Tool (see www.supplyrisk. org) to help companies understand and manage the environmental and social risks of raw materials in their supply chains. This tool covers around 30 broad topics, from CO<sub>o</sub> emissions and depletion of biodiversity to labour rights and water use. The 'risk matrix' gives a score based on the severity of the risk and how likely it is to occur. For example soy in Brazil scores the highest rating for habitat conversion, impact on biodiversity and GHG emissions. McDonald's and Johnson & Johnson are some of the many FMCG companies who have already used the Supply Risk Analysis Tool.

**PepsiCo Inc** worked with suppliers, as part of the CDP Supply Chain Programme, to share information about their own learning curve and worked together to tackle climate change. They realized that deforestation by their agricultural suppliers was one of the main sources of their GHG emissions. As a result of the programme, suppliers began to seriously analyze the impact of climate change on their business, often for the first time.160



### HURDLE: LACK OF TRACEABILITY OR CONTROL OF SUPPLY CHAIN

An important tool to achieve greater transparency in supply chains is traceability. Traceability is the identification of suppliers and receivers for each operation in the supply chain. Ensuring full traceability in supply chains is not the same as sustainability but it will enable FMCG companies to ascertain that they are using certified products that reduce their exposure to environmental and social risks. In other words, traceability is an important step on the journey to fully sustainable supply chains.

In many cases a critical challenge in traceability is to establish the link between the location of harvesting and initial processing, i.e. field to mill. In timber and palm oil, it is crucial to go beyond the mill to the underlying forest or plantation to break the link with deforestation and other risks.

**Solution:** FMCG companies are increasingly being asked to ensure the traceability of the commodities they use back to verified sources. Larger commodity users may have the resources to deliver this themselves. But many companies using smaller volumes can rely on credible certification schemes like the FSC, MSC and RSPO, which have supply chain controls already in place to deliver the required traceability.

**Examples: Kao Corp** committed to purchasing only sustainable palm oil traceable to the mill for use in Kao products by 2015 and to the plantation by 2020. <sup>161</sup> Kao Corp has committed to zero deforestation by 2020 through cooperating with plantations, suppliers and third party organizations and intends to obtain RSPO certification of Kao Group factories in order to build a traceable supply chain for the Kao Group.

With regards to paper, by 2020, Kao Corp will purchase only recycled paper or sustainably sourced paper and pulp for use in its consumer products, packaging and offices. In the event that it has to use virgin pulp, Kao Corp has committed to zero deforestation at the source of wood fibre for raw materials and by 2020, Kao Corp will purchase only pulp for raw materials that is traceable to the source.

WWF has developed a transparency tool for pulp and paper producers, some of them selling brands directly (see *epci.panda.org*). The WWF Environmental Paper Company Index (EPCI) also provides valuable feedback from an international environmental organization on a company's pulp and paper production and can be useful for FMCG companies to develop more transparent and sustainable supplier bases. In 2015 the number of voluntary participants in the EPCI rose to 31 compared to 25 in 2013 and companies who participated in the EPCI 2013 were able to increase their overall scores on more than 90 per cent of product categories.



## HURDLE: REGULATION AND PROLIFERATION OF STANDARDS CREATE CONFUSION FOR FMCG COMPANIES

Governments are increasingly becoming involved in 'voluntary' standards, from development of national production standards and defining sustainability standards for product labelling to investing public funds in development or implementation of standards. This results from increasing public and private sector awareness of the approach of transforming markets through responsible standards and presents both opportunities and risks.

There is also a proliferation of standards and schemes. Sustainability can become conflated with legality and traceability, resulting in weaker standards gaining traction. There can be public scepticism of institutions including governments, multinational companies and increasingly the claims of large NGOs.

Most stakeholders, including government buyers, brands and retailers, and consumers, engage with standards through ecolabels or other claims, and they need to be able to trust that those claims are an accurate reflection of what has been achieved.



WWF considers that for any sustainability standard or certification scheme to be credible162 and effective it should, among other factors:

- Focus on minimizing or eliminating important negative environmental and social impacts, as well as creating positive environmental, economic and social outcomes;
- Provide transparency through meaningful stakeholder participation in decisionmaking and public reporting on certification progress and outcomes;
- Require independent third party verification, certification and accreditation;
- Require truthful claims, and where applicable, traceability;
- Be committed to continuous improvement.

Solution: Companies should source commodities certified by international, credible, independent, multi-stakeholder-based standards that meet ISEAL codes of good practice for impact and assurance - see figure 5 on page 38 for standards WWF supports. Companies should dig into the details of the sustainability claims of the certification scheme; ISEAL is developing a good practice guide to bring higher quality and consistency to sustainability claims and labelling.<sup>163</sup>



## APPENDIX TO CHAPTER 1: DEFORESTATION

### INTRODUCTION

Most of the soft commodities procured by Asian FMCG companies are closely associated with deforestation. This appendix gives some key information about this vital issue.

As both supply chain challenges and calls for transparency increase, FMCG companies can no longer afford to ignore the problems associated with deforestation without incurring risks to their operations, profitability, legal compliance, brand value and reputation.

FMCG companies urgently need to begin or increase sourcing of responsibly produced commodities as one of the main ways to break the link between their raw materials and deforestation/forest degradation. In addition to protecting crucial ecosystems, sourcing responsibly produced commodities will enhance the security of supply for FMCG companies, allow traceability of products back to responsibly produced raw materials and contribute to the long-term viability of supply chain partners — many of whom are small producers.

### WHAT IS DEFORESTATION AND FOREST DEGRADATION?

- Deforestation is the conversion of forest to another land use or the long-term reduction of tree canopy cover. This includes conversion of natural or semi-natural forests to tree plantations, agriculture, pasture, water reservoirs and urban areas. It excludes logging if the forest is expected to regenerate naturally or with the aid of forestry measures.
- Degradation happens when areas of natural forest are more gradually transformed through processes including partial logging, burning and small-scale clearing. This can lower their value for wildlife, habitats, carbon storage, soil fertility and communities. Left unchecked, degradation can result in the forest becoming vulnerable to fire and invasive species. It can eventually lead to the forest being replaced by other land uses, especially in remote places where logging roads are used for encroachment. Avoiding forest degradation is just as important as stopping deforestation; sustainable forest management is a critical strategy to avoid these 'death by a thousand cuts' scenarios.





### ABOUT DEFORESTATION

Rainforests are home to some of the world's most biologically and culturally diverse landscapes. Despite their importance, a significant part of the Earth's natural forests has already been lost or degraded through conversion to agriculture or urbanization, or through unsustainable forest management and fragmentation. This process has accelerated greatly in the last decades due to increased consumption and population growth.164

The forests that remain are disappearing fast. The extreme scale and pace of forest loss and degradation in some countries is having devastating impacts on species, communities, local economies, and the climate. It is also important to note that in addition to deforestation, the loss of other native vegetation such as highly critical grasslands should be considered. We focus on deforestation in this appendix given most of the soft commodities procured by Asian FMCG companies are more closely associated with tropical deforestation.

Certain agricultural and wood-based commodities can drive major sustainability issues if forests are cleared and/or degraded to make way for their production. The issue of deforestation can be significant in FMCG companies' supply chains as they are largely dependent on agricultural and wood-based commodities.

### HOW CAN DEFORESTATION CAUSED BY COMMODITIES PRODUCTION BE **AVOIDED OR REDUCED?**

WWF advocates a global shift to Zero Net Deforestation and Forest Degradation (ZNDD) by 2020. ZNDD means no net forest loss through deforestation and no net decline in forest quality through degradation.<sup>165</sup> In advocating ZNDD by 2020 as a global target, WWF stresses that:

- (a) Most natural forest should be retained and the annual rate of loss of natural or semi-natural forests should be reduced to near zero; and
- (b) Any gross loss or degradation of natural forests would need to be offset by an equivalent area of socially and environmentally sound forest restoration. In this accounting, plantations are not equated with natural forests as many values are diminished when a plantation replaces a natural forest.

ZNDD is not the same as a call for no forest clearing anywhere under any circumstances. For instance, it recognizes people's rights to clear some forests for agriculture, new roads or schools, and the value in occasionally 'trading off' degraded forests to free up other land to restore important biological corridors, provided that biodiversity values and net quantity and quality of forests are maintained, and the rights of local communities or indigenous people are respected.



Although it is clear that the growing world population needs more natural resources, there are more sustainable ways to increase production than converting forests to agriculture and plantations. Average palm oil yield, particularly for the 40 per cent of supply from smallholders, is less than a third of that of the best yields achieved by the industry. This illustrates the potential to easily double production without any further expansion (and related deforestation) while at the same time improving livelihoods for the poorest producers.

Even where expansion is needed, there is appropriate land available for crops to be planted with little or no further impacts on wildlife, communities or GHG emissions. For example, non-forested lands in Indonesia are estimated to range from 12 to 74 million hectares, 166 compared to the current global total of 13.5 million hectares planted with oil palm. This means that even the lower estimate is more than sufficient to meet projected doubling in global palm oil demand by 2050.

Deforestation and degradation are avoidable if commodities and timber are planned, cultivated, sourced and managed in a sustainable way. Governments also have a crucial role to play in setting a policy framework to ensure production of natural resources is done sustainably. Certification of commodities is one way to help ensure sustainable methods of production that avoid deforestation and forest degradation.



DEFORESTATION THROUGH OPEN **BURNING LEADING** TO EXTENSIVE **FOREST FIRES** HAS BEEN **ANOTHER PRESSING ISSUE** IN SOUTHEAST **ASIA DUE TO THE** ANNUAL HAZE

### WHAT ARE THE DRIVERS OF DEFORESTATION AND FOREST DEGRADATION?

There are proximate/direct drivers of deforestation and degradation as well as underlying/indirect drivers, as explained in the report Drivers of Deforestation and Forest Degradation. 167

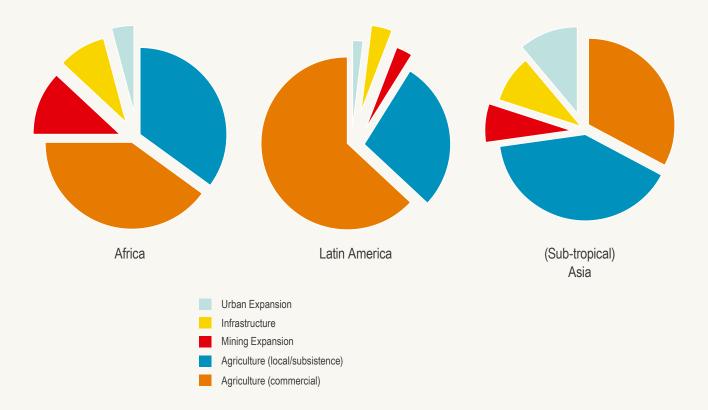
**Direct drivers** are human activities and actions that directly impact forest cover, such as removal of forests for agriculture, unsustainable timber extraction, logging and fuelwood collection, uncontrolled use of fire and clearing for roads and infrastructure.

Agriculture is by far the largest direct driver of deforestation (defined in this report as conversion from forest to other land use categories with the assumption that forest vegetation is not expected to regrow naturally in that area). It is responsible for an estimated 80 per cent of deforestation worldwide. 168 In (sub-tropical) Asia, agriculture is responsible for 70 per cent of deforestation; commercial and subsistence agriculture are responsible for more or less an even share.\*

With forest degradation (defined as the reduction of the canopy and loss of carbon in remaining forests), unsustainable timber extraction and logging activities account for more than 70 per cent of total degradation in (sub-tropical) Asia.

<sup>\*</sup> It should be noted that slash-and-burn subsistence agriculture was traditionally stable as forests were left to regenerate fully. This is no longer the case due to shrinking habitats (partly caused by expansion of commercial agriculture) and rising populations.





**Underlying or indirect drivers** are interactions of social, economic, political, cultural and technological processes that affect the direct drivers to cause deforestation. Examples of indirect drivers include commodity prices, population growth, consumption patterns, national and international policies, financing, governance and poverty.

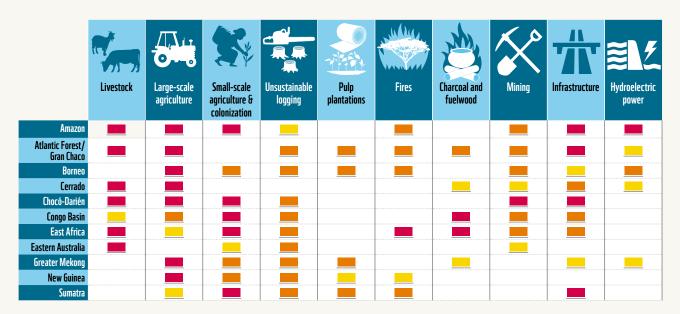
The most critical indirect drivers include economic growth based on the export of primary commodities (grown in former forested areas); and an increasing demand for wood products. <sup>169</sup> Other indirect drivers are weak forest sector governance in many countries, lack of cross-sectoral coordination and illegal activity (related to weak enforcement).

Of course, the drivers of deforestation are different for each deforestation front. The figure opposite from WWF's *Living Forests Report* chapter 'Forests at Risk' published in

2015<sup>170</sup> provides a summary of these drivers of deforestation. The most common pressures causing deforestation and severe forest degradation in deforestation fronts in Asia are: large and small-scale agriculture, unsustainable logging, pulp plantations, mining, infrastructure projects and increased fire incidence and intensity.

Regions most impacted by deforestation include Latin America (Amazon, Cerrado, Gran Chaco), Africa (Congo Basin, East Africa) and Asia-Pacific (Sumatra, Greater Mekong region, Borneo, New Guinea).

Figure 8: Drivers of deforestation on key fronts



Primary cause Important Not a cause Less of forest loss secondary important of forest loss and/or severe cause of cause of and/or severe degradation forest loss forest loss degradation and/or severe and/or severe

degradation

Summary of main pressures on forests in different deforestation fronts

degradation

### WHAT PROBLEMS DO DEFORESTATION AND FOREST DEGRADATION CAUSE?

Alongside the devastation to biodiversity, deforestation and forest degradation are key contributors to rising atmospheric CO $_2$  levels and climate change. Agriculture, forestry and other land uses account for 20-24 per cent of global anthropogenic emissions of GHGs. To Moreover, less forest equates to a reduced carbon sink, further increasing atmospheric concentrations of GHGs. To Alongside the devastation and forest degradation are key contributors to rising atmospheric concentrations of GHGs. To Alongside the devastation and forest degradation are key contributors to rising atmospheric CO $_2$  levels and climate change. Agriculture, forestry and other land uses account for 20-24 per cent of global anthropogenic emissions of GHGs. To Alongside the devastation and forest degradation are key contributors to rising atmospheric CO $_2$  levels and climate change. Agriculture, forestry and other land uses account for 20-24 per cent of global anthropogenic emissions of GHGs.

Deforestation and forest degradation can also disrupt local weather, rainfall, and water retention systems critical for regional agricultural production. In addition, local communities depend on forests for food, fuel, medicine and fibre and risk losing their traditional livelihoods if forests are cleared or degraded.

### **DEFORESTATION IN ASIA**

WWF has identified 11 places in the world as major deforestation fronts, as shown in the figure below from WWF's *Living Forests Report*. These places are where the bulk of global deforestation is projected to take place over the two decades from 2010 to 2030, under business-as-usual scenarios and without interventions to prevent losses. Of these 11, four are in Asia: Sumatra, Borneo, Greater Mekong and New Guinea.



Figure 9: The world's 11 major deforestation fronts

Indonesia has experienced the highest levels of deforestation across the region in recent years and is home to three of the 11 major deforestation fronts: Sumatra, Borneo and New Guinea (the Indonesian provinces of Papua and West Papua). Based on World Resources Institute (WRI) analysis for 2011, the country is the world's sixth largest emitter of GHGs, 173 but has the highest GHG emissions intensity per unit of GDP. Eighty-five per cent of its GHG emissions stem from land use change, such as deforestation and peat development as well as peat fires.<sup>174</sup>

Recent work published by the RSPO<sup>175</sup> showed that total CO<sub>2</sub> emissions associated with land use change in Indonesia from 2005 to 2010 were in the region of 700 million tonnes per year - roughly equivalent to all of the commercial and residential emissions in the US in 2012, according to the US Environmental Protection Agency.

The same work showed that industrial palm oil plantations in the region increased from 3.5 to 13.1 Mha between 1990 and 2010, a mean annual increase of about 7 per cent. Of this 20-year increase, 3.5 Mha (36 per cent) came at the direct expense of natural forests with high carbon stocks. The net emissions of CO<sub>a</sub> from the loss of this vegetation, the use of fires and the subsequent drainage and loss of peat soils increased from 92 million tonnes of CO per year from 1990 to 2000 to 184 million tonnes of CO per year from 2006 to 2010.

Deforestation through open burning leading to extensive forest fires has been another pressing issue in Southeast Asia due to the annual haze. The haze is frequently linked to the pulp and paper and timber industries, making it key for FMCG companies to ensure that their supply chains do not include any materials linked to this issue. The 2015 haze was particularly bad, with the WRI report 176 stating that from early September carbon emissions from the Indonesian forest fires had exceeded average US daily output on 26 out of 44 days. Given the US is the second largest GHG source after China, the magnitude of GHGs from the haze is remarkable.

The majority of the burning is taking place in peatlands which are being drained and cleared for palm oil and pulpwood plantations. But the burning itself is just the tip of the iceberg. Much of the GHG emissions from the agriculture and forestry sectors comes from extensive peat draining and deforestation. Such actions can create significant commercial risks for FMCG companies.

Paper production is the second most common cause of deforestation in Indonesia. Pulp and paper production has led to the loss of more than 2 million hectares of Indonesian natural forests in the last 30 years.<sup>177</sup> Companies having caused significant deforestation in the past have recently made pledges to stop conversion of HCV forests. Yet their legality still needs to be addressed on the ground and outstanding conflicts with local communities need to be solved.

The production of palm oil, soy, paper and beef in Indonesia, Malaysia, Brazil and Russia alone causes 50 per cent of all deforestation globally and contributes to the destruction of some of the world's most biodiverse regions.<sup>178</sup>



### 1. INTRODUCTION AND SUMMARY

FMCG companies across Asia are benefiting from rising populations, and the changes in lifestyles and diets that accompany urbanization and growing wealth. However, these shifts, particularly the move toward eating more meat, are putting significantly more pressure on water resources.

Globally, 2.8 billion people already live in areas of high water stress. This will rise to 3.9 billion by 2030 – representing more than half of the expected population of the world. <sup>179</sup> By the same year, global demand for food is projected to grow by 40 per cent. <sup>180</sup>

Pressure is acute in both India and China. Some of India's most populous river basins could face severe depletion by 2030, including the Ganga, the Krishna, and the Indian portion of the Indus. In China, current water supply is just over 618 billion m³ – but demand is expected to reach 818 billion m³ by 2030. 181

Water issues are creating mounting problems for FMCG companies, particularly in Asia. FMCG companies are heavily reliant on water through their supply chains, and face many water-related risks and issues – its availability, its quality, how it is governed, and whether organizations are seen to be fair and responsible in their water use. All these can have physical, regulatory and reputational impacts on a business and its supply chain.

Current business-as-usual water management practices and levels of water productivity will put approximately US\$63 trillion at risk by 2050. That is 45 per cent of the projected 2050 global GDP (at 2000 prices), and equivalent to 1.5 times the size of today's entire global economy.<sup>182</sup>

Asian FMCG companies have only started to identify and manage these risks and generally they remain behind global leaders. The strongest approaches they can employ include significant engagement with stakeholders in the basins they rely on.

Globally, FMCG companies that have started to address water-related risks are finding that it is not enough to only reduce their direct water use since corporate water supplies are affected by upstream users who in turn affect downstream users. They are also increasingly taking action to reduce water risks in their supply chains associated with manufacturing and raw material supply. Companies have to better understand stakeholder needs and work more actively with other water users in their water basin to reduce their water risk exposure.

Global investors and banks are also concerned about water-related risks, as evidenced by the rise in respondents to, and investors involved in, the CDP Water



**RISKS AND** 

**GENERALLY THEY** 

**REMAIN BEHIND** 

GLOBAL LEADERS

Questionnaire. They are concerned about systemic risks to portfolios as well as risks to specific companies. In many cases investors and banks are working individually and collectively to ensure the companies in their portfolios are addressing water risks – improving earnings quality.

### This chapter:

- Highlights key environmental and social concerns around water and why water is a local and temporal issue;
- Reviews finance sector initiatives related to water management;
- Highlights water challenges in Asia;
- Explains the importance of water risk management for FMCG companies;
- Sets out the steps required to effectively manage water, and solutions and existing market practices to overcome potential hurdles companies may encounter.

### THE VALUE OF WATER

Despite the low pricing of water, the value it delivers to business is extremely high. All businesses harness natural resources in some way, but often do not pay for their full value.

In Asia, the natural capital cost of water use is US\$1.15 trillion. <sup>183</sup> This factors in local water availability to provide a more accurate price for water and represents the currently unpaid and unpriced natural capital input to production. This is a significant amount of value at risk across Asia, and represents half of all these unpaid costs (or risks) globally. Asia is therefore facing by far the largest risk of any region.



Companies with 'yes' have disclosed some steps to address the issues around water, although most are focusing on water footprint rather than water risk.

### INTRODUCTION AND SUMMARY

Figure 10: Companies' disclosure of their steps to address water issues

	Direct water use	Indirect downstream water use (consumers)	Indirect upstream water use (commodity supply chain)
Amorepacific Corp*	YES	YES	
Charoen Pokphand Foods PCL	YES		
China Mengniu Dairy Co Ltd	YES		
Dutch Lady Milk Industries Bhd	YES		
Emami Ltd			
Fraser & Neave Holdings Bhd	YES		
Fraser & Neave Ltd	YES		
Godrej Consumer Products Ltd	YES		
Hindustan Unilever Ltd	YES	YES	YES
Indofood CBP Sukses Makmur Tbk PT	YES		
Masan Consumer Corp			
Mayora Indah Tbk PT			
Nestlé Malaysia Bhd	YES		YES
Orion Corp/Republic of Korea*			
Petra Foods Ltd			
San Miguel Corp	YES		
Super Group Ltd/Singapore			
Thai Beverage PCL	YES		
Thai Union Frozen Products PCL	YES		
Tingyi Cayman Islands Holding Corp	YES		
Tsingtao Brewery Co Ltd			
Ultrajaya Milk Industry & Trading Co Tbk PT			
Unilever Indonesia Tbk PT	YES	YES	YES
Universal Robina Corp			
Vietnam Dairy Products Joint Stock Company	YES		
Want Want China Holdings Ltd	YES		YES

<sup>\*</sup>The asterisk indicates companies which answered the CDP Water Questionnaire in 2015.

### WATER RISK MANAGEMENT: THE BUSINESS BENEFITS

### Preventing supply chain disruption

Companies that consider the embedded water risk in their supply chains will be more likely to avoid disruption. The FMCG sector depends heavily on water in its agricultural supply chains, to grow and produce key soft commodities. While this initially appears to be an issue for suppliers to manage, the risk transfers to FMCG companies if their suppliers are unable to deliver products at the required price, quantity and quality, and FMCG companies cannot feasibly hedge against fluctuations.

### Mitigating operational risks

FMCG companies that manage water well can also prevent their processing and production operations grinding to a halt. These can be strongly affected by reduced water availability, whether due to groundwater depletion (sometimes requiring company investment in additional boreholes or infrastructure to withdraw the same volume of water), surface water reduction, municipal water supply cost increase or growing local community needs and conflicts.

### Maintaining a good reputation

Companies can suffer huge reputational damage on water issues, either locally near operations and supply chains (including reputational damage via suppliers' actions and practices), or at a global and brand level. Managing water well can avoid this.

### Staying in line with regulations

Regulatory risks are connected to unstable or poor regulation of water use and lack of positive water management processes. For a company or its suppliers, this can mean instability, uncertainty, higher costs and a lack of balanced decision-making on water rights and allocations. Companies that stay in line with regulations and back strong water management institutions can ensure that water allocation and quality are sustainable and balanced. This is needed at the water basin level.

### INTRODUCTION AND SUMMARY



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### THE FIVE-STEP PLAN FOR WATER STEWARDSHIP

Water risk mitigation for FMCG companies requires individual and collective efforts. The first three steps below relate to internal measures, the fourth and fifth to external. Water stewardship is the best way for companies to ensure their long-term viability and the questions below are useful for understanding how well an FMCG company is addressing water risk.

- 1. Water awareness: build awareness within the company of water issues and exposure to physical, reputational and regulatory risks.
- Has the company developed training programmes for relevant operational and purchasing managers?
- impacts, dependencies, and water-related risks in its operational river basins and raw materials supply chain?

Has the company obtained access to or developed appropriate expertise to assess its

- 2. Knowledge of impact: understand what and where the water impacts of the company and its supply chain are and identify priority water-risk hotspots.
- Is the company using water risk tools such as the Water Risk Filter (waterriskfilter. panda.org) to assess its impacts and prioritize issues and risks?
- Are water risk assessments for operations and suppliers conducted at a water basin level?
- Beyond immediate requirements, is the company factoring water issues into its growth strategy - both for sourcing and production at current and potential sites?
- Does the company disclose its risk exposure to water through annual reports, sustainability reports or disclosure platforms such as the CDP Global Water Report?
- Does the company transparently report its performance on water?
- 3. Internal action: outline actions, targets, goals and plans to tackle water issues under the company's immediate control, including engaging employees, suppliers and buyers.
- Are policies and management systems in place to manage water-related risks?
- Are there targets for operational and supply chain water management, such as commitments to standards and certifications that address water stewardship?
- Are all operations and suppliers in full compliance with relevant water permits and laws?





### **WATER RISK** MITIGATION FOR **FMCG COMPANIES REOUIRES** AND COLLECTIVE **EFFORTS**



- **4. Collective action:** work with others at various scales, from local water user groups to international fora, to improve water management find out what collective action initiatives are already under way in your area.
- Is the company taking part in collective action projects in operational and supply chain locations?
- Is the company taking into account the views of other stakeholders in developing its plans?
- **5. Influence governance:** join government and other stakeholders to develop a common understanding of the challenges and drivers of water problems, and help improve the systems in place for managing water resources and services.
- How effective is governance in the water basins relevant to the company and its suppliers?
- How is the company anticipating potential criticisms that it is seeking to influence
  water governance and benefit at the expense of other users who have yet to engage
  with government?

### **ENGAGEMENT QUESTIONS FOR INVESTORS**

- To what extent does the company face potential risks relating to water (for example, reliance of business model on water versus availability of water now and in the future)?
- Is the company assessing its water-related risks and taking steps to manage them?
- What are the barriers the company faces to developing and implementing its approach to water management?
- How does the company decide what to disclose about its water-related policies?

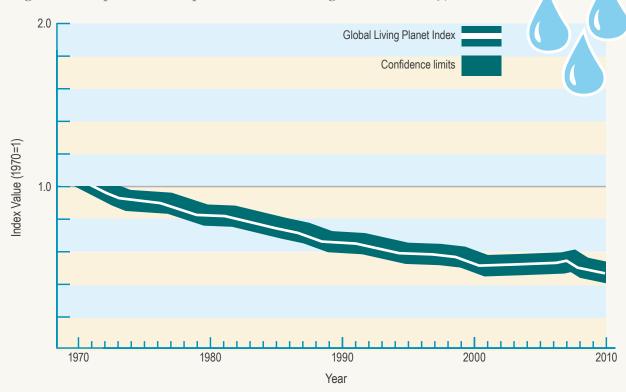
KEY WATER FACTS

• Freshwater species are declining faster than any other. This impacts livelihoods that depend on them as well as ecosystem health. The value of the services provided by freshwater ecosystems is extremely high for any operation, especially one dependent on agricultural products.

• More than 1 billion people in the world do not yet have access to clean water. 184 This is often not due to a lack of physical water resources, but to a lack of infrastructure and human development. Countries which, 25 years ago, had low incomes yet had access to adequate safe water and sanitation have had an average of 3.7 per cent growth in GDP per year, while countries with the same per person income but limited access to water have grown at only 0.1 per cent per year over the same period. 185

- Women and girls in low-income countries spend 40 billion hours a year collecting water the equivalent
  of a year's worth of labour by the entire workforce in France.<sup>186</sup> In many countries, the disproportionate
  burden of fetching water can greatly affect girls' and women's educational and employment opportunities.
- Water pollution is a huge issue in Asia. Polluted water is not available for use without major investment
  in treatment technologies, and this reduces the supply of usable or available water. Pollution of water
  can also reduce or distort the ecosystem services provided by water. For example, in 2015, the Chinese
  Ministry of Environmental Protection reported<sup>187</sup> that nearly two-thirds of groundwater and one-third of
  surface water were graded in 2014 as unfit for direct human contact.
- Climate change is likely to create more extremes of weather more droughts, more flooding, more
  intensified scarcity or lack of availability of water at particular times as existing weather systems break
  down. Sites in Asia are very likely to experience these extremes as well as changes in monsoon patterns
  that impact agricultural production.





# WHY COMPANIES MUST MANAGE WATER LOCALLY

Water is a local issue, and the circumstances in each location in each river basin are unique. Unlike carbon, for which a tonne saved anywhere on Earth is the same, water systems function around specific basins, as shown in the figure below. These basins can also be broken down into smaller sub-basins.

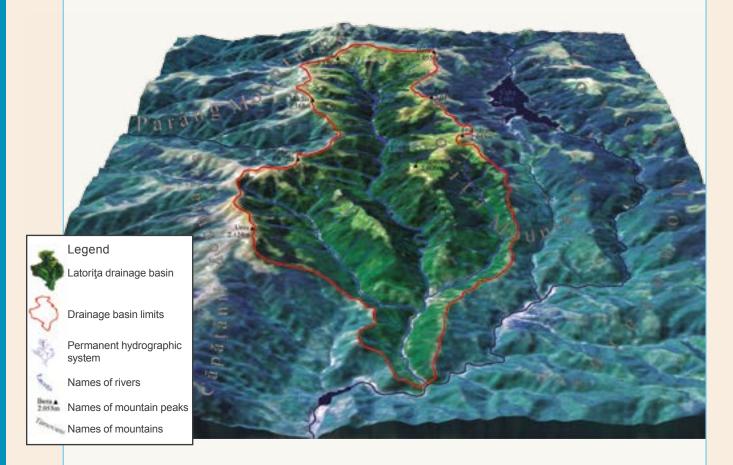
River basins are mostly self-contained, and do not interact with others. For this reason, water impacts are only meaningfully understood at a basin or sub-basin level. One litre of water consumed in the Yangtze is not interchangeable with one litre

in the Ganges – it matters *where* water is used. As such, companies need to understand the risk on a site by site basis for their direct and supply chain embedded water, rather than looking at an aggregate corporate level. **Aggregated volumetric water data at national or international levels can be misleading, and fails to capture local impacts.** 

It is also important *when* water is available. Each river basin will have varying flow volumes throughout the year, and these different levels of water at different times are important for ecosystems, as well as flood and drought prediction. It is important for companies to understand temporal water flows at each operating site.

Solutions need to be at the local level. Meaningful answers must be found in the water catchment – together with other stakeholders and regulators (which may be at the national level). A company's response should not only focus on efficiency and reducing pollution, but on water stewardship.

Figure 12: Latorița River, tributary of the Lotru River (drainage basin) 188



# 2. EXISTING FOCUS ON WATER ISSUES BY THE FINANCIAL SECTOR

Financial institutions are increasing their focus on water as they become more aware of the risks and opportunities it brings to their investments. In a number of cases investors have formed collaborative initiatives to share knowledge and coordinate efforts to raise the profile of the issue with the companies they invest in. Investor platforms, investor advocacy groups and large leading investors have also intensified their focus on water issues.

### COLLABORATIVE INITIATIVES



### CDP water program

In 2015 more than 617 institutional investors representing US\$63 trillion in assets under management supported CDP in engaging companies worldwide on their water use. 189 CDP's water program is designed to guide corporations through water security challenges while helping investors and companies with large supply chains better understand how their portfolio companies and suppliers are addressing their water impacts. Its primary tool is a company survey. In 2015 there were 1,226 responses up 15 per cent compared with 2014, generating an unrivalled database of self-reported corporate water risk and mitigating actions.



### **Principles for Responsible Investment**

The UN-backed PRI, which as of January 2015 had 1,325 signatories with a combined US\$45 trillion in assets under management, coordinates priority collaborative engagements on certain ESG themes, one of which is water risk.<sup>190</sup> Engagement on water risk is focused on the water risks faced by companies in their agricultural supply chains. As part of this initiative, a research report was developed in collaboration with WWF. 191 The report highlights the risks to investors and provides engagement guidance.



### Ceres

Ceres is a US-based non-profit organization that advocates for sustainability leadership. It works with investors, companies and public interest groups to accelerate and expand the adoption of sustainable business practices. It recently published two water-related reports for investors:

• An Investor Handbook for Water Risk Integration (March 2015), which has insights on managing water risk from 35 global asset owners and fund managers with

over US\$6 trillion in collective assets under management. This report noted that over the period 2003-2014, 11 resolutions were filed with food and agriculture companies on issues ranging from broad water risk disclosure and corporate policies on the human right to water, to wastewater management. The report also noted that asset managers and investors were increasingly aware of the importance of concentrating on location-specific water risks and believed that water is undervalued and subject to use and abuse. As a practice, some managers use a shadow price for water in their risk models that better reflects externalities.

• Feeding Ourselves Thirsty: How the Food Sector is Managing Global Water Risks<sup>192</sup> (May 2015), which provides investors with guidance and relevant data for evaluating the water risk exposure of public equities in the packaged food, beverage, meat and agricultural products industries. This report features a unique dataset ranking 37 major food companies on the quality of their corporate water management.<sup>193</sup>

On the back of this report, Ceres coordinated joint letters from investors managing over US\$2.6 trillion in assets to 15 food and drink companies about their concerns over water scarcity and pollution. <sup>194</sup> These companies were selected based on their relatively low water risk management scores in the report.

Recent shareholder resolutions pertaining to water use by FMCG companies that were coordinated by Ceres are featured in the figure below:

Figure 13: Examples of shareholder resolutions coordinated by Ceres in relation to water

Company (Year)	Resolution	Filer	Result
Tyson Foods Inc (2015)	Shareholders request the Board of Directors adopt and implement a water stewardship policy that outlines leading practices to improve water quality for all company-owned facilities, facilities under contract to Tyson, and suppliers.	American Baptist Home Mission Society	Vote: 11.1 per cent  No information was found on this topic in Tyson Foods' public information.
Dean Foods Co (2015)	We recommend the use of WRI's Aqueduct water risk mapping tool on water risk and stress against key suppliers initially and encourage key suppliers to pilot Farm Smart, a 'smart tool' that seeks to help dairy producers "evaluate their production techniques [and] assess economic and environmental consequences of potential improvements in management practices".	Calvert Asset Management Company	Withdrawn, ongoing dialogue.  No information was found on this topic in Dean Foods' public information.

### **Interfaith Center on Corporate Responsibility**

The Interfaith Center on Corporate Responsibility, which represents nearly 300 organizations including faith-based institutions, socially responsible asset management companies, unions, pension funds and colleges and universities that collectively represent over US\$100 billion in invested capital, states that: "As people of faith, ICCR members have long advocated for protection of the planet's water as a moral mandate and a matter of both environmental and social justice." It further notes that: "Beyond the obvious social impact to affected communities, water issues pose a range of risks to business - from higher costs to major business disruptions stemming from supply chain interruptions and a possible loss of licence to operate."

ICCR issued a Statement of Principles and Recommended Practices for Corporate Water Stewardship in 2012, 195 with principle five stating that: "Corporations must implement sustainable water stewardship policies that are both environmentally and socially sustainable and that respect the universal human right to water." ICCR also provides detailed guidance on water practices to its portfolio companies.



### SIGNIFICANT ACTIONS BY INDIVIDUAL INVESTORS ON WATER ISSUES

Some of the largest institutional investors in the world provide explicit policy statements on how they will address water management at the companies which they invest in. Examples include:

### THE LARGEST INSTITUTIONAL INVESTORS IN THE **WORLD PROVIDE** EXPLICIT POLICY STATEMENTS ON **HOW THEY WILL** ADDRESS WATER **MANAGEMENT AT** THE COMPANIES WHICH THEY **INVEST IN**

### NBIM: "scarce water supplies are a growing risk"

NBIM (manager of Government Pension Fund Global of Norway, one of the world's largest sovereign wealth funds) states that scarce water supplies are a growing risk for many of the companies the fund invests in and that managing this risk is important for the companies' financial results and the fund's investments. NBIM has identified the food sector as one of a "number of industries that are particularly exposed to the risk of scarce water supplies". They set out expectations for their portfolio companies 196 which focus on clear water management strategy, sustainable water management and governance structures.

### PGGM's focus on water scarcity

PGGM is the investment manager for the second largest Dutch pension fund. In its 2014 annual report 197 it explains why water scarcity is an area of focus. PGGM notes that the expected global demand for water will be 40 per cent higher than the supply, which affects the companies in which PGGM invests on behalf of its clients, especially in sectors that are highly dependent on water, such as power generation and agriculture. PGGM's engagement programme focuses on providing better insight into the business value at risk due to water issues, looking into risks to company production sites, as well as risks within the supply chain, ranging from raw materials to the use of end products.

### CalSTRS playing its role in helping society manage water scarcity

CalSTRS, the California State Teachers' Retirement System, is one of the largest US pension funds, and one of the largest public pension funds in the world. It reports in its 2014 *Green Initiative Task Force Annual Report*<sup>198</sup> that in California the fund is keenly aware of how water scarcity can impact lives and businesses, as the state struggles to manage a depleting water supply. CalSTRS notes that investors can play a role in helping society manage water scarcity by encouraging portfolio companies to be mindful of their water consumption and make efforts to conserve and recycle water when possible. The CEO, Jack Ehnes, states that CalSTRS uses water tools such as the Aqua Gauge "to analyze companies in our portfolios and to help us engage with companies on water risk." 199

### Water: one of RobecoSAM's key sustainability themes

RobecoSAM is an investment specialist focused exclusively on Sustainability Investing. It provides an annual ESG analysis of 2,800 listed companies through its Corporate Sustainability Assessment which is used as the basis for the construction of the Dow Jones Sustainability Index. RobecoSAM focuses on water as one of the key sustainability themes, noting that it has never been as apparent as today that water supplies are limited as shown by prolonged droughts in California and Brazil. RobecoSAM states on its website that "companies offering products and services that address global challenges related to the scarcity, quality and allocation of water are well-positioned to profit in the long run". RobecoSAM has developed a Sustainable Water Fund<sup>201</sup> and provides frequent updates on water issues to its clients.



# 3. WATER RISKS FOR ASIAN FMCG COMPANIES

Water risks are widespread for FMCG companies, and can have tangible impacts on companies' supply chains, operations and production, and subsequent commercial performance.

For example, in China many sites are legally limited in how much they can increase overall production without first taking drastic action to reduce their water use and impacts.

Water issues can be complex and affect water users, including FMCG companies, in different ways. The risks split broadly into three categories: physical risks related to the problems of too little water, which can affect direct operations or create supply chain disruption; reputational risks; and regulatory risks.

Figure 14 shows the level of risk food and beverage producers face in different areas of Asia, calculated using WWF's Water Risk Filter. India and China face particular threats.

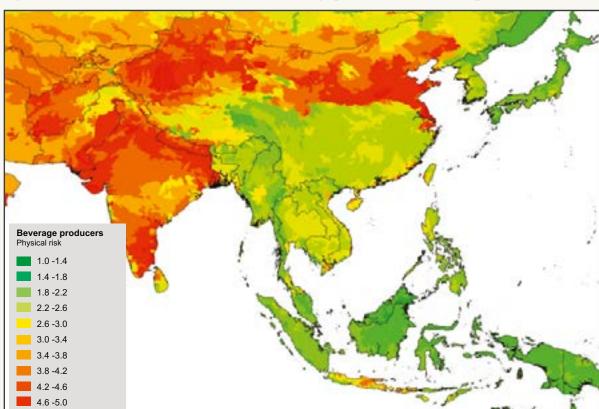
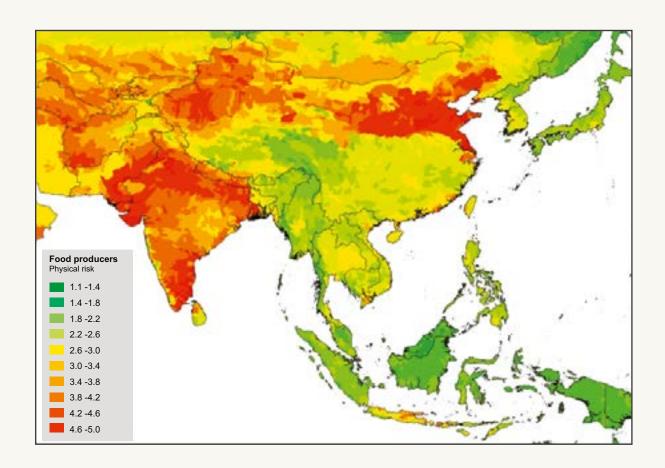


Figure 14: Physical water risks for food and beverage producers in different parts of Asia



### The CDP Global Water Report 2015 shows high levels of risk

Companies which contributed information to the CDP Global Water Report 2015 202 reported they felt they were at a great deal of risk from water-related issues:

- Sixty-five per cent of the companies that responded to investor requests for information reported an exposure to substantive water risk. Respondents reported in total 2,413 individual risks in direct operations and 788 in supply chains with 44 per cent of all risks estimated to occur within the next three years.
  - Sixty-eight per cent of respondents from FMCG sectors reported exposure to risks in direct operations and in supply chains. The most significant risk drivers reported were increased water scarcity and increased water stress and drought. Forty-three per cent of respondents experienced detrimental water-related business impacts in the reporting years.
  - Seventy-five per cent of FMCG respondents reported that they have evaluated how water risks could impact the growth of their business in the near future. Such constraints could be from physical limits to growth as well as limits to gaining a social licence to grow and operate. There is a risk that water resources become a limiting factor for expansion if they are not integrated into long-term planning. This is particularly important for the FMCG sector, which has the highest



**COMPANIES WHICH CONTRIBUTED INFORMATION TO** THE CDP GLOBAL **WATER REPORT 2015** REPORTED THEY **FELT THEY WERE AT** A GREAT DEAL OF **RISK FROM WATER-RELATED ISSUES** 

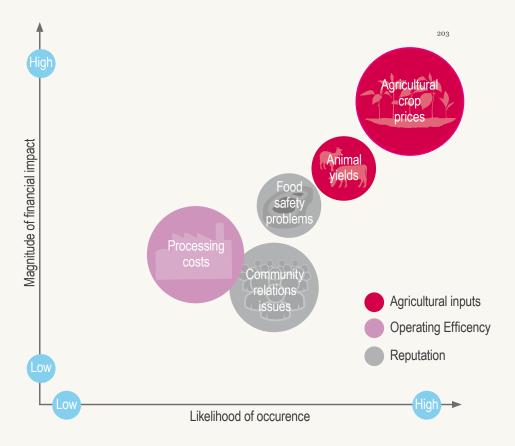
proportion of respondents reporting an increase in water CAPEX and OPEX year on year (22 per cent).

- For example, Unilever fears that it could face requirements to use less power for its operations in Brazil because of the effects of the drought on hydropower production and this could also cause consumer demand for its products to decrease if washing behaviours change in response to the long-term drought.
- Fewer than 15 Asian FMCG companies responded to the report and all were from Japan and South Korea, showing Asian companies' lack of engagement on water issues.

### Food and beverage sector at risk

The WRI and HSBC also analyzed how climate change and water scarcity risks are likely to play out for the food and beverage sector in South and Southeast Asia. They found that the highest magnitude and risk of financial impacts came from the impact on agricultural crop prices (see figure below).

Figure 15: Sector risks: Magnitude of impacts of climate change and water scarcity on the food and beverage sector in South and Southeast Asia



### CERTIFICATION STANDARDS NEED TO DO MORE ON WATER

This report considers the risk of supply chain disruption due to water issues in the water chapter rather than in the commodities chapter as the sustainable water management requirements in current certification standards do not extend all the way to water stewardship. Water stewardship is based on collective action and is crucial if companies are to have any chance of success at resolving the underlying water crisis that threatens their operations and supply chains.

WWF acknowledges that the certification standards mentioned in the previous chapter provide positive contributions to water challenges over and above conventional agriculture. We are seeking to develop an integrated water and standards assessment framework to align and enhance the coverage of water stewardship in existing standards and certification evaluation. A 2015 report<sup>204</sup> provides some recommended solution pathways for the standards community to better address water risk and incorporate water stewardship into their systems.

# 4. ASIAN FMCG COMPANIES' **CURRENT ACTIONS ON WATER**

This section looks at the steps the 26 large listed Asian FMCG companies assessed as part of this guide are taking on addressing water-related risks in their supply chains and in their direct operations.

It should be noted that the steps taken by the companies in figures 16 and 17 tend to focus on footprint reduction or water efficiency as an end in itself. While this is important, it is insufficient to properly address water risk, which considers many aspects of governance, regulations, physical limitations and failure of water management. Companies need to aim for water stewardship, and should first undertake water risk analysis on their supply chain, using tools such as the WWF Water Risk Filter and WWF's five-step approach (see page 103).

### **ACTION ON EMBEDDED OR SUPPLY CHAIN WATER RISKS**

Of the 26 large listed Asian FMCG companies assessed as part of this guide, 21 made no disclosure on whether they monitor and manage their supply chain water risk/embedded water risk. Five of them disclosed steps to manage embedded water use, of which one, being purely a household personal care company, focused only on downstream indirect water use (i.e. use of water by consumers to rinse cleaning products). The remaining four which disclosed on upstream supply chain water use are featured in figure 16.

Figure 16: Companies' disclosures on upstream supply chain water use

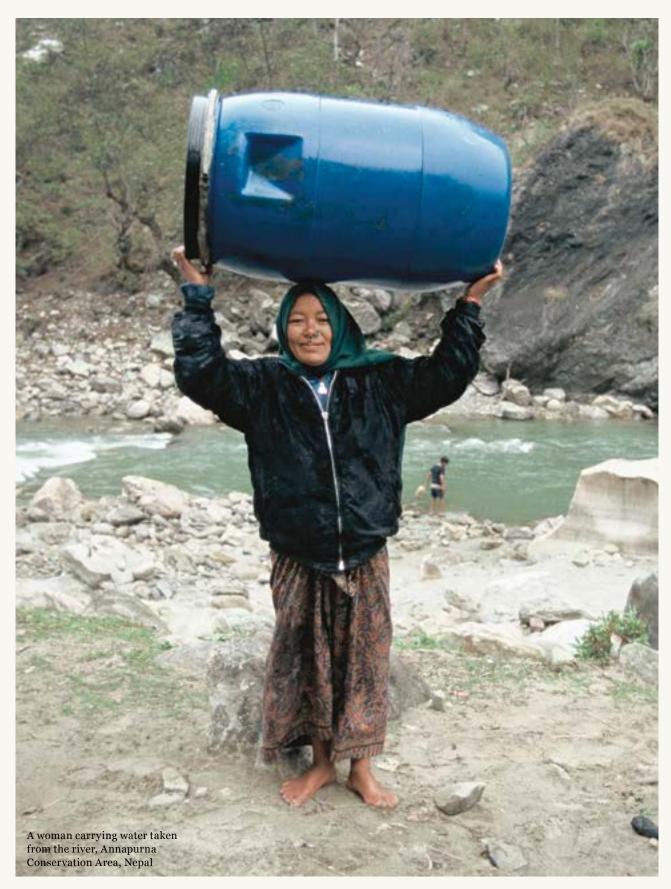
Company name	Steps disclosed to address embedded/indirect water use
Hindustan Unilever Ltd	<ul> <li>Hindustan Unilever:</li> <li>Hindustan Unilever focuses mainly on creating capacities in conserving water through significant investments in partnership with relevant stakeholders across India via its foundation. Community projects have resulted in increased crop yields, water conservation, and capacity building on water conservation and better agricultural practices.<sup>205</sup></li> <li>Unilever Group:         <ul> <li>Unilever's Sustainable Agriculture Code<sup>206</sup> recommends good practices and mandatory requirements for suppliers on water use and water management. Unilever has also recommended<sup>207</sup> good agricultural practices for water (for example, optimal irrigation practices and erosion prevention) and how these practices are implemented, for example, through training of farmers.</li> </ul> </li> <li>According to Unilever's 2014 CDP water response,<sup>208</sup> 85 per cent of its water footprint is associated with consumer use of its products; irrigation water for agricultural raw materials is about 15 per cent; and manufacturing is less than 1 per cent.</li> <li>In this same CDP response, Unilever stated that using data from the Water Footprint Network, it assesses the amount of irrigation water used to produce its key agricultural raw materials. It does this across all the water-scarce countries from which it sources raw materials. This includes a detailed assessment of key agricultural materials (around half of its volume) and consideration of a further 30 materials.<sup>209</sup></li> </ul>
Nestlé Malaysia Bhd <sup>210</sup>	<ul> <li>Nestlé Malaysia had a 2015 objective to define and start to implement action plans to save water in its upstream supply chain for coffee, sugar, rice and cereals in high priority locations.<sup>211</sup></li> <li>Nestlé Group measures water use throughout its value chain in order to improve the water efficiency of its products, in recognition of the large quantities of raw materials and ingredients purchased, all of which require water to grow. In 2013, the water consumed by the crops it purchased amounted to 65 billion m³.</li> </ul>
Unilever Indonesia Tbk PT <sup>212</sup>	Unilever Group: As above.
Want Want China Holdings Ltd	<ul> <li>Cooperates with Alxa SEE Foundation (SEE stands for Society of Entrepreneurs and Ecology) to encourage the local farmers and herdsmen to grow plants that demand less water, to grow 'Desert Millet' to replace corn and to promote water-saving irrigation methods and environmentally friendly growing methods.<sup>213</sup></li> </ul>

### **ACTION ON DIRECT WATER RISKS**

Awareness of direct water risks (the water-related impacts and risks stemming from their own managed operations) and actions to manage these are much higher than for indirect or embedded water risks. Of the 26 large listed Asian FMCG companies, 17 had disclosed an awareness of and action to manage direct water use. Nine of them lacked disclosure on this issue. The following table provides six examples of awareness and action from this group. We have not assessed the adequacy of their actions but have provided examples of steps disclosed by these companies to facilitate engagement and comparison by financiers.

Figure 17: Companies' disclosures on direct water use

Company name	Steps disclosed to address direct water use	
Amorepacific Corp <sup>214</sup>	<ul> <li>Amorepacific aims to reduce water consumption by 30 per cent per unit of output by 2020 compared to 2010.</li> <li>At its two Beauty Campuses in Osan and Shanghai, projects were carried out in 2014 to increase the use of rainwater which effectively reduced the yearly water consumption by approximately 20,000 tonnes in total for the two sites.</li> <li>PACIFICGLASS identified the areas of the production process where water is unnecessarily spent, and established a recycling system to reuse water that would otherwise be wasted.</li> </ul>	
Dutch Lady Milk Industries Bhd <sup>215</sup>	<ul> <li>The operations team, with the support of the parent company, have put in place strategy and actions to decrease Dutch Lady Malaysia's water footprint by 20 per cent per kilo by 2020 compared to 2010, through an efficiency gain of 2 per cent per year.</li> </ul>	
Hindustan Unilever Ltd <sup>216</sup>	<ul> <li>Unilever Group:</li> <li>Under the 'Reducing Environmental Impact' goal of Unilever, it has set a water objective to "Halve the water associated with the making and consumer use of Unilever products globally, by 2020." Hindustan Unilever:</li> <li>In India, Hindustan Unilever reduced water usage (cubic metre per tonne of production) in 2014 in its manufacturing operations by 44 per cent, compared to its 2008 baseline.</li> </ul>	
Nestlé Malaysia Bhd <sup>217</sup>	<ul> <li>Nestlé Group set objectives as follows to reduce its water consumption:</li> <li>By 2015 – Reduce direct water withdrawals per tonne of product in every product category to achieve an overall reduction of 40 per cent since 2005.</li> <li>By 2015 – Establish and implement detailed guidelines on human rights to water and sanitation due diligence.</li> <li>By 2016 – Define water stewardship initiatives and start implementation in five high priority locations.</li> <li>By 2016 – Implement water saving projects in 100 per cent of high priority manufacturing facilities.</li> <li>By 2016 – Carry out 45 new water resources reviews in selected manufacturing facilities, and all greenfield sites.</li> <li>Nestlé Group employed the Nestlé Combined Water Stress Index<sup>218</sup> to assess water stress at operating sites and throughout its supply chain in 2014. The index takes an average of results from three leading water-stress indicators (WWF's Water Risk Filter, WRI's Aqueduct and Pfister's Water Stress Index). It gives a risk score (low, medium or high) to help determine the level of risk associated with reduced water quantity or quality and considers possible competition with other local water users.</li> </ul>	



### Steps disclosed to address direct water use Company name • Thai Beverage has identified two risks on water resources throughout its product life cycle: risk on water shortage and quality of water for the production process, and risk on volumes and quality of water after the production process. In order to prevent and mitigate those risks Thai Beverage has surveyed and monitored the volumes of water in public resources where its production facilities were located, based on the information of related public agencies. Thai Beverage • It launched a pilot project on water footprint to develop a systematic water management system PCI 219 throughout the entire production supply chain. • From 2015 onward, effective tools, namely, the Global Water Tool by the World Business Council for Sustainability Development and WRI Aqueduct, are to be deployed for water volume assessment so as to determine the critical water level and water shortage tendency. The company signed up to a 2015 water footprint project<sup>220</sup> for food exporters with the Thai government to measure its water consumption and manage wastewater. • Based on Thai Union's water stress assessment 2014 using Aqueduct's global water risk mapping tool for its key 15 factories in all continents, the company has one factory in 'high' water stress, and seven factories in 'medium to high' water stress. This is considered critical to systematically manage the company's water intake. Thai Union • Because Thai Union operates in water-stressed areas, the company focuses on reducing water Frozen use and minimizing effluent burden on local municipalities and ecosystems. A focus on water Products efficiency also helps Thai Union to lower its operating costs. PCI 221 • Municipal water supply is the major source of water for Thai Union's canning factories, therefore the company is taking steps to minimize its risk exposure in this area. Cleaning consumes large amounts of water and Thai Union is constantly looking for ways to reduce water usage in this process without undermining food safety standards. • In 2014 Thai Union introduced several projects to use recycled water for cleaning purposes, mostly outside the building and for the toilets.

# 5. THE BENEFITS OF WATER RISK MANAGEMENT FOR FMCG COMPANIES

Water risk management offers a wide range of benefits to FMCG companies, outlined below.





THE FMCG SECTOR **HAS A LARGE DEPENDENCE ON** WATER IN ITS **AGRICULTURAL SUPPLY CHAINS,** FOR THE GROWTH AND PRODUCTION OF MAIZE. SUGARCANE, BARLEY, WHEAT, CEREALS AND GRAINS, COCOA, MILK, AND **EDIBLE OILS SUCH AS** RAPESEED, SOYBEAN AND PALM OIL

### PREVENTING SUPPLY CHAIN DISRUPTION DUE TO EMBEDDED WATER RISK

The FMCG sector has a large dependence on water in its agricultural supply chains, for the growth and production of maize, sugarcane, barley, wheat, cereals and grains, cocoa, milk, and edible oils such as rapeseed, soybean and palm oil. While this initially appears to be an issue for suppliers to manage, the risk transfers to FMCG companies if their suppliers are unable to deliver product at the required price, quantity and quality. Companies should consider the embedded water risk in their supply chains in case these risks cannot be managed by their suppliers. Companies that do so are more likely to benefit from uninterrupted supplies.

There are multiple types of water risk that can affect soft commodity producers. Water quality issues can have a strong effect on agricultural and raw material production, with polluted or salinated ground and surface water potentially being used for irrigation purposes – damaging crops or creating poor quality product, reducing soil quality and leading to potential health issues for consumers.<sup>222</sup>

Drought and flood are also highly relevant risks for agricultural supply chains, and can lead to shortages of water and widespread crop failure. Some agricultural sites will need to seek last minute water and this increases their production costs – this may then be passed down direct supply chains. Climate change and other global factors can lead to large-scale changes in water availability, which will affect agricultural production costs and increase commodity prices.

Even without accounting for climate change impacts, global commodity prices are expected to increase in the long term,<sup>223</sup> with the price of wheat predicted to rise by 81-102 per cent by 2050. Volatility in precipitation and more severe water scarcity may increase these pricing risks further.

Asian supply chains have significant exposure to the issues. China is among the largest exporters of products linked to water risk: 40 per cent of its food production is in water-stressed areas.<sup>224</sup> HSBC Global Research looked at how water scarcity and pollution could affect food safety and food security in China.<sup>225</sup> The study warns that the agricultural sector, which is the top user and polluter of water in China, may come

under risks from the government's tightened regulations on water usage as well as water and soil pollution. It is possible that such disruptions will be passed downstream to FMCG companies through pricing increases and potential shortages.

In Japan, KPMG research, together with Trucost, 226 showed that from all sectors listed on the Nikkei 225 index, the food and beverage companies have the highest share of water consumption in their supply chain: 98 per cent of their water footprint resides with first-tier and further upstream suppliers. The whole Nikkei index 'imports' more than 75 per cent of its water use, mostly from other countries in Asia.

Companies worldwide are already facing water-related supply chain disruption:

- Unilever NV estimates that natural disasters linked to a changing climate in particular, food price increases, water scarcity and reduced productivity in many parts of the agricultural supply chain — cost the company around US\$400 million annually (around 0.7 per cent of 2014 revenues).227
- Campbell Soup Co saw a 28 per cent drop in its California-based carrot division profits in early 2015 due in part to drought followed by intense rains which forced them to shift harvesting to farms that were less affected and also increased freight and water costs.<sup>228</sup> In their 2014 annual report, Campbell Soup Co clearly describe the exposure of their business to supply chain disruptions brought about by events such as adverse weather and water scarcity. They state that: "Failure to take adequate steps to mitigate the likelihood or potential impact of such events, or to effectively manage such events if they occur, may adversely affect the company's business or financial results, particularly in circumstances where a product is sourced from a single supplier or location."229
- **JM Smucker Co** raised prices on most of its US packaged coffee in June 2014, after the worst drought in Brazil in decades caused green coffee costs to soar. In November 2014, the company termed the price increases a 'misstep' as they led to a sharp drop in sales volumes as customers shifted to cheaper private-label brands. The company announced plans to introduce smaller Folgers cans in Q2, 2015 to win back customers.230

### MITIGATING OPERATIONAL RISKS

Good water management will help companies to ensure they have enough water for their operations at all times.

FMCG companies are large consumers of water in their direct operations and processing facilities, and can very quickly see production disrupted by drought, flood, water resource competition, climate change and other physical water risks. This can be due to groundwater depletion (sometimes requiring company investment in additional boreholes or infrastructure to withdraw the same volume of water), surface water reduction, or municipal water supply cost increase.

As climate impacts intensify, this is not something that can be avoided by having a 'backup' location, since water risks are likely to increase across whole regions where production is taking place and this could limit earnings growth.

Water quality has been declining throughout Asia due to a combination of increased pollution and decreased flow volumes. Lower water quality can impact water availability, increase the costs for treatment and increase food safety risk.<sup>231</sup> In particular, beverage companies are at risk, due to their direct water use and requirements for consistent volumes of high quality source water.

For example, a report by China Water Risk *Bottled Water In China – Boom Or Bust?*<sup>232</sup> looked at the exposure of the bottled water industry to physical and regulatory risks in a country where bottled water is one of the fastest growing FMCGs. The report states that in 20 years China has become the world's number one bottled water consumer. Bottled water consumption is expected to grow faster than the national water quota and this booming market has attracted both domestic and foreign investments. However, the report estimates 71 per cent of the bottled water production lies in water-scarce and water-stressed regions, therefore bottled water companies are exposed to significant physical and regulatory risks.



MAY BE FORCED TO

STOP USING WATER.

**POTENTIALLY** 

**PRODUCTION** 

HALTING

### MAINTAINING A GOOD REPUTATION

Without good management, companies can suffer huge reputational damage on water issues, either locally near operations and supply chains, or at a global and brand level. The figure opposite shows that most water basins in Asia are classified as moderate to high reputational risk.

Legend Reputational risk 1.0-1.4 1.4-1.8 1.8-2.2 2.2-2.6 2.6-3.0 3.0-3.4 3.4-3.8 3.8-4.2 4.2-4.6 4.6-5.0

Figure 18: Water-related reputational risk throughout Asia

Reputational risk mapped using the WWF DEG Water Risk Filter: waterriskfilter.panda.org

> Companies and their suppliers need to maintain their social licence to operate locally or they may be forced to stop using water, potentially halting production. It is important for companies to understand the reputational risks across the specific areas in which they operate as these can vary significantly.

Examples of companies facing reputational risks related to water include:

- In 2013, Nestlé Waters North America Inc faced opposition in several states while securing contracts to build water bottling plants in the US, 233 leading to severe postponements. The company was the subject of negative media attention due to this issue.
- Nestlé Waters North America Inc was again impacted by water-related reputational issues in 2014 amid a severe drought in California. It faced criticism from the local population (who had been asked to cut their consumption by a

fifth) for the fact that Nestlé Waters North America was still bottling water in its Southern California plant. For example the League of Conservation Voters, a prominent national lobby group, urged 50,000 of its members and consumers to petition the company on the issue. <sup>234</sup> Nestlé SA stated on its website <sup>235</sup> that it withdraws less than 0.008 per cent of the total water in California and that closing its operations or reducing the amount of water it withdraws significantly would not resolve the drought problem. It stated that the resulting annual savings from shutting down all of its California bottling plants would be less than 0.3 per cent of the total the California Governor estimated the state needed residential and public users to save. This exchange demonstrates the heightened sensitivity around water issues that FMCG companies need to manage carefully.

• Both Coca-Cola Co and PepsiCo Inc have had issues in India. In 2003, citizen protests in Kerala forced Coca-Cola Co to shut down its bottling plant due to local stakeholders accusing them of pollution and depleting the groundwater supply. The campaign was picked up across the world and in particular in the US. This not only caused Coca-Cola Co disruption of supply in Kerala, but brand damage across the world. The result was a stranded asset valued at US\$16 million. A local water issue also became a global brand issue.

Despite having an in depth focus on water risks, Coca-Cola Co faced similar problems again in 2015, when it had to abandon plans to build a US\$81 million bottling plant in southern India<sup>238</sup> due to resistance from local farmers who cited concerns about strains on local groundwater supplies. This followed on from the 2014 mothballing of a new US\$24 million bottling line at an existing bottling plan in Uttar Pradesh due to disagreements with the local water authorities amid protests from local farmers. This demonstrates the difficulties faced by FMCG companies looking to expand into areas experiencing or facing risks of future water stress.

PepsiCo Inc's experience was similar and also occurred in 2003. It was accused of excessive groundwater use at its facilities. Following protests its Indian sales suffered double digit falls. <sup>239</sup> The company faced a second round of protests and a hit to sales in 2006 when protestors smashed bottles on the streets while several states in India banned or restricted the sales of soft drinks.



REGULATION
AND STRONG
WATER
MANAGEMENT
INSTITUTIONS
ARE VITAL
TO ENSURING
THAT WATER
ALLOCATION AND
QUALITY ARE
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### MITIGATING REGULATORY RISKS

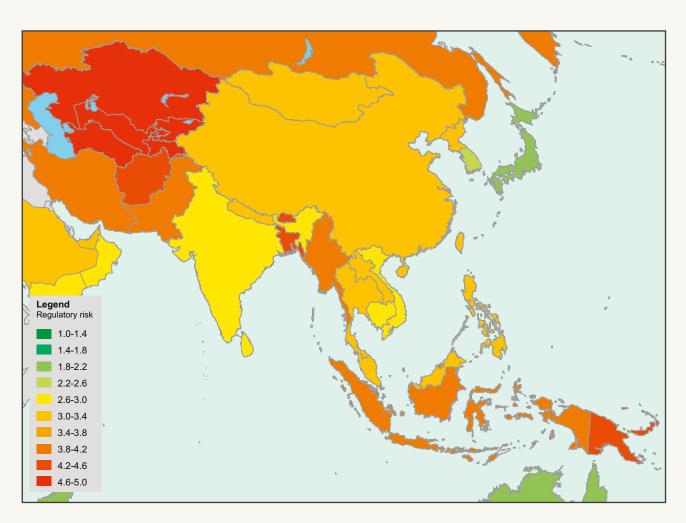
Regulatory risks are connected to unstable or poor regulation of water use and lack of positive water management processes. For a company or its suppliers, this can mean instability, uncertainty, higher costs and a lack of balanced decision-making on water rights and allocations.

Regulation and strong water management institutions are vital to ensuring that water allocation and quality are sustainable and balanced. Strong basin management means

weighing competing water demands and uses, to provide an equitable allocation for the benefit of all users within the limits of the physical environment, and to safeguard the quality of ground and surface water.

Lack of adequate planning and regulation – for example a lack of integrated river basin management – can lead to water over-exploitation, water pollution and habitat destruction. It can mean that local populations are not included in decisionmaking, water rights are not properly allocated or honoured, and private interests are sometimes allowed to monopolize or damage water sources, preventing access by other users and local populations. It may also mean that preparations are not made for future water scenarios and current extremes of drought and flood, and local populations are not able to access basic water and sanitation services. Weak governance can lead to instability of regulation around water, which is challenging for all water users. All of these scenarios have negative impacts for an organization operating in affected countries or regions.

Figure 19: Water-related regulatory risk throughout Asia Reputational risk mapped using the WWF DEG Water Risk Filter: waterriskfilter.panda.org







WHILE IT IS NOT **POSSIBLE TO** PREDICT WHEN REGULATORY **CHANGES REGARDING WATER USE MAY COME ABOUT, THE** IMPENDING WATER CRISES IMPACTING **ASIA IN THE NEXT 15** YEARS SUGGEST THAT GOVERNMENTS **WILL HAVE TO REACT SOONER RATHER** THAN LATER

Regulation of water use and water quality is lax in many developing countries, and sites adhering to the law can still have serious negative impacts. For companies looking at water risk in their supply chains and operations, legal compliance is usually not a sufficient threshold to mitigate site-level water risks. Even where regulations are strong, enforcement can be weak. The figure above shows regulatory risk across countries and highlights moderate to severe regulatory risks across Asia.

Companies that have investments in locations where regulations and institutions fail to properly regulate water, or which struggle with implementation of laws and limits, face higher water-related risks. In these conditions, it is not possible for a company to manage water risk by only improving its own practices. If governance does not function optimally, impacts from other users can continue to influence a company and operational and supply chain risks continue. Volatility of the political landscape also poses great risks to ensuring stable access to water, and can lead to sudden changes in the cost, licensing requirements or availability of water resources. Here, collective action is required.

A further governance issue relating to water is how its price is set. Companies in many locations are currently paying a low cost for water. In many parts of Asia, water is not priced at all or priced very low<sup>240</sup> and does not reflect the externalities (costs) borne by others. A KPMG/Trucost study showed that if suppliers to Nikkei 225 index companies in the personal and household goods sector were to pass on water prices that reflect water scarcity in Asia through the supply chain, the additional costs would equate to 84 per cent of EBITDA on average. This may not be a hit to earnings as the companies may be able to pass on some costs, but it highlights the significance of the risks involved.

While it is not possible to predict when regulatory changes regarding water use may come about, the impending water crises impacting Asia in the next 15 years suggest that governments will have to react sooner rather than later to prevent significant adverse consequences.

# 6. OVERCOMING HURDLES TO EFFECTIVE WATER RISK MANAGEMENT AND STEWARDSHIP

FMCG companies should address water issues. This is not only for immediate procurement cost savings, which may be limited since in many countries water has a low price (often free), but also because water impacts multiple aspects of financial viability – expenses, revenues, assets and liabilities. Both potential corporate and basin-related water risks have a significant ability to affect future value. Since in many cases these risks are from outside their own operations, companies need to take a water basin-level approach, considering other users in the same basin, not just their direct footprint.

The most effective approach is described as water stewardship. The Alliance for Water Stewardship (AWS) <sup>241</sup> defines it as "entailing the internal and external actions that ensure water is used in ways that are socially equitable, environmentally sustainable and economically beneficial".



ONE OF THE
BEST WAYS FOR
COMPANIES TO
START WORK ON
WATER ISSUES IS TO
JOIN A COLLECTIVE
ACTION PROJECT
WITH MULTIPLE
STAKEHOLDERS,
INCLUDING
GOVERNMENT, CIVIL
SOCIETY, AND
OTHER PRIVATE
SECTOR PLAYERS

A report published in August 2015 by WWF and the IFC entitled *The value of water: A framework for understanding water valuation, risk and stewardship*<sup>242</sup> offers a new framework to understand water valuation, risk, and stewardship. It identifies three concepts which are often used interchangeably, although they differ considerably: the price of water, the cost of water, and the value of water. By showing how physical, regulatory and reputational risks at company and basin level are related (see figure 20 opposite, extracted from page 17 of the report) it highlights the importance of companies moving to water stewardship. This report makes six recommendations for companies:

- 1. Understand water's value to different audiences.
- 2. Understand how risk and uncertainty impacts the value of water.
- 3. Include water-related value in the balance sheet and income statement and discuss both water risk and stewardship response in the annual report.
- 4. When making financial decisions, consider more than just the price of water.
- 5. Learn about, and engage in, water stewardship to more fully capture water-related value.
- 6. Share with investors how water stewardship creates and preserves value.

### **COMPANY-RELATED RISK**

Linked to facility's performance

### **BASIN-RELATED RISK**

Linked to location of facility

Water quantity and quality issues related to the performance of the company and its supply chain.

PHYSICAL RISK

Water quantity (scarcity, flooding, and droughts) and quality (pollution) within the river basin and the impacts this might have on society and the environment.

Perceptions of water use, pollution and behaviour that have negative impacts on the company brand and influence purchasing decisions. Public perceptions can emerge rapidly if local aquatic systems and community access to water are affected.

REGULATORY RISK

Strength and enforcement of water regulations and the consequences of restrictions by public institutions; either felt through direct regulatory action or from neglect, blockages, or failure.

REPUTATION RISK

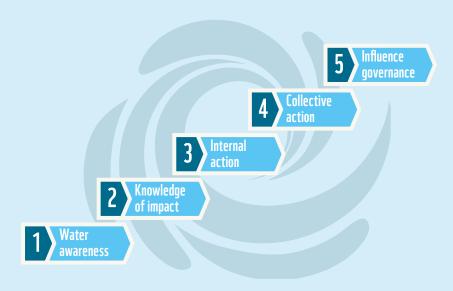
Figure 20: Types of water risk

One of the best ways for companies to start work on water issues is to join a collective action project with multiple stakeholders, including government, civil society, and other private sector players. Companies will gain increased understanding to address their internal footprint and identify and solve technical, financial and strategic challenges.

### THE FIVE STEPS TO MITIGATING WATER RISKS AND CAPTURING WATER-**RELATED VALUE**

The following steps illustrate the progress that FMCG companies can make in their journey toward sound water risk management and eventually water stewardship. This section provides for each step the various hurdles preventing companies from achieving progress, available solutions and existing best practice examples. Companies do not have to follow these steps in order.

Figure 21: Water Stewardship Steps<sup>243</sup>



Steps 1-3 relate to activities over which companies have greater control, while 4-5 involve coordinating with other stakeholders. Steps 1 and 2 build internal knowledge and understanding of water issues and risks in operations and supply chain management. Step 3 helps to reduce internal and supply chain impacts.

Steps 4-5 are where a company shifts from management to stewardship – where the rules, measures, focus, engagement, control and complexity change considerably – and where traditional notions of business sustainability are most challenged by the resource. However, where reputable collective action initiatives already exist in the basin, companies that join should be able to benefit from the theory of change and knowledge of the water situation in place. As such, steps 4-5 are not just for companies with a mature water stewardship strategy. Mature companies can take steps 4-5 as leaders, while less mature companies and SMEs can join existing initiatives geared specifically to help them take impact reduction action and take part in shared solutions. For example, FMCG producers and SMEs in Pakistan, <sup>244</sup> India, <sup>245</sup> and China <sup>246</sup> are all working with WWF teams to develop their understanding and in many cases with external initiatives such as the PaCT programme in Bangladesh. <sup>247</sup>

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Figure 22: Definition of steps

Steps 1-3	Steps 4-5
Direct sphere of control	Indirect sphere of influence
Impacts my company has on water resources	How my company is impacted by external water issues
Efficiency of resources	Allocation of resources
Products I make (or buy or use)	Places I (others) make them
Private goods	Public goods
The value I create	The values people hold
The risk I face	The risk we face



## **STEP 1: WATER AWARENESS**

This is awareness of the general water debates (social, environmental, economic), the water management context and the functionality of water institutions, as well as the implications for specific sectors. Awareness should also explore how other parties perceive the company, including basin stakeholders, the press, consumers and NGOs. This will influence the degree of risk that a particular company faces. There is also internal awareness of issues, from the CEO to plant and purchasing managers, which is a key factor in how companies sell the water story internally. As with each of the subsequent steps, building water awareness is an ongoing process and progress needs periodical review. On the basis of public disclosure, our assessment shows that 17 out of 26 (65 per cent) of large listed Asian FMCG companies had some level of awareness of their direct water risks. The awareness on indirect water risk through agricultural supply chains was much lower, with only four disclosing any monitoring or management steps.



### **OPERATIONAL HURDLE**

The company is not aware of the local nature of water impacts, or the kinds of risks their operations and supply chains are exposed to. Water is not widely discussed within the organization, and is not embedded in product/process design or other assessments. No training is given on water issues. The company has a short-term perspective on water dependency and its operational/raw material water needs.

### **Solutions:**

- Engage with internal and external stakeholders to help understand the impacts and risks in basins and across the company.
- Understand water use and sources within the company and supply chain.
- Create internal capacity on water and ensure water issues are embedded into staff and supplier training.

Example: Marks & Spencer Group plc is committed to working with its suppliers to improve their water efficiency and encourage good water stewardship<sup>248</sup> through its Sustainable Factory and Farming for the Future programmes. Marks & Spencer initially focused on assessing water impacts and risks for 200 suppliers in five countries to understand and share water management good practice. It has produced a guide<sup>249</sup> with WWF directly targeted at agricultural producers to help them better understand their water risks and how they can reduce these risks through good water stewardship. It aims to help agricultural producers identify ways to improve the use and management of the freshwater resources that are critical to the sustainability of their business.



### REGULATORY HURDLE

The company lacks comfort with and understanding of the regulatory elements of risk. It sees adherence to the legal minimum as providing protection. There's also a lack of understanding of regulatory variation and (possible) inadequacies across opaque supply chains. The company does not recognize the shared risk approach either (defaulting to a win/lose view of water as a resource).

#### **Solutions:**

- Analyze how issues around water regulation are communicated internally.
- Work to understand and communicate water regulation and pricing.
- Embed regulatory issues into internal and supplier training.

Example: H&M has created in depth internal training and communication materials, looking at all water risks including physical, regulatory and reputational risks. These risks are included in the company's risk management strategy. <sup>250</sup> H&M is very communicative with its stakeholders about how it addresses water risks, particularly through its dedicated sustainability website, where the water page informs readers, for example, that by 2014, of 132,000 H&M AB employees, 50,000 had completed a sustainability e-learning with water as a key topic, and the company aimed to increase this to 50 per cent by the end of 2015. 251



### REPUTATIONAL HURDLE

The company's understanding of potential reputational impacts of water risk is limited. Water is not treated as a core issue within the organization, and if addressed it is usually a 'CSR' approach focused on ad-hoc sponsorship projects.

### **Solutions:**

- Review external company reporting on water and improve if necessary.
- Work with external stakeholders to understand brand/company and sectoral level reputational issues related to water.

Example: Ooska news reports all water-related reputational issues on its website . The website allows users to visualize several corporate risk categories related to water, including reputational risk. This is an excellent place to understand more about potential reputational risk in key locations. Ooska news' analysis is included in the WWF Water Risk Filter.

## STEP 2: KNOWLEDGE OF IMPACT

A company requires a wider understanding of where its footprint actually is, where suppliers are located and what dependencies it has on water - both in terms of quantity and quality. This may include some measurement of water footprint or risk, as well as some measurement of the impact a company's activities have on water, the risk in each location and how this affects people and ecosystems. This will allow companies to assess peer users and identify more material risk issues. Companies should develop an understanding of their context in specific river basins, and identify high-risk 'hotspots' caused by water quantity and/or quality issues relevant to them.



### OPERATIONAL HURDLE

The company has no knowledge of tools to assess impacts and risks, particularly beyond volumetric water measures and within the supply chain. It is unclear on assessment methods at basin level.

### **Solutions:**

- Use the Water Risk Filter and other tools for understanding all types of risk including climate change-related water risk.
- Push as far into the supply chain as possible and examine impacts on other users. Understand the main locations and impacts of raw materials.
- Review water quality impacts, monitoring and policies throughout its operations and supply chain.
- Assess cost of action vs inaction. Consider an ecosystem services assessment.

**Example: Coca-Cola Co** has carried out a detailed assessment around the vulnerabilities of the quality and quantity of water sources for each of its bottling

### FMCG COMPANIES IN THE CDP GLOBAL WATER REPORT 2015

 Even though 65 per cent of respondents report that water poses a substantive risk to their business almost half (45 per cent) of them do not require key suppliers to report water use, risks or management.



plants to identify water-related risks to its system and to the communities it serves.<sup>252</sup> Once the assessments were complete, Coca-Cola Co and its bottling partners developed locally relevant water resource sustainability programmes detailing specific risk mitigation actions that can be taken to help with preserving the sustainability of local water sources. All the bottling partners were required to implement their source water protection plans by the end of 2012.



### **REGULATORY HURDLE**

The company does not know how to benchmark regulatory effectiveness, or how to anticipate regulatory changes across its operations or supply chains. It is unclear on company responsibility and exposure beyond legal compliance.

### **Solutions:**

- Use the Water Risk Filter and other tools for understanding risks across operations and supply chain.
- Investigate threats to water licences, and potential water price changes.
- Conduct a comprehensive assessment of water withdrawal and discharge regulations in relevant basins.

**Example: SABMiller plc** is one of many companies to have carried out a detailed water risk assessment on its production sites, including analysis of regulatory risks.<sup>253</sup> It launched its group water risk assessment process, and used the WWF Water Risk Filter, in order to obtain a detailed understanding of the potential water risks facing all its breweries globally. The risks assessed cover a range of issues including water availability, water quality, the strength of regulatory systems, and reputation risk. Importantly, these reviews cover the watersheds that the Group's operations are located in to ensure it has an appreciation of not only what risks its breweries face, but also the risks faced and the contributing role played by other companies, industries and stakeholders in the communities and watersheds where it operates.



### REPUTATIONAL HURDLE

The company does not know how to incorporate or measure reputational risk exposure in basins/countries. They find it challenging to articulate what reputational risk means for the company.

### **Solutions:**

Use the Water Risk Filter and other tools for understanding risk across operations and the supply chain.

- Understand key stakeholders and issues in relevant basins (including critical voices).
- Anticipate future changes in risk.

Example: Woolworths Holdings Ltd, a South African food and clothing retailer, is one of many companies to have used the Water Risk Filter to assess its risks on water, including its general reputational risks in operations and supply chains.<sup>254</sup>

WWF has been working with Woolworths to better understand and reduce its operational water use since 2009. Woolworths' investments are used toward clearing invasive alien plants in priority catchments in the Western Cape. Seeking global strategies and knowing that partnerships are required to meet local water issues, through WWF, Woolworths and Marks & Spencer have created a shared initiative to address water-related risks in the stone fruit supply chain. This project brings together a group of Woolworths and Marks & Spencer shared stone fruit suppliers and works with them to implement the AWS Standard, actioning opportunities for water efficiency and quality.

## **STEP 3: INTERNAL ACTION**

This is a logical and easily managed first step of outlining actions, targets, goals and plans to help tackle the more immediate technical fixes to the problem. It can also be a good time to drive wider awareness throughout the company. Internal action means engagement with employees, buyers and suppliers to establish the potential opportunities as well as risks for the company. Water efficiency (where appropriate), implementing technical best practices, pollution reduction, measuring and reporting, and internal water governance are all crucial elements of internal action. Companies should also begin to engage their suppliers to realize improvements.



### OPERATIONAL HURDLE

The company has financial limitations and no access to technical expertise. The cost of water is low, therefore savings are low (or there's a lack of information on potential savings). There's a lack of supply chain leverage, and challenges addressing supply chain and raw material risks. The company has no supply chain or operational targets.

### **Solutions:**

Engage industry-wide initiatives' on-site technical support and access to investment capital or provide links to relevant expertise and funding for suppliers and operations.

- Create flood risk and climate change adaptation plans.
- Ensure water is fully embedded in company targets and policy.
- Enforce leading water quality standards throughout operations and the supply chain.
- Invest in ecosystem services.
- Implement water stewardship standards at site level (such as AWS).

**Example: AB InBev** has implemented a full-scale programme of activity within its brewery operations to reduce water impacts. It states that it has a long-standing approach of partnering with its growers to improve crop management practices. It has conducted a robust water assessment in its key barley regions — identifying local water availability and water quality concerns, mapping relevant stakeholders for potential partnerships and developing locally tailored pilot initiatives that improve water management.255



### **REGULATORY HURDLE**

Water pricing does not reflect the true cost and opportunity cost of water. Regulators in many places do not adequately legislate or police water use, creating basin-level issues.

### **Solutions:**

- Create engagement strategies on governmental water issues.
- Where suppliers or operations are in areas without adequate regulation, engage them on this issue and assess the levels of risk at a local level.
- Consider analyzing financial value at risk of water impacts and using as a discussion point internally and externally.

Example: H&M has addressed ineffective legal minimums in wastewater treatment by committing to get 100 per cent of its wet process suppliers to comply with industry best practice water quality standard BSR. By the end of 2015, all 500+ supplier factories with wet processes should have improved water management such as annual water targets, improved water use measurements, improved chemical use, reduced water use and increased water recycling rate. In June 2008, the company signed the CEO Water Mandate, a voluntary initiative from the UN Global Compact. The mandate commits H&M to improve both its own and its suppliers' water efficiency, improve wastewater quality and report transparently on its progress. H&M is publishing its progress against this target on its website.256



# REPUTATIONAL HURDLE

The company feels a lack of 'push' from consumers or shareholders/banks. It has no previous experience of negative reputational outcomes, and no disclosure of water use, risks or targets.

#### **Solutions:**

- Create activities to understand and address stakeholder issues related to the company.
- Communicate internally on risks and company responses to risks.
- Ensure internal governance is in place to deal with water issues.
- Prioritize supplier engagement based on reputational risk.
- Disclose risks and responses, assess company strategic response via dialogue with NGOs, governments, transparent reporting in annual or CSR reports or to disclosure platforms.
- Educate and engage shareholders and banks on the company's water management strategy.

**Example:** The number of companies disclosing to reporting initiatives like CDP is increasing every year. In 2015, responses were received from 1,226 companies, up 15 per cent compared with 2014. 257 This includes 405 respondents out of the 1,073 publicly listed companies globally that were asked by investors to provide information.



# **STEP 4: COLLECTIVE ACTION**

This relates to external engagement and demonstrates that a company now recognizes that working with others and at various scales (global fora to local water user groups) might be a necessary part of its strategy. Stakeholders can be anyone from other users within a geographical area, such as a specific catchment, to other companies, sector initiatives, public agencies, NGOs and standard setting bodies.

For companies new to the water space, the best approach to collective action is to identify and join an existing collective action initiative that can support the company in developing an action plan on water, and help them to understand the water risks within local areas. There are many initiatives in Asia that aim to help companies improve as part of a wider initiative on tackling shared water risks and governance issues.



## **OPERATIONAL HURDLE**

The company lacks awareness of the need for collective basin-based dialogue and action. There's an assumption that the role of the company is either limited to its own impacts or to funding basin-level infrastructure. There's uncertainty around the correct approach to mapping key actors and water issues in relevant basins.

#### **Solutions:**

- Map dependencies of stakeholders on physical water resources and quality within priority basins.
- Engage with representative basin stakeholders to drill down into specific water issues within the basin.
- Create research projects to drive full understanding of basin impacts and hydrology.
- Engage with stewardship standards such as the AWS.
- Use the Water Action Hub to identify other actors who are interested in collective action. Create a collective action dialogue and activity plan in line with WWF and CEO Mandate guidelines.
- Engage and fully participate in collective action programmes, to ensure strong joint
  decision-making, support of governance and voluntary impact reduction measures
  or joint projects such as infrastructure investment and ecosystem restoration.
- Set internal targets for water stewardship not just volumetric or in-house targets.

**Example: H&M** has worked with WWF on collective action projects in two countries: Bangladesh and China. WWF and H&M are working on supporting stronger water governance in Bangladesh, through collaboration with other organizations and analysis of governance challenges. The aim is to raise awareness with public and private actors on the importance of strong water governance and to create a roadmap for all actors to contribute toward strengthened governance and a sustainable, shared water future. In China, H&M and WWF have initiated a project in the Taihu area where industrial parks are engaged in water stewardship and collective action. The aim is that all factories in the area will improve internal practices, share resources and expertise regarding water management and engage in collective action with other factories, as well as local communities and NGOs. A methodology for industrial parks has been developed with input from local experts, and tested with relevant industry and political stakeholders. The goal is to capture learnings from the industrial park level and ensure that a variety of key stakeholders are engaged, to support replication of the industrial park method in other locations.<sup>258</sup>



# REGULATORY HURDLE

The company lacks resources in or awareness of local and national regulators. Within the company, there is a lack of participation in or support of collective action.

#### **Solutions:**

- Map key regulatory agencies. Include them in collective action as an important stakeholder.
- Align with existing institutions including basin-level activity.
- Create economic risk analysis for basins to emphasize the important role of water in basin economics and growth.
- Engage with regulators on water issues.
- Leverage influential local players to drive the message to key governmental actors.

**Example:** One of the first cases of collective action on water issues was in Lake Naivasha in Kenya, led by local flower and vegetable growers. They worked to address physical, regulatory and reputational risks as part of a collaborative effort to tackle water issues in the lake, and to strengthen existing regulatory institutions. The initiative involved local organizations from the public and private sectors as well as local associations and small-scale farmers. It achieved the implementation of a management team, the funding of environmental conservation projects, as well as the preparation of a Sustainable Development Action Plan and of the WWF-Imarisha Integrated Water Resource Action Plan.<sup>259</sup>



ONE OF THE FIRST CASES OF **COLLECTIVE ACTION ON WATER ISSUES WAS IN LAKE NAIVASHA IN** KENYA, LED BY **LOCAL FLOWER AND VEGETABLE GROWERS** 



# REPUTATIONAL HURDLE

The company lacks external understanding of water as a local/basin issue that should be addressed through collective action, rather than abstract footprint reduction. Local stakeholders are suspicious of corporate actors as convenors or instigators of collective dialogue. The government believes that corporations want to weaken rather than strengthen regulation. Existing reputational challenges in the basin could lead to a negative reaction to engagement. There could be negative reputational outcomes if basin collective action is unsuccessful or challenging.

#### **Solutions:**

- (Applies to role of convener) Ensure that basin-level activity is communicated transparently with basin stakeholders and the wider audience, and that all important interest groups are included.
- Ensure that the company has a good track record on site-level activity and can communicate this effectively.
- Engage stakeholders on shared risk perspective and need to collaborate. Ensure local communities are educated on water issues.
- Partner with credible third parties who can facilitate engagement and dialogue effectively (for example local NGOs).
- Understand human rights to water and take action wherever possible to promote this within priority basins.
- Engage and align with existing water forums or opinion leaders.
- Have a long-term role in collective action and backup plans for potential hurdles.

**Example:** The **Water Action Hub**<sup>260</sup> is a good place to look for collaborators to work together in collective action projects. By working collaboratively, companies minimize their reputational risk, show leadership and insulate themselves against accusations of policy capture and the outcomes of unsuccessful individual activity on water.

# STEP 5: INFLUENCING GOVERNANCE



STEWARDSHIP IS **ABOUT GUIDING** AND SUPPORTING **GOVERNMENT POLICY, NOT SUPPLANTING IT** AND CERTAINLY **NOT THWARTING OR UNDERMINING ITS IMPLEMENTATION**  Water governance refers to the political, social, economic and administrative systems that are in place to develop and manage water resources, and the delivery of water services, at different levels of society. 261 Improving governance via stewardship enables non-government actors to play a positive role by fulfilling their responsibilities and supporting other actors and government to do the same.

Stewardship is about guiding and supporting government policy, not supplanting it, and certainly not thwarting or undermining its implementation. A key challenge for water stewardship is to broaden the discussion of water problems from sector- or business-specific concerns and develop a common understanding of the challenges and drivers of water problems across government, the private sector, civil society and communities. Influencing governance is also about a shared voice. Where a company's direct influence is perceived to be too strong, this may hamper the delivery of shared water management plans, as other stakeholders may question the legitimacy of decision-making. Undue influence can also lead to a misreading of water-related issues and therefore an ineffective plan, since understanding a range of perspectives is a much more effective way of pinpointing issues.

For smaller companies or companies just starting their work on water, direct engagement with governance or initiating action on governance is not realistic. However, many of the collective action projects for step 4 also have a governance component, and there are many organizations working to create participatory governance mechanisms for all local stakeholders. Participating within these groups does not require companies to organize efforts but merely to discuss water issues with other users and take part in a guided process. This not only leads to better water governance but also allows the company to express concerns and needs around water and take part in shared decisions.



## OPERATIONAL HURDLE

The company lacks influence at individual company level, examples of self-regulation and viability of good basin management from an economic perspective.

#### **Solutions:**

- Promote government action on water and investment in infrastructure.
- Participate in government for a for water management including drought and flood management.

- Promote appropriate land planning and conservation/habitat restoration programmes. All activities should ideally be channeled through collective action. Economic risk analysis can also play an important role in reaching government departments.
- Stakeholder mapping at the start of collective action should have identified the key government agencies and actors to engage, and this should form a cohesive engagement plan.

**Example:** The **PaCT**<sup>262</sup> programme in Bangladesh is a collaborative effort between the IFC, an NGO called Solidaridad and textile brands sourcing from suppliers in the region. They are working with a number of local stakeholders to identify how to engage with water governance systems within Bangladesh. The programme gathers global apparel buyers, factories in the buyers' supply chains, financial institutions and the leading industry association, the Bangladesh Garment Manufacturers and Exporters Association, to address water sustainability challenges in the sector. PaCT has formed a Textile Sustainability Platform to allow a structured approach to engaging with government, local communities and other stakeholders on water challenges. Improving water governance is not just for the companies involved to reduce their own internal risk but the goal is for the new norms and practices set through this platform to form the new water policy for all other factories.



# **REGULATORY HURDLE**

The government lacks interest or resources, or there are complex relationships between different government agencies.

#### **Solutions:**

- Support strengthening of government policy. This is particularly useful if done through collective action, as this protects against policy capture.
- When interest is lacking, engagement plans with reports and evidence of best practice benefits should be created.
- When government resource is lacking, the collective action group should explore the potential of collective self-regulation, donating resources for implementation, or engaging third parties for support.

**Example:** WWF and key stakeholders that include civil society, private companies and government institutions have collectively come together in an effort to better understand the risks facing the lower Kafue sub-basin in Zambia. The group has begun to recognize that the challenges and opportunities that exist within the basin cannot be harnessed alone.



The collective action work in Lake Naivasha also produced an analysis of the economic risk to the Kenyan economy from problems with water resources in Naivasha. The report<sup>263</sup> was an important tool in engaging regulators and decision-makers on water issues in the region - and illustrated that around 3 per cent of GDP and >10 per cent of foreign exchange earnings were dependent on the continuing function of the lake's water resources. This was due to the impact on the horticulture industry which is an important export industry. The report concluded that there could be indirect investor perception issues as well as an impact on forex earnings if the environmental, regulatory and reputational risk management at Lake Naivasha was not taken seriously at a national political, economic and planning level.

The work (not just the report) catalyzed the government to engage better. An action plan was developed by the water users themselves, agreements were made on allocation, especially under future drought conditions, and water user groups were given greater incentives to collect water fees, engage users and promote best practice. The governance of any water body requires long-term effort and diligence but this project enabled the creation of a better business case that led to greater involvement and wider awareness around dependency and risk related to governance.



### REPUTATIONAL HURDLE

There are accusations of over-influence or policy capture by individual companies, and a lack of in-house policy capacity.

#### **Solutions:**

Influencing governance through collective action, with a competent third party to support policy engagement, will protect individual companies from accusations of policy capture, and ensure that the interests of the basin are properly represented. The capacity of the convening third party should be strong on policy engagement as well as stakeholder engagement, so that companies are not required to bring in additional resources.

**Example:** The **CEO Mandate** has published guidelines for companies wanting to engage with water policy issues in a responsible way. The goal of the Guide to *Responsible Business Engagement with Water Policy*<sup>264</sup> is to make a compelling case for responsible water policy engagement and to support it with insights, strategies, and tactics needed to do so effectively. The guide states that engagement and leadership not only promote the company's reputation, they can also set a progressive agenda toward sustainable resource management. WWF is developing and instigating basin-level work with companies using this guide and its principles.



# 1. INTRODUCTION AND SUMMARY

FMCG companies use extensive amounts of packaging. It plays an important role in protecting products and minimizing damage and waste. It is also vital for companies' branding.

It does, however, create multiple environmental problems. The extraction of raw materials often contributes to issues such as deforestation and fossil fuel depletion; and packaging production processes can cause emissions to land, water and air. Packaging is also one of the most common items to be mismanaged at the end of its life, adding to problems like ocean waste.

For FMCG companies, poor management of the problems around packaging creates potential reputational and longer-term regulatory risks, as well as supply chain resilience issues.

For companies that want to stay ahead of consumer expectations and regulatory change, as well as improve their reputation and operational resilience, the answer is sustainable packaging. There are various benefits to sustainable packaging, with Asian FMCG companies increasingly adopting sustainable practices.

**However, defining 'sustainable packaging' is not simple.** For example, one type of packaging can increase product shelf-life thereby reducing waste, but may have a higher resource requirement or end of life footprint. This is precisely why companies need to use systems thinking and do a proper assessment of all trade-offs when deciding what packaging to use. There is guidance available on this.

#### This chapter:

- Reviews existing focus on packaging by the finance sector;
- Sets out the major environmental impacts of unsustainable packaging and poor management of packaging waste;
- Identifies steps toward more sustainable packaging;
- Highlights the business benefits of more sustainable packaging;
- Presents solutions and existing market practices to overcome potential hurdles.

The following table identifies, based on public disclosure, which of the 26 large Asian FMCG companies have already taken steps to address environmental and social issues

in their packaging solutions. Note that none of them have disclosed the adoption of a systems approach and the steps below taken alone are not solutions to sustainable packaging. They should be perceived as sub-strategies/actions that can form part of a sustainable packaging optimization strategy based on a systems approach. Without systems thinking in the first place, each of these steps taken on a standalone basis could lead to sub-optimal outcomes from a sustainability (or economic) point of view.

Figure 23: Companies' disclosure of their steps to address packaging issues

Financiers should assess the companies to understand how much they have progressed from point zero of not doing anything toward systems thinking, bearing in mind that the net outcome of a poorly thought out strategy of taking some steps without systems thinking could have a net negative impact.

舒	Assessment of packaging design to protect products	RESPONSIBLE SOURCING OF MATERIALS		Material/design	Consideration
		Sourcing of certified responsible paper- based materials	Use of recycled materials	optimization	of end of life in material choices and support of recycling infrastructure
Amorepacific Corp			YES	YES	YES
Charoen Pokphand Foods PCL				YES	
China Mengniu Dairy Co Ltd		YES	YES		YES
Dutch Lady Milk Industries Bhd		YES			
Emami Ltd					
Fraser & Neave Holdings Bhd			YES	YES	
Fraser & Neave Ltd			YES	YES	
Godrej Consumer Products Ltd					
Hindustan Unilever Ltd		YES	YES	YES	YES
Indofood CBP Sukses Makmur Tbk PT			YES	YES	YES
Masan Consumer Corp					
Mayora Indah Tbk PT					
Nestlé Malaysia Bhd	YES	YES	YES	YES	YES

# INTRODUCTION AND SUMMARY

舒	Assessment of packaging	RESPONSIBLE SOURCING OF MATERIALS		Material/design optimization	Consideration of end of life in
	design to products	Sourcing of certified responsible paper- based materials	Use of recycled materials	. optiinization	material choices and support of recycling infrastructure
Orion Corp/Republic of Korea					
Petra Foods Ltd					
San Miguel Corp			YES		
Super Group Ltd / Singapore					
Thai Beverage PCL			YES	YES	
Thai Union Frozen Products PCL			YES	YES	
Tingyi Cayman Islands Holding Corp					
Tsingtao Brewery Co Ltd					
Ultrajaya Milk Industry & Trading Co Tbk PT					
Unilever Indonesia Tbk PT		YES	YES	YES	YES
Universal Robina Corp					
Vietnam Dairy Products Joint Stock Company					
Want Want China Holdings Ltd		YES			

# SUSTAINABLE PACKAGING: THE BUSINESS BENEFITS

#### **Saving money**

Sustainable packaging has the potential to create many savings, from immediate cost savings from lower use of raw materials (packaging makes up roughly 8 per cent of the cost of food products and up to 40 per cent of the cost of manufacturing cosmetics<sup>265</sup>) and efficiencies within packaging operations, to reduced distribution costs because packaging is lighter. It can also create efficiencies with retailers where handling costs are lower and with the end user where packaging increases shelf-life or product utility. This is of course subject to no loss in the performance in its primary role to prevent product damage and waste.



#### Enhancing branding and reducing reputational risk

There are reputational issues related to packaging, particularly around waste and sourcing. When the mismanagement of packaging waste contributes to pollution problems, it can be visibly linked back to the company. Brands can enhance their green credentials through their packaging.

#### **Increasing operational resilience**

Packaging materials supply disruption can be a business risk for FMCG companies. Where packaging materials are derived from soft commodities, notably paper and paperboard, responsible sourcing can mitigate some of the related risks. Similarly, companies sourcing packaging materials derived from petroleum and aluminium face greater price volatility and supply disruption risk.

#### Minimizing regulatory risk

Paper is a significant packaging raw material for FMCG products but may also be linked to illegal timber harvesting, putting FMCG companies at risk of regulatory impacts as more and more countries adopt regulations to face this issue. An increasing number of countries are also tackling plastic waste by introducing binding targets for recycling that may affect FMCG companies - both by increasing their costs and influencing consumers' behaviour toward purchasing products with recyclable packaging.

## SUSTAINABLE PACKAGING STRATEGIES

Although there is no common definition of sustainable packaging, there are initiatives to create standards and protocols, such as the Global Packaging Protocol, and opportunities to work with other FMCG companies on shared solutions. The use of systems thinking should underlie any strategy to achieve more sustainable packaging.

Companies can use the steps and questions below to help formulate their strategy.

#### Internal capacity building, monitoring and reporting on progress

Companies adopting a strategy to achieve more sustainable packaging need first to build internal capacity, undertake analysis and then set appropriate goals.

- Does the company take a systems view in order to assess its overall environmental impact and identify opportunities for improvement?
- Is there internal capacity to understand the environmental and social footprint of current packaging solutions, including expertise on packaging and systems thinking? Is the company able to gather information of sufficient quantity and quality on its packaging footprint?

# INTRODUCTION AND SUMMARY



- Are decision-makers within the company incentivized based on systems-level results or are departments working in silos and hindering the company's efforts to take a systems approach?
- How does the company measure the sustainability of its packaging and what tools does it use to assess its packaging?
- · Has the company developed a sustainable packaging policy based on target key performance indicators that are quantified and time-bound?
- Has the company set out an internal governance structure with clear responsibilities to review and monitor the sustainable packaging policy?
- Does the company report its progress to its stakeholders?

#### Design the packaging to protect products

The focus here is to ensure that systems thinking is in place and to respect that the fundamental purpose of packaging is to protect and facilitate use of the product. Resources can be saved via suitable packaging design if there is a resulting extension in the shelf-life of the product and/or reduction in damage, misuse and mishandling both at the distribution and consumer use ends.

- Has the company assessed the performance of its packaging solutions in terms of shelf-life, and rate of damage during transportation at the distributor end and consumer end?
- Does the company monitor misuse or product wastage (for example, spillage, spoilage or leftover product inside the packaging that cannot easily be retrieved) at the consumer end?
- Does the company compare the relative performance of packaging materials (in terms of product shelf-life etc.) in its design and material choice? (See sub-strategy below on material/design choice.)

#### Use responsibly sourced and/or recycled materials

Here the focus is on the sourcing of the raw materials for the packaging. For example, using FSC-certified paper and paperboard and using recycled materials. This is important for FMCG companies where marketing to 'ethical' consumers and where FMCG companies have already started sourcing responsibly produced and recycled raw materials.

• What proportion of packaging materials are responsibly sourced or recycled? Is this formalized through procurement policies and are there plans to increase the proportion of responsibly sourced materials?

# INTRODUCTION AND SUMMARY



IT IS KEY THAT
SYSTEMS THINKING
IS USED TO
UNDERSTAND ALL OF
THE TRADE-OFFS
WITHIN THE
PRODUCT AND
PACKAGE SUPPLY
CHAIN IN MAKING
DECISIONS AROUND
OPTIMIZATION OF
MATERIAL USE

- Are the raw materials credibly tracked via certifications with chain of custody or third party verification?
- How would the brand value of the company or product be impacted by increased consumer awareness of the extent of sustainability of the packaging raw materials?
   Can more sustainable packaging provide branding and new market opportunities?

#### Optimize material/design

FMCG companies need to consider how to optimize their use of materials. First and foremost, the role of a package is to protect the contents inside. Packaging material use in either extreme (increased or decreased materials) can contribute to additional environmental impacts. It is key that systems thinking is used to understand all of the trade-offs within the product and package supply chain in making decisions around optimization of material use.

There can be benefits to using less materials where this does not compromise packaging performance. Less materials can reduce input costs as well as waste. It can also lower the weight and/or volume of packaging and hence reduces distribution and handling costs. However, taken in isolation, there could be overall negative impacts. For example some extremely lightweight materials are too thin to go through existing recycling lines.

- Are there opportunities to lower material input and potentially distribution costs through changing the mix of the material or packaging design?
- Is there an opportunity to collaborate with a packaging supplier to share research and development costs and develop packaging with less materials for the same functions and with the same end of life impacts, or at least an overall net positive impact on the value chain?

# Consider end of life in material choices and work with partners to enhance recovery and recycling systems

The emphasis of this strategy is on designing packaging and choosing materials that have a lower footprint and specifically have a lower contribution to waste, taking into consideration the local waste management options and waste hierarchy. Beyond material choice, there is also the question of how companies work with regulators and consumers to create better waste management systems, including recycling infrastructure.

- Has the material and design choice taken into consideration the existing recycling technology, infrastructure and practices in place in the consuming country (for example, some extremely lightweight materials are too thin to go through existing recycling machines)?
- What proportion of packaging materials can be reused or recycled?

- What proportion of customers have access to recycling infrastructure?
- Would different choices of materials or designs improve the reuse/recycling rates and what are the trade-offs to consider, for example, the quantity and renewability of materials that are more easily recyclable?
- Is it possible to work with other parties to improve recovery and recycling infrastructure?

# **ENGAGEMENT QUESTIONS FOR INVESTORS**

- Does the company perceive and understand sustainability risks or opportunities relating to packaging?
- Has the company taken a systems approach in trying to optimize its packaging?
- What are the barriers the company faces to developing and implementing sustainable packaging solutions?
- How does the company decide what to disclose about its approach?

# WHAT IS 'SUSTAINABLE PACKAGING'?

Packaging performs four key functions – (i) containment of the product for transport and use, (ii) protection of the product, (iii) communication about the contents as well as branding, and (iv) utility to consumers through making products last longer and enabling reclosure. In light of these functions, it is not always clear how FMCG companies should make relevant trade-offs, such as between changes in packaging utility and changes in resource footprint.

For example, one type of packaging can increase product shelf-life, so reducing waste. But it may have a higher resource requirement or end of life footprint. Given the majority of the environmental footprint of a packaged food product lies in the product itself, if packaging can be optimized to increase shelf-life and reduce waste, the overall system becomes much more sustainable. This is precisely why systems thinking is required and a proper assessment reflecting all trade-offs is needed.

Even questions such as resource footprint require complex calculation and thinking about the whole system. For instance, a company may be choosing between plastic or glass bottles on sustainability grounds. It is only possible to assess this with an understanding of the waste disposal procedures and

consumer behaviour in the relevant market's area. Will consumers reuse or recycle the bottles? Are there facilities to recycle glass or plastic? Should biodegradeable plastic be used or is there a risk this will contaminate plastic for recycling? Should lower weight, new technology materials be used or is there a higher end of life footprint if they are more difficult to recycle? As such, there are also local differences to consider – what may be a sustainable solution for one product or one market might not be more sustainable for another.



# 2. EXISTING FOCUS ON SUSTAINABLE PACKAGING BY THE FINANCIAL SECTOR

# **COLLABORATIVE INITIATIVES**



#### As You Sow

As You Sow<sup>266</sup> is a US-based non-profit organization that promotes environmental and social corporate responsibility through shareholder advocacy and collaborative actions. As You Sow has been particularly active on the issue of consumer packaging since 2013, working alone or with investors to propose shareholder resolutions on the issue at annual general meetings of FMCG companies and retailers.



#### The Closed Loop Fund

The Closed Loop Fund<sup>267</sup> is an initiative in the US supported by FMCG companies such as Coca-Cola Co, PepsiCo Inc, Unilever NV, Procter & Gamble Co, Johnson & Johnson and other US corporations including Wal-Mart Stores Inc and Goldman Sachs Group Inc. They have invested millions of dollars in a social impact fund charged with increasing the recycling and recovery rate in the US. The fund will achieve this goal by providing zero interest loans to communities to develop recycling infrastructure. The fund links the financial interest of companies that need recycled material back in their supply chain (to reduce cost) to the capital that municipalities need to invest in recycling infrastructure.



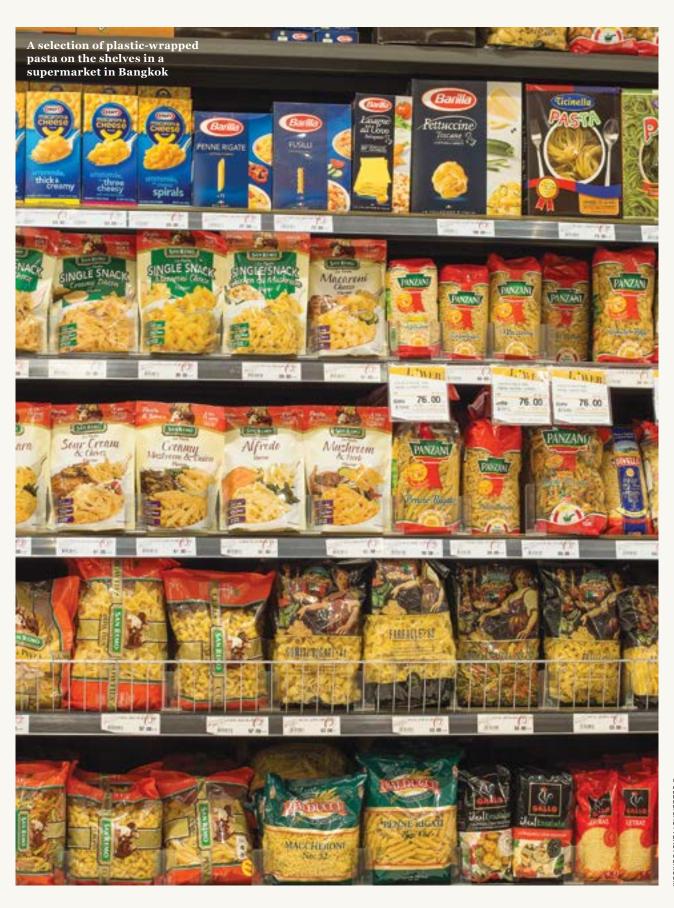
#### The Plastic Disclosure Project

The Plastic Disclosure Project<sup>268</sup> asks companies to measure, manage, reduce and benefit from plastic waste in order to create a world in which plastic adds value for consumers and businesses without negatively impacting the environment. Its current supporters include Credit Suisse, the Sustainable Investment Research Institute Australia, the Responsible Investment Research Association – India, Environmental Investment Services Asia Limited and the United Nations Environment Programme (UNEP).

# SIGNIFICANT ACTIONS BY INDIVIDUAL INVESTORS ON PACKAGING ISSUES

Shareholder resolutions proposed in the US by As You Sow<sup>269</sup> have yielded strong support from shareholders, as shown opposite. While these are clear examples of how pressure from financial institutions can drive change, it is important that the change is well thought out and takes into consideration all of the trade-offs in a system. WWF notes that some of the resolutions opposite are based on a single criteria and not on systems thinking.

- In 2015, 29.1 per cent of **Kraft Foods Group Inc's** shareholders voted in favour of the resolution: "Be it resolved: Shareowners of Kraft Foods Group request that the Board of Directors issue a report at reasonable cost, omitting confidential information, by 1 October 2015 assessing the environmental impacts of continuing to use non-recyclable brand packaging." As of 7 December 2015 the Group's website described highlights of its activities and progress on packaging<sup>270</sup> but no report or information about environmental impacts of non-recyclable packaging was found in the Group's public information.
- In 2015, 31.1 per cent of **Dr. Pepper Snapple Group Inc's** shareholders supported the resolution: "Be it resolved: Shareowners of Dr. Pepper Snapple Group request that the Board of Directors adopt a comprehensive recycling strategy for beverage containers sold by the company and prepare a report by 1 September 2015 on the company's efforts to implement the strategy. The strategy should include aggressive quantitative recycled content goals, and container recovery goals for plastic, glass and metal containers. The report, to be prepared at reasonable cost, may omit confidential information." The same resolution was voted by 30 per cent of the company's shareholders in 2014. As of 7 December 2015 the Group's website mentioned an initiative with NGO Keep America Beautiful to increase recycling in parks in the US<sup>271</sup> but no information or report about a comprehensive recycling strategy or report was found in the Group's public information.
- In 2015, 31.7 per cent of **Kroger Co's** shareholders voted in favour of the resolution: "Be it resolved: Shareowners of Kroger request that the Board of Directors issue a report, at reasonable cost, omitting confidential information, assessing the environmental impacts of continuing to use unrecyclable brand packaging." A similar shareholder resolution proposed by As You Sow in 2014 asking Kroger to develop a policy position on recycling had only obtained 13 per cent of shareholder support.
- In 2015, 27.9 per cent of Mondelez International Inc's shareowners supported the resolution: "Be it resolved: Shareowners of Mondelez International request the Board to issue a report, at reasonable cost, omitting confidential information, by 1 October 2015, assessing the environmental impacts of continuing to use nonrecyclable brand packaging." As of 7 December 2015 the company had a stated goal on its website to eliminate 50 million pounds (22,500 tonnes) of packaging material by 2015<sup>272</sup> but no information or report was found on the specific topic of environmental impacts of non-recyclable packaging.
- On 13 October 2014 Procter & Gamble Co announced new sustainability goals including a commitment that 90 per cent of its packaging will be recyclable by 2020. This came the day before the vote of a shareholder resolution filed by As You Sow asking the company to stop using unrecyclable packaging. The resolution won the support of 25 per cent of the company's shareholders, representing more than US\$35 billion of shares.<sup>273</sup>



# 3. THE ENVIRONMENTAL IMPACTS OF 'UNSUSTAINABLE' PACKAGING AND POOR MANAGEMENT OF PACKAGING WASTE

**ESTIMATED VALUE** OF PACKAGING **DISCARDED ANNUALLY** IN THE US

> VALUE OF UNRECOVERED PLASTIC PACKAGING **SENT TO** LANDFILL IN THE **US ALONE**

Packaging can significantly contribute to preserving resources by protecting the product it contains and minimizing damage and waste. Given the majority of the environmental footprint of a packaged food product lies in the product itself, if packaging is not optimized to increase shelf-life and results in high wastage, the overall system is highly unsustainable, and the environmental footprint of the product is significantly increased. For example, the East Asia-Pacific region has the highest percentage of organic waste in the world (62 per cent of the total waste). Here, there is a big sustainability opportunity to cut food waste by using more effective packaging.<sup>274</sup>

Packaging is also associated with multiple environmental problems - extraction of raw materials often contributes to environmental impacts like deforestation and fossil fuel depletion, and packaging production processes contribute to emissions to land, water and air.

In addition, packaging is one of the most common items to be mismanaged at end of life and contributes to problems like ocean waste. According to the US EPA, 275 packaging and containers accounted for the largest portion of municipal waste generated in the US in 2013: 29.8 per cent, or over 75 million tonnes. Half of this packaging waste (38.56 million tonnes) was paper and paperboard, 13.98 million tonnes were plastics, 9.46 million tonnes were wood and 9.26 million tonnes were glass. Almost half (48.5 per cent) of this waste was not recovered and ended up in landfill.

Approximately 85 per cent of plastic waste (not limited to plastic packaging waste) around the world is not recycled.<sup>276</sup> Even Europe, whose paper industry leads the world in recycling with an average paper recycling rate (not limited to paper packaging waste) of 71.7 per cent in 2013, 277 only had a recycling rate of 34.7 per cent for its plastic packaging waste in 2012.<sup>278</sup> While some packaging waste comes from other consumer products, FMCG products are still a key component.

The estimated value of discarded packaging in the US is US\$11.4 billion annually and unrecovered plastic packaging sent to landfill is worth over US\$8 billion in the US alone.279

Figures for Asia are rare but the principle still applies. China Water Risk<sup>280</sup> estimates that packaging waste accounts for over 30 to 40 per cent of China's total municipal waste in terms of volume and much of this is not recycled. In 2013, 44.75 per cent of paper and paperboard waste was recycled in China while the rate was even lower at 23 per cent for general plastic waste.

FMCG companies that are not reducing and reusing materials, not educating their consumers about recycling and not working with other stakeholders to boost recycling infrastructure will end up bearing higher packaging costs in the long run.

This is precisely why systems thinking is required to optimize packaging so it becomes more sustainable. A proper assessment reflecting all trade-offs along the entire value chain is needed.

# 4. MOVING TOWARD MORE SUSTAINABLE PACKAGING

## WHAT IS ALREADY HAPPENING?

There is no common definition or one universal attribute of 'sustainable packaging'. However, some initiatives are addressing this through a broad philosophy that sustainable packaging should incur the minimal environmental impacts possible while meeting the needs of the product and the distribution system and bearing in mind the existing waste management infrastructure.

The Global Packaging Protocol<sup>281</sup> is an initiative from the CGF, which the consumer goods industry can use to assess the relative sustainability of packaging. It provides a common language and set of indicators companies can use to reduce the environmental impact of their packaging.

Other initiatives include the Sustainable Packaging Coalition (SPC)<sup>282</sup> which is founded on a science-based approach, supply chain collaborations and continued outreach. The SPC has almost 200 member organizations including large FMCG companies such as Coca-Cola Co, PepsiCo Inc, Unilever NV and Kellogg Co.

While few companies disclose the adoption of a systems-based approach in their packaging strategy, there are some other more common sub-strategies that companies adopt. These include:

- Designing packaging to minimize waste and damage;
- Using responsibly sourced materials (for example, FSC-certified virgin paper/paperboard and recycled);
- Optimizing material weight and volume to reduce package impacts without reducing package performance and product protection;

• Considering end of life in material choices (effective after-use disposal and recycling).

As demonstrated above, adopting any of these sub-strategies on a standalone basis will not optimize the environmental footprint of a product and can lead to adverse outcomes. Systems-based thinking is necessary but apparently not widely adopted across Asian companies or even many multinational companies, as demonstrated by their piecemeal approach toward packaging. Some multinational companies do take a systems approach but do not report it publicly as such, perhaps because they find it easier to communicate around single issues.

There are examples of Asian companies working on some of these approaches, which bring various business benefits.

## THE STEPS TO SUSTAINABLE PACKAGING

#### Design packaging to minimize waste and damage

Companies should look at how they can design their packaging to cut waste and damage. None of the Asian companies reviewed in this guide disclosed steps on this sub-strategy but we can cite Nestlé Group's statement on this topic: "The packaging of Nestlé's products is crucial to prevent food waste, guarantee high quality standards and inform consumers. Nestlé is committed to improving the environmental performance of its packaging. Nestlé makes sure that the environmental benefits derived from packaging improvements are not outweighed by increased product losses due to under-packaging."283



**COMPANIES SHOULD LOOK AT HOW THEY CAN DESIGN THEIR** PACKAGING TO CUT **WASTE AND** DAMAGE, NONE OF THE ASIAN **COMPANIES REVIEWED IN THIS GUIDE DISCLOSED** STEPS ON THIS SUB-STRATEGY

#### Use responsibly sourced materials

Using responsibly sourced raw materials in packaging is vital for companies. A common example is the use of responsible sourced fibre if paper and card packaging is required by the FMCG company. FSC certification is a useful tool here. FMCG companies will find this particularly important where they are selling products that are marketed as sustainable or where they have already committed to using sustainable commodities for ingredients. Consumers who buy organic are likely to also want recycled or eco-friendly packaging materials.

Another example is the use of recycled materials such as recycled paper and board instead of virgin fibre. A 2012 PwC study on sustainable packaging 284 noted that the move to substitute virgin materials with recycled ones has gathered pace in the corrugated packaging industry due to more open and informed dialogue between FMCG companies, retailers and packaging manufacturers. It noted that the financial benefits are significant and often shared among this group.

In addition, unrecycled packaging waste has a value that is lost as companies have to purchase newer and more expensive packaging materials.

The responsible production of packaging materials to protect natural resources is a growing theme. Tetra Pak Inc, a key packaging supplier to FMCG companies, sourced 43 per cent of its paperboard as FSC-certified in 2014 and the vast majority of the rest from controlled non-controversial sources. Tetra Pak Inc has launched Moving to the Front<sup>285</sup> – a US focused campaign inviting suppliers, manufacturers, brand owners, NGOs and others to expand attention from the middle and end of the packaging life cycle to the beginning. They say: "We want to lead a new industry commitment to what we call renewability – protecting natural resources and rewarding best practices and innovations that focus on the front end of a packaging lifecycle as well as practices and innovations that will keep the consumer packaged goods industry strong and viable in an increasingly volatile economy."

Within the context of the Moving to the Front campaign, Tetra Pak produced a white paper with WWF entitled *What is Renewability in Packaging, and why should we care?*<sup>286</sup> This white paper explains the concept of renewability, or simply the use of a resource that can be regrown or replenished naturally with the passage of time. While it identifies different stages for a circular model of packaging, such as the assessment of water and energy used during the manufacturing of the packaging and the end of life of the package, the white paper focuses on the renewable sourcing of raw materials as it states this aspect usually receives less visibility.

The following two tables show the steps a selection of Asian FMCG companies have disclosed they are taking on responsible sourcing of packaging raw materials, including sourcing of certified responsible paper-based materials and use of recycled materials.

WWF considers the FSC to be the most credible certification system to ensure environmentally responsible, socially beneficial and economically viable management of forests, leading to responsible paper and paperboard. Indeed, the FSC is the only forest certification scheme with a robust control mechanism that requires yearly audits of certified forest companies, to assess and verify that the criteria are implemented on the ground. These audits require consultation with all stakeholders affected by the forestry operations.

Figure 24: Companies' disclosures on sourcing more responsible paper and paperboard

Company name	Steps disclosed to source more responsible paper and paperboard through use of certified responsible paper-based materials
China Mengniu Dairy Co Ltd <sup>288</sup>	<ul> <li>Mengniu uses FSC-certified Tetra Pak materials to avoid 'one-off' use of forest resources.</li> <li>In its 2008-2013 Social Responsibility Report, the company reported having used 3 billion recycled packs every year, equivalent to 1 million trees saved.</li> </ul>
Dutch Lady Milk Industries Bhd <sup>289</sup>	<ul> <li>The company uses FSC-certified materials for the primary packaging for its Dutch Lady UHT milk; it was the first manufacturer in Malaysia to use FSC-certified packaging, in mid-2013.</li> <li>The effort continues to secondary packaging as the majority of materials used by the company are from sustainable sources.</li> </ul>
Hindustan Unilever Ltd <sup>290</sup>	<ul> <li>Nearly 90 per cent of paper and board used for packing Hindustan Unilever's products is from certified and sustainably managed forests. The paper and board mills selected are FSC-certified. All of the company's carton supply partners are FSC-certified and possess PEFC certification.</li> <li>Unilever Group: <ul> <li>Unilever Group's Sustainable Wood Fibre-Based Material Policy<sup>291</sup> states a commitment to eliminate deforestation from its supply chain and to source all wood fibre-based materials from certified and known sources (full chain of custody) by 2020.</li> <li>Target of end of 2015 for 100 per cent of all paper and board packaging to be sourced sustainably (recycled, or certified virgin).</li> <li>Target of 2019 to accept recycled fibre products only when they come from certified sources (with a full chain of custody).</li> <li>Target of 2020 at the latest to source wood fibre-based materials solely from certified sources (with a full chain of custody).</li> <li>Will work with suppliers to measure and report its own progress, on a yearly basis.</li> <li>Will work with its packaging suppliers to develop individual time-bound action plans to deliver a supply chain for certified sustainable wood fibre-based materials.</li> <li>When the production chain is chain of custody certified, the share of certified virgin fibre or recycled raw material must be gradually increased, according to a time-bound commitment, until the level required by this policy is reached.</li> </ul> </li> </ul>
Nestlé Malaysia Bhd <sup>292</sup>	<ul> <li>The company has a partnership with The Forest Trust to map and assess supply chains of more than 260 paper and board suppliers across Europe and a number of high priority countries (Brazil, China, India, Indonesia, Malaysia and the US) over the period 2011-2017.</li> <li>As a result of engaging with paper mills, converters and packaging manufacturers, and 142 visits to its suppliers' sites by December 2014, 53 per cent of its global volume of pulp and paper is responsibly sourced (annual target: 60 per cent).</li> <li>Nestlé Group has category-specific requirements for pulp and paper including the protection of HCV sites and high carbon stock forests. As FSC best meets Nestlé's criteria for credible certification, it aims to use FSC certification to demonstrate compliance.</li> </ul>
Unilever Indonesia Tbk PT	Unilever group:  • As above.
Want Want China Holdings Ltd <sup>293</sup>	<ul> <li>The company progressively uses Tetra Pak packaging materials made from sustainable forest products certified by the FSC.</li> </ul>

Figure 25: Companies' initiatives on recycled materials

Company name	Initiatives disclosed on the use of recycled materials
Amorepacific Corp <sup>294</sup>	<ul> <li>In 2014 Amorepacific jointly developed the PCR PETG material, a recycled material with physical properties and post-processability equivalent to the existing PETG materials used in its over-cap products. The company is planning to expand the scope of application of the PCR PETG material and is testing its quality with the aim to use the material in its finished products.</li> <li>At Amorepacific's Beauty Campus in Shanghai in 2014, 54 per cent of the packaging material suppliers switched from the conventional paper packaging material to a reusable plastic packaging material.</li> </ul>
Hindustan Unilever Ltd <sup>295 296</sup>	<ul> <li>Unilever Group:</li> <li>Unilever Group used 3,951 tonnes of recycled plastic in its packaging in 2014. The Group's ambition is to use far more in the future so it has started to investigate opportunities to work closely with re-processors and suppliers to develop closed loop systems. Unilever Group is increasingly using recyclable materials such as high-density polyethylene (HDPE) and polyethylene terephthalate (PET) in its plastic bottles.</li> <li>Hindustan Unilever:</li> <li>Hindustan Unilever has started using r-PET (80 per cent recycled PET) in its blister packs for personal care brands such as Pepsodent toothbrushes and Fair &amp; Lovely.</li> </ul>
Nestlé Malaysia Bhd <sup>297</sup>	<ul> <li>Nestlé Group uses recycled materials for packaging where they are equal or better in environmental performance, as demonstrated by life cycle assessment, and do not jeopardize the quality, performance, safety or consumer acceptance of products. The Group used 26.8 per cent of recycled material in its packaging in 2014.</li> <li>Five Nestlé Waters North America brands (Arrowhead, ReSource, Deer Park, Nestlé Pure Life and Montclair) incorporate r-PET into some of their bottles; the amount of r-PET used varies from 50 per cent to 100 per cent, accounting for 6 per cent of the plastic purchased by the Group and representing 11,793 tonnes of recycled PET per year. The Italian mineral water brand Vera has incorporated 25 per cent of recycled PET in its bottle range, and Nestlé Hungary used r-PET for a plastic tray for seasonal chocolates.</li> </ul>
Unilever Indonesia Tbk PT <sup>298</sup>	Unilever Group:  • See above.

## Optimize material weight and volume to reduce package impacts without reducing package performance or product protection

FMCG companies can consider how to optimize their use of materials through systems thinking. There can be benefits to using less materials where this does not compromise packaging performance. Less materials reduces input costs as well as waste, and reduces pressure on the planet. It can also lower the weight and/or volume of packaging and hence reduce distribution and handling costs.

However, packaging material used in either extreme (increased or decreased materials) can contribute to additional environmental impacts as illustrated on the chart below. This sub-strategy has to be considered alongside the other sub-strategies through systems thinking in order to minimize the environmental footprint in terms of resources used as well as emissions to air and water.

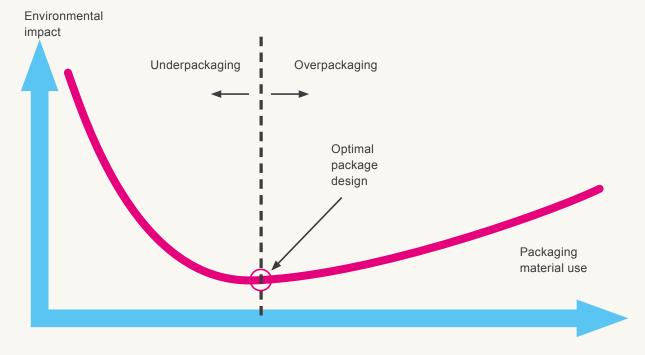


Figure 26: Optimal packaging design<sup>299</sup>

The following table shows a selection of Asian FMCG companies that have taken steps to reduce their use of packaging materials. Note that most of them do not mention the enhancement or at least maintenance of the level of packaging performance in terms of food wastage. It is crucial that they consider such potential knock-on impacts on shelflife rather than just focus on cost savings through reduced use of materials

Figure 27: Companies disclosing steps to reduce use of packaging materials

Company name	Steps to reduce the use of packaging materials 🕡 🔀 📋 🧃
Amorepacific Corp <sup>300</sup>	<ul> <li>Amorepacific is developing sustainable packaging based on four strategies of Reduce, Recycle, Reuse and Renewable, with the goal of 25 per cent reduction of package use per product by 2020.</li> <li>Since signing the agreement on the pilot programme for reducing the packaging volume of cosmetic product containers initiated by the Ministry of Environment in 2013, Amorepacific reduced the packaging volume of three products by the end of 2014.</li> </ul>
Charoen Pokphand Foods PCL <sup>301</sup>	<ul> <li>Since 2004, the company has been committed to continuous improvement and development of packaging that supports environmental impact mitigation.</li> <li>Charoen Pokphand has been able to reduce the consumption of plastic and paper by 1,700 tonnes, including 170 tonnes in 2014. Cost savings from 2007-2014 add up to 230 million Baht, which came primarily from the reduction of resources used and the efficiency improvement in packing and loading capacity. This also benefits the company's customers who bear lower transportation cost as a result of increased loading capacity.</li> </ul>
Hindustan Unilever Ltd <sup>302 303</sup>	<ul> <li>Hindustan Unilever:</li> <li>Hindustan Unilever committed to reducing the weight of packaging through using lightweight materials, optimizing structural and material design, developing concentrated versions of its products and eliminating unnecessary packaging.</li> <li>In India, a number of projects with a focus on design and material optimization implemented across categories have resulted in significant reduction of over 700 tonnes of plastic and around 4,900 tonnes of paper in 2014.</li> <li>Unilever Group:</li> <li>Unilever Group aims to innovate new ways of reducing the resources used for its packaging. The Group focuses on using lighter, stronger and better materials that have a lower environmental impact. Its Strategic Materials Capability Group works together with suppliers, academia and other providers to develop new technologies. The Group is exploring new innovations which will enable them to move into circular models.</li> </ul>
Nestlé Malaysia Bhd <sup>304</sup>	<ul> <li>Nestlé Group committed to a target of 2017 to systematically analyze and optimize its packaging portfolio, avoiding the use of at least 100,000 tonnes of packaging material.</li> <li>It challenged itself during the innovation and renovation design process to find optimal packaging design that allows savings of packaging material and avoids food wastage.</li> <li>In 2014, Nestlé Group avoided the use of 45,805 tonnes of packaging material (2013: 66,594 tonnes), equivalent to a saving of CHF77.4 million.</li> <li>Nestlé Malaysia reduced the weight of its MAGGI chilli sauce glass bottles for both the 470g and 300g sizes by 14 per cent and 7 per cent respectively, which translates into a 900 tonnes reduction in glass usage. In 2014, packaging optimization projects in Malaysia enabled the reduction of material usage by 1,382 tonnes.</li> </ul>
Unilever Indonesia Tbk PT <sup>305 306</sup>	<ul> <li>Unilever Indonesia:</li> <li>To reduce the amount of packaging materials it uses Unilever Indonesia has invested in cutting-edge design techniques and breakthrough materials. Many of its brands have reduced the amount of materials they use, thus cutting material, energy and transport costs.</li> <li>Unilever Indonesia is maximizing the pack size of its products and its material capability experts work closely with suppliers to develop innovative solutions focused on reducing packaging.</li> <li>Unilever Group:</li> <li>As above.</li> </ul>

## Consider end of life in material choices and work with partners to boost recycling infrastructure

The previous sub-strategy on responsible sourcing minimizes impacts of current packaging material choices, e.g. if paper is to be used, then FSC paper is best.

Beyond material choice, there is also the question of how companies work with regulators and consumers to reduce waste and create better waste management systems, including recycling infrastructure.

According to the Asian Development Bank, solid waste output from Asia's biggest cities will increase from 760,000 tonnes per day now to almost 2 million tonnes per day by 2025. 307 The Pacific trash vortex (see box text) is a significant example of the problems of too much mismanaged waste.

# THE NATURAL CAPITAL COST OF PLASTIC

A 2014 study by Trucost<sup>308</sup> working together with UNEP and the Plastic Disclosure Project<sup>309</sup> estimated the natural capital cost of plastic in the consumer goods industry to be US\$75 billion per year, of which food, soft drinks and non-durable household goods accounted for around US\$35 billion. The study noted that "Companies in the food, soft drinks and non-durable household goods sectors have the largest natural capital costs in absolute terms and thus are more likely to face reputational and legislative risks from their association with the environmental impacts of plastic, especially litter from packaging." It highlights risks including tougher environmental legislation, damage done to the reputation of brands targeted by campaigners over their association with plastic litter, clean-up costs and disruption to the plastic supply chain caused by resource scarcity and price volatility.

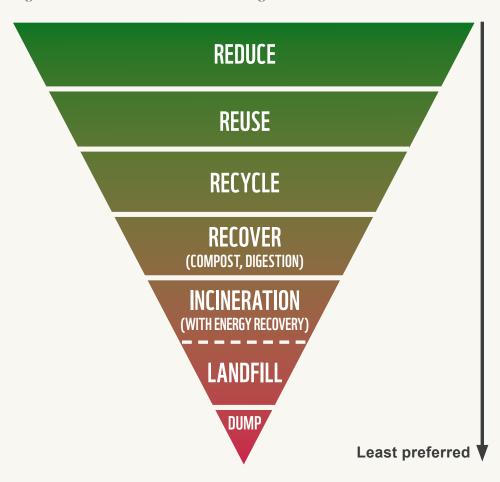


# THE TRASH VORTEX

An example of the devastating consequences of poor waste management is the 'trash vortex', an area estimated to be three times the size of Thailand, situated in the North Pacific. There are understood to be a number of such vortexes in the world's oceans, 310 although the North Pacific Gyre is the best known. There, for every kilo of natural plankton, there are six kilos of plastic, much of which is plastic material that has been discarded on land and has made its way via drainage systems into the ocean.311 Some of this plastic will outlive the grandchildren of the people who threw it away. 312 The area is also choked with other slowly degrading garbage and dead marine mammals and birds that have become entangled in or eaten plastic.

The following diagram<sup>313</sup> shows the preference hierarchy for materials when they come to the end of use phase.

Figure 28: Preference for end of use stage



Effectively achieving reduce, reuse, recycle and recover requires careful consideration. There needs to be a match between the smart packaging designs and the waste management systems in the region where the products are sold. Otherwise these attempts will fail.

Paper and paperboard are a case in point. They are easily recyclable, but often contaminated or otherwise rendered unsuitable for recycling. For recycling to happen, the following conditions are necessary: consumers must recycle the paper and paperboard separately from other materials such as food; the government must arrange collection (directly or through contractors); there needs to be a processing facility that can take in and sort the materials; and there needs to be further distribution to a processing centre or factory that can use the recycled materials.

A critical question is whether waste management infrastructure is growing fast enough to keep pace with the waste. Another is whether governments are enforcing as well as implementing appropriate waste management policies.

One example of a multi-stakeholder initiative to address the waste issue is the Singapore Packaging Agreement (SPA). This is a joint initiative by government, industry including FMCG, and NGOs that started in 2007 with 32 members. It is aimed at reducing packaging waste, which constitutes a third by weight of Singapore's domestic waste.314 Its members have pledged to and succeeded in reducing their waste significantly. Because of the benefits in waste reduction and cost savings enjoyed by members, a second SPA started on 1 July 2012 and has since then been extended until June 2020. As of 1 March 2016 the programme has 175 signatories who have cumulatively contributed to a reduction of 26,000 tonnes of packaging waste and saved more than US\$58 million over the eight-year period.315

The SPA's other goals include raising community awareness of packaging waste minimization and introducing supply chain initiatives that foster sustainable use of resources in packaging.

Another example is the Courtauld Commitment<sup>316</sup> (see box text).

# THE COURTAULD COMMITMENT

The Courtauld Commitment is a voluntary agreement funded by the UK government that aims to improve resource efficiency and reduce waste within the UK grocery sector. It was originally launched in 2005 as a three-phase plan which ended in 2015. Signatories of the new Commitment, named Courtauld 2025, include 11 retailers (such as Aldi, Asda and Marks & Spencer) representing 93 per cent of the 2016 UK market share and 8 brands and manufacturers (including Coca-Cola Enterprises, Heineken UK and Unilever UK).

Courtauld 1 (2005-2009) looked at new solutions and technologies so that less food and primary packaging ended up as household waste. Over the four-year period 1.2 million tonnes of food and packaging waste was prevented, with a monetary value of £1.8 billion, and a saving of 3.3 million tonnes of CO<sub>2</sub>, which is equivalent to the emissions from 500,000 round-the-world flights. As a result of actions by signatories, 520,000 tonnes of packaging waste was avoided across the UK.

Phase 2 of the Commitment (2010-2012) aimed to reduce primary packaging and household food and drink waste, but also included secondary and tertiary packaging, and supply chain waste. It moved from reducing weight to reducing the carbon impact of packaging. A total of 1.7 million tonnes of waste was reduced through the influence of Phase 2. This impact has a monetary value of £3.1 billion and equates to a reduction of 4.8 million tonnes of CO<sub>2</sub>.

Phase 3 (2013-2015) aimed to help deliver sustainable growth, save money and reduce environmental impact by focusing further on waste reduction in the food and drink sector. Specifically it looked to improve packaging design to help consumers reduce waste, make it easier to recycle, increase recycled content and ensure there is no increase in total carbon impact of packaging. This could mean an average reduction in carbon intensity per pack of a further 3 per cent. Courtauld 2025 aims to cut the resources needed for food and drink production by one-fifth in 10 years.

The following table shows some of the steps disclosed by the group of Asian FMCG companies to build end of life considerations into their packaging choices (for example, through conducing life cycle assessments and taking steps to boost recycling infrastructure).

Note that life cycle analysis does not take into account biodiversity and ecosystem impacts such as water minimum flows and biogenic carbon emissions (i.e. emissions from land use occupation such as below and above ground biomass carbon flows). As such, end of life considerations should ideally be complemented with certification standards for the original extracted materials to ensure a more sustainable packaging solution.

Figure 29: Companies disclosing steps on end of life considerations

Company name	Steps to build end of life considerations into packaging decisions and to boost recycling
Amorepacific Corp <sup>317</sup>	<ul> <li>Greencycle is Amorepacific's public initiative which involves customers to recycle cosmetic containers. The company collects empty containers and practises the creative circulation of resources. Up till 2013, 431 tonnes of empty containers were collected and Amorepacific is conducting research on the recycling of cosmetic containers. They were able to use recycled OPE bio essence containers as raw materials to make new cosmetic containers and recycled five tonnes in this way. The remainder of the plastic was recycled into plant pots, candles or art pieces to drive consumer awareness on recycling.</li> <li>Through the Greencycle campaign, they plan to innovate all of their product development processes from production to collection.</li> </ul>
China Mengniu Dairy Co Ltd <sup>318</sup>	<ul> <li>China Mengniu was the first in China to raise the idea of 'paid packaging recycling'. The company installed packaging recycling machines in supermarkets and consumers can get a certificate for recycling and a ticket for a Mengniu event after putting a certain amount of packaging into the machine.</li> <li>The company states this campaign has activated 'paid ecology', a model aimed to encourage public participation in environmental protection.</li> <li>By the end of 2013, China Mengniu Dairy Co Ltd together with Tetra Pak recycled more than 40,000 tonnes of packaging materials, which could be used to pack 4 billion packs of milk or circle the Earth 10 times.</li> </ul>
Hindustan Unilever Ltd <sup>319</sup>	<ul> <li>Hindustan Unilever:</li> <li>Hindustan Unilever is working in partnership with the industry, governments and NGOs to increase recycling and recovery rates in its packaging. In 2014 the company launched its Partner To Win 2020 programme to create a supplier ecosystem where partners work with Hindustan Unilever and each other to create breakthroughs in products or packaging to deliver the capacity, innovation and sustainable solutions to meet its growth ambition. The company has started using rPET (80 per cent recycled PET) in its blister packs for personal care brands like Pepsodent toothbrushes and Fair &amp; Lovely. This ensures there is an application for newly available rPET resin in the market thereby establishing circular economy thinking.</li> <li>Unilever Group:</li> <li>Unilever Group<sup>320</sup> states that it aims to halve the waste associated with the disposal of its products by 2020 and that it has taken a life cycle approach with a baseline of 2010. It reduced its waste footprint, versus the 2010 baseline, by 12 per cent per consumer use in 2014.</li> </ul>

Company name	Steps to build end of life considerations into packaging decisions and to boost recycling
Indofood CBP Sukses Makmur Tbk PT <sup>321</sup>	The company formed a coalition with five consumer goods companies in 2010 to pilot the Waste Bank programme in Pejaten, Pasar Minggu, South Jakarta. Waste Bank is a community assistance programme that actively engages local communities to develop ways to reduce, reuse and recycle packaging and other household waste.
Nestlé Malaysia Bhd <sup>322</sup>	<ul> <li>Nestlé Group has expanded the scope of its packaging ecodesign by moving from PIQET, a tool that assesses the environmental performance of its packaging, to Ecodesign for Sustainable Product Development and Introduction (EcodEX), a broader, more holistic approach that covers the entire value chain.</li> <li>Nestlé Malaysia takes a holistic approach to assessing the environmental impact of its packaging and it uses the analytical life cycle assessment (LCA) tool to select the optimal packaging solution. The LCA covers the environmental impact of packaging throughout the supply chain from material extraction and manufacturing process to disposal after consumption of the product.</li> </ul>
Unilever Indonesia Tbk PT <sup>323</sup>	<ul> <li>Unilever Indonesia:</li> <li>Aware that only 28 per cent of its primary packaging is being recycled though recycling industries and waste collectors, Unilever Indonesia's strategy in waste collection aims to increase the collection rate of post-consumer packaging by developing various waste collection channels such as waste banks and a partnership with waste collectors, before it ends up in final disposal sites.</li> <li>Currently Unilever Indonesia is working on two technologies to solve this issue: plastic recycling technology for flexible packaging waste, and using municipal solid waste to generate energy.</li> <li>Unilever Indonesia is conducting various studies on plastic recycling technology which aim to break down flexible waste and turn it into factory-grade plastic pellets.</li> <li>In 2011, Unilever Indonesia, in collaboration with five other multinational and national companies, established a non-profit coalition named the Coalition for Sustainable Packaging (CSP). Addressing the problem of post-consumer packaging waste, CSP has four missions:</li> <li>Improve management of post-consumer packaging waste;</li> <li>Increase stakeholders' awareness of the importance of managing post-consumer packaging waste and of methods to manage waste;</li> <li>Promote the collaboration of CSP;</li> <li>Perform collective advocacy for policies on post-consumer waste.</li> <li>Unilever Indonesia applies the principle of Reuse, Reduce, Recycle and Eliminate. This approach covers waste management throughout the value chain, ranging from products and packaging to its operations in Indonesia. The company strives to reduce its environmental footprint by increasing the volume of material recycled and minimizing disposal in landfills or by incineration.</li> <li>Unilever Group:</li> <li>As above.</li> </ul>

# 5. THE BENEFITS OF MORE SUSTAINABLE PACKAGING FOR FMCG COMPANIES

# **USING SUSTAINABLE PACKAGING SAVES MONEY**



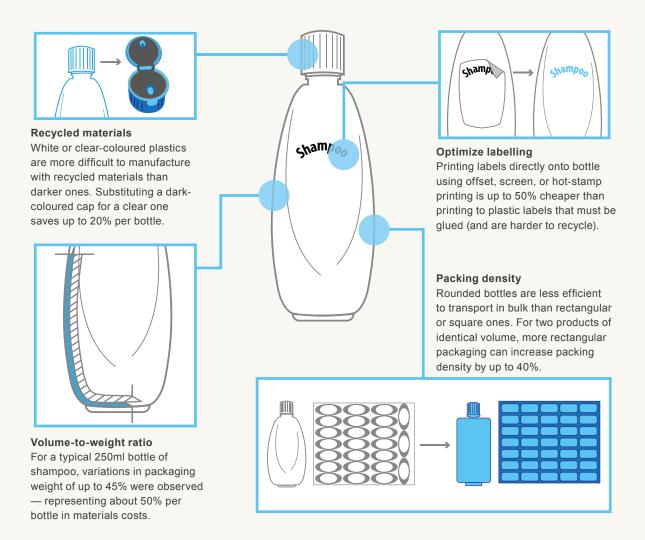
A 2011
KPMG REPORT
STATED THAT
PACKAGING CAN
ACCOUNT FOR 8 PER
CENT OF THE COST
OF FOOD PRODUCTS
AND UP TO 40 PER
CENT OF THE COST
OF MANUFACTURING
COSMETICS

Packaging is a large cost for FMCG companies: A 2011 KPMG report stated that packaging can account for 8 per cent of the cost of food products and up to 40 per cent of the cost of manufacturing cosmetics. The same report noted that "the need to spare costs and preserve margins, exacerbated by wary consumer buying attitudes, has prompted many producers to double-down on efficiency drives, redesigning bottles and lids to use less plastic, shortening distribution networks to save on fuel, embracing lean techniques to reduce waste and spoilage, and using cheaper, lighter, recyclable materials in packaging."

As multiple examples show, packaging optimization, whether it relates to reducing waste at the source or embracing the cradle-to-cradle approach, can result in cost savings for FMCG companies.<sup>326</sup> These cost savings need to be achieved without any loss in the performance of the packaging in its primary role to prevent product damage and waste so as not to increase the net environmental impact of the product along its entire value chain.

A 2009 McKinsey report<sup>327</sup> based on research into packaging and manufacturing costs in the European FMCG industry demonstrates how simple design changes can result in packaging reduction and cost savings for FMCG companies manufacturing shampoo.<sup>328</sup> These changes can also enhance the recyclability of the package as well as enable greater use of recycled materials in the packaging. The report stated that "few companies examine the cost of trade-offs implicit in their packaging decisions, much less look to their competitors for ideas. Such decisions tend to be the domain of marketers, since packaging is a key element of communicating a company's brand to consumers. Yet we have seen organizations reap considerable savings. One consumer goods maker reduced its packaging costs for a key product by 10 per cent by making straightforward design changes that allowed it to use less plastic in manufacturing the product's bottle."

Figure 30: The factors that influence the cost and complexity of packaging shampoo



### Other examples include:

- In 2014, **Nestlé SA** avoided the use of 45,805 tonnes of packaging material (2013: 66,594 tonnes), equivalent to a saving of CHF77.4 million.<sup>329</sup> A specific example is Nestlé Singapore, who reduced the packaging material in the carton boxes used to pack NESCAFE® Original 3-in-1 Coffee in 2014.330 This enabled the company to save SG\$65,800 and lower its paper packaging material consumption by about 32 tonnes annually.
- Unilever NV has worked with external technology experts Mucell and Alpla to commercialize Mucell technology to inject gas while blow-moulding bottles. The gas creates bubbles in the middle of the pack walls, reducing the plastic component by up to 15 per cent while the bottle remains 100 per cent recyclable. In March



2014, Unilever NV launched the first Dove 250ml bottle using this technology and has saved 200 tonnes of HDPE, and €110,000. The company estimates savings of up to 27,000 tonnes of plastic resin once this technology is applied fully across its portfolio of products and anticipates potential cost savings of up to €50 million.<sup>331</sup>

- For its Gilette Blades and Razors category, 332 Procter & Gamble Co switched its high-volume North America club packaging from plastic thermoform clamshells to a paperboard primary carton in 2011 – a reduction of 164,000kg of packing material per year. This new carton made the product over 50 per cent more efficient to ship and resulted in over US\$1 million in annual cost savings. According to P&G: "Consumers like it better because it's easier to open, and our retail partners like it because it's more visually appealing on the shelf." P&G also has a goal that 100 per cent of its paper packaging should contain recycled or third party certified virgin content by 2020, 333 hence the switch from plastic to paper does not result in a higher environmental footprint.
- Charoen Pokphand Foods PCL has been able to reduce its consumption of plastic and paper by 1,700 tonnes, 170 tonnes of which occurred in 2014. 334 The accumulated cost savings for 2007-2014 amounted to 230 million Baht, which came primarily from the reduction of resources used and the efficiency improvement in packing and loading capacity. This also benefits the company's customers who bear lower transportation costs as a result of increased loading capacity.

# USING SUSTAINABLE PACKAGING ENHANCES BRANDING AND REDUCES REPUTATIONAL RISK

Packaging's primary function has always been to protect products. However, as consumers have become more sophisticated and demanding, it has also become an important business tool that organizations use to attract attention, describe the product and achieve higher sales. Packaging is a key attribute of FMCG companies' marketing strategy and has the ability to influence all other elements of the marketing mix, namely product, place, price and promotion.

More and more FMCG brands are making responsible sourcing policies for their product ingredients, as highlighted in the certified commodities chapter. As such, it does not make sense for these companies to use unsustainable packaging to communicate the sustainability credentials of the products contained within. John Perkins, vice president of Strategic Customer Partnerships at global paperboard and plastics packaging manufacturer MeadWestvaco, stated that: "If a company offers natural or ecofriendly products, then consumers expect that its packaging is sourced and manufactured in an equally environmentally responsible way."335 In these cases, sustainable packaging is part of the brand image and part of the marketing strategy.

A further consideration is that today, numerous brands are identifiable through their packaging and FMCG companies do not wish to be seen as contributing to the global pollution problem through the highly visible discarded packaging remains of their products. There is growing public awareness of the waste problem in Asia, where mountains of waste, from plastic bags to discarded mobile phones, are overwhelming some of its largest cities. As a result, there is growing consumer demand for sustainable packaging.

A 2013 study<sup>336</sup> found that the two aspects for which consumers would be willing to pay more around packaging were for "packaging that keeps food fresh longer" and "packaging that is environmentally friendly" (55 per cent for each). Countries most interested in environmentally friendly packaging included China (64 per cent), Malaysia (65 per cent) and Indonesia (67 per cent).

A 2014 report<sup>337</sup> by Smithers Para, a specialist consulting firm focusing on packaging, paper and print industry supply chains, highlighted that awareness among consumers is driving demand for sustainability, particularly packaging that has a smaller environmental footprint. It predicts that Asia will be the largest market for sustainable packaging in the world by 2018, accounting for 32 per cent of the overall market.<sup>338</sup>

According to the Tetra Pak Environment Research 2015, 339 a survey which included 6,000 respondents across 12 countries, 77 per cent of consumers claimed that environmentally sound packaging makes them more likely to choose a beverage brand. The survey also found that 85 per cent of consumers sort and set aside waste for recycling and 70 per cent of consumers look for environmental information or labelling on the products they buy, a rise from 39 per cent in 2009. This latter figure reached 79 per cent in India and 64 per cent in China while only 24 per cent of consumers in the UK and the USA and 18 per cent in Japan claimed they look for environmental logos on the products they buy. In China, according to the report *Corporate Strategy and Competitive Advantage in China's War on Pollution – Pursuing China's New Consumer* by the China Carbon Forum, 340 73 per cent of respondents surveyed were willing to pay extra money for green products, of which over 8 per cent were willing to pay 10 per cent more.

This can provide real opportunities for FMCG companies who want to be one step ahead of their competition and see their earnings grow by differentiating themselves through more sustainable packaging.

On the flip side, if FMCG companies do not pursue sustainable packaging strategies, they can run into reputational risks or lose customers. Waste reduction is an important issue for consumers and people increasingly indicate a readiness to switch or to boycott brands that behave irresponsibly with regard to the environmental impact of packaging.<sup>341</sup>

The following examples demonstrate how FMCG companies can use packaging to market their sustainability credentials and how they need to manage reputational risk associated with their packaging use:



THERE IS GROWING **PUBLIC AWARENESS OF THE WASTE** PROBLEM IN ASIA, WHERE MOUNTAINS **OF WASTE, FROM** PLASTIC BAGS TO **DISCARDED MOBILE** PHONES, ARE OVERWHELMING SOME OF ITS **LARGEST CITIES** 

- Closed Loop Recycling and Ecover have launched a highly innovative initiative which collects waste plastic recovered from the seas around the UK by EU fishermen, sends it to the UK for recycling at Closed Loop's facility, and reuses it in new packaging. On its consumer facing website, Ecover explains the problem of marine pollution by plastic and how it is trying to be part of the solution rather than the problem. Its special edition bottle using the recycled plastic carries a label saying: "This bottle of washing up liquid is made with ocean plastic." 342
- In 2012 a group of California elementary school students gathered more than 90,000 signatures on a petition<sup>343</sup> asking marker pen company **Crayola LLC** to 'make its mark' on recycling its used markers. Crayola LLC initially responded that it had no facilities or process in place for a recycling programme.<sup>344</sup> The campaign inspired a competitor, Dixon Ticonderoga Co, to launch its own programme<sup>345</sup> for recycling used marker pens. The publicity and potential loss of business led to Crayola LLC announcing its own recycling programme for used plastic markers.<sup>346</sup> <sup>347</sup> The Crayola example shows that with the increasing use of social media a message that can threaten a company's image takes little time to reach people.
- Kraft Foods Group Inc was targeted in 2015 by a campaign accusing the company of using packaging that is hard to recycle for its Capri Sun pouches. The Make It, Take It campaign<sup>348</sup> is supported by organizations including Greenpeace and the Natural Resources Defense Council. According to its estimates, 1.4 billion Capri Sun pouches are landfilled or littered each year in the US and only 1 per cent of pouches are collected nationwide. This is the sort of negative publicity and potential reputational risk that FMCG companies adopting sustainable packaging can avoid.

### USING SUSTAINABLE PACKAGING INCREASES OPERATIONAL RESILIENCE

Another reason for adopting more sustainable packaging is to become more operationally resilient and reduce regulatory risk related to raw materials. Investing in a responsible sourcing strategy now will ensure a stable supply of packaging materials in the future. This can be beneficial in terms of spreading risks and avoiding material availability disruptions and price shocks for certain materials.

As Coca-Cola Co stated: "Any time the cost of packaging materials like petroleum and aluminum increases, or any time the supply of those materials is disrupted, it means potential harm for our business."349

See the commodities chapter for further insight into supply chain disruption and regulatory risk from raw materials.





COMPANIES
ADOPTING
SUSTAINABLE
PACKAGING
STRATEGIES
AND CONSIDERING
END OF LIFE IN
MATERIAL CHOICES
ARE BETTER PLACED
TO MITIGATE
REGULATORY RISK

### USING SUSTAINABLE PACKAGING REDUCES REGULATORY RISK

Companies adopting sustainable packaging strategies and considering end of life in material choices are better placed to mitigate regulatory risk.

As paper-based packaging forms a significant component of most FMCG companies' packaging needs, sustainable packaging can ensure that FMCG companies are not exposed to regulatory risk through the purchase of imported packaging materials derived from illegal timber harvesting. While this may impact the Lacey Act in Asia, the potential tightening of regulatory requirements will put companies at risk if they are sourcing such packaging materials.

Similarly, the European Parliament agreed a resolution <sup>350</sup> in January 2014 regarding the strengthening of EU laws on plastic waste. One of the aims included introduction of specific and binding targets for recycling. The resolution noted that plastic waste "should be treated as a valuable resource by promoting its reuse, recycling and recovery" and called on the Commission to make proposals to phase out the landfilling of recyclable and recoverable waste by 2020 while introducing measures to discourage incineration of recyclable, compostable and biodegradable plastics.

Government regulation can have an indirect impact on FMCG companies' sales where it changes consumer behaviour. For example, if consumers are not able to easily (or at no cost) dispose of non-recyclable materials, they may switch to purchasing products using recyclable packaging. Examples of government regulation that may impact consumer behavior include:

- The introduction of payments for non-recycled waste in Taipei city where the 'fee-per-bag' policy reduced domestic waste production by one-third and tripled collection of recyclable materials.<sup>351</sup>
- Vancouver city will only collect waste that is properly sorted and provides recycling
  bags for free.<sup>352</sup> However it charges consumers extra for additional volumes of nonrecyclable garbage beyond a single bin allowance through the issuance of payment
  stickers without which garbage bags are not collected.

Such risks are appreciated by FMCG companies such as Coca-Cola Co which stated that: "Changes in laws and regulations relating to beverage containers and other packaging could increase our costs and reduce demand for our products." Similarly Unilever explains that: "An increasing number of national, sub-national and local governments are taking action to tackle the environmental impacts of packaging waste. Some of these actions, such as eco-taxes or bans on particular packaging formats, are unlikely to result in higher recycling and recovery rates. However, they will entail significant costs to businesses." 354

## 6. OVERCOMING HURDLES TO **SUSTAINABLE PACKAGING**



### HURDLE: SUSTAINABLE PACKAGING IS A COMPLEX ISSUE

It can be difficult to pinpoint the advantages and trade-offs of packaging solutions. Unintended consequences can come from a packaging change if the issue is not thoroughly investigated and analyzed at a systems level. The need to assess the environmental impact (including the water, carbon and forest footprint) of packaging materials and their products over the whole product life cycle is highly complex.

**Solution:** There are existing resources and protocols, such as life cycle analysis and the Global Packaging Protocol that companies can use to accelerate their learning.

Examples: Nestlé SA<sup>355</sup> has adopted a tool called Ecodesign for Sustainable Product Development and Introduction (EcodEX) which takes a broader approach covering the entire value chain. Nestlé SA focuses on finding optimal packaging design that allows it to save packaging material and avoid food wastage. It also leads the development and use of materials from sustainably managed renewable resources, considering packaging and product performance requirements, and supports initiatives to recycle or recover energy from used packaging. Nestlé uses recycled materials where there is an environmental benefit and it is appropriate.

In 1969 **Coca-Cola Co** commissioned the first study to examine the whole environmental impact of a package, laying the framework for the life cycle assessment methodology used today. The company is advancing sustainable design efforts through an initiative known as e3, which focuses on improving efficiency, life cycle effectiveness and eco-innovation. For example, using state-of-the-art computer design software, Coca-Cola Co has effectively reduced and improved the impact resistance of its most recognizable package – the glass contour bottle. 356

Reckitt Benckiser Group plc has developed a Sustainable Innovation Calculator<sup>357</sup> to help create more sustainable products. The tool uses a simple traffic light system that allows product developers to quickly understand the environmental footprint of their innovation compared to that of a similar product. The Calculator is a streamlined life cycle analysis tool that models the most significant environmental impacts of its products, including raw materials and consumer use. Reckitt uses it at key decision points to ensure it is making more sustainable choices affecting the carbon footprint, water impact, packaging or ingredients. To count towards its net revenue target, a

product innovation must score better in at least one of the following categories without scoring worse in any others: Carbon, Water, Ingredients, Packaging (the product must use less packaging overall or use less virgin packaging material resulting in a significant saving (>10 per cent) in the weight of virgin packaging per dose (after subtracting any post-consumer recycled content)).



### HURDLE: COSTLY INVESTMENT IN RESEARCH AND DEVELOPMENT (R&D)

As sustainable packaging is an innovative field, R&D is needed to find the best packaging alternatives for companies' products, customers and supply chains. The upfront cost of R&D is a barrier for some companies.

**Solution:** Investments in process improvement are typically lower than those in development of new materials. Investment in R&D needs to be considered on the basis of the benefits and returns it will provide and in light of other potential uses of capital. There are multiple examples of positive returns. Companies can also work together through industry alliances that will provide synergies in R&D.

**Examples:** Brewing company **Kirin Holdings Co Ltd** worked with manufacturers, distributors and retailers to standardize the secondary corrugated packaging of PET bottled drinks, reducing the amount of packaging and improving supply chain efficiency. This led to a 10 per cent reduction in CO<sub>2</sub> emissions, and also improved the operational efficiency of retailers, making it easier for workers to open and unpack bottles.358



### HURDLE: CONSUMER MISUNDERSTANDING OF SUSTAINABLE PACKAGING

Consumers often do not have enough information to understand the advantages and disadvantages of a specific package, and can make decisions that are detrimental to sustainability. Consumers can also be deliberately deceived by greenwashing, or confused by the overload of information from eco-labels.

Even where consumers are trying to do the right thing, they will not always take the right action. For example, consumers generally consider bioplastics to be 'green', but the reality is more complex. Bioplastics have the potential to be more environmentally sustainable than fossil-based plastics. However, they have many impacts of their own, largely centered on the cultivation of agricultural feedstocks, which requires the use of land, water and chemicals. If these factors are not managed properly, a bioplastic could be as damaging as a fossil-based plastic.

Compostable plastics have particular issues. Some FMCG companies are using this relatively new innovation. The compostable plastics can end up in the conventional post-consumer plastic waste cycle as consumers are unaware of the difference. However, it is not possible to recycle most compostable plastic, so they contaminate the



**FMCG COMPANIES CAN WORK** TOGETHER VIA **INDUSTRY** INITIATIVES TO **IMPROVE CONSUMER UNDERSTANDING** AND SUCH **ALLIANCES CREATE MORE POWERFUL MESSAGES AND ARE MORE COST** EFFECTIVE THAN INDIVIDUAL **COMPANY EFFORTS** 

recycling stream when mixed with other plastics. There are fears that increasing use of compostable plastics may undermine existing efforts to recycle plastics. 359

In addition, FMCG companies have not properly communicated the benefits of sustainable packaging in consumer-centric terms. Most FMCG companies communicate their improvements in sustainability or corporate responsibility terms rather than closing the loop with consumers from a value-add perspective, i.e. smarter packaging is good for consumer wallets and the environment.<sup>360</sup> Changing this communication style can help increase consumer actions in terms of choice of product and also recycling actions.

Solution: Educate consumers about sustainable packaging, and how it can lower the overall environmental footprint of consumption and also save money for consumers, including how consumer actions can help. FMCG companies can work together via industry initiatives to improve consumer understanding and such alliances create more powerful messages and are more cost effective than individual company efforts.

Examples: The Sustainable Packaging Coalition, 361 whose members include large FMCG companies, acknowledges that "the proliferation of recycling-related labels on today's packaging creates confusion in the marketplace, i.e. recovery-related messaging and its associated iconography on packaging, such as 'please recycle' and '100 per cent recyclable' give the erroneous impression that a package can be recycled everywhere". In response, it has initiated the How2Recycle Label<sup>362</sup> to address these issues, and to:

- Reduce confusion by creating a clear, well-understood, and harmonized label that enables industry to convey to consumers how to recycle a package after its use;
- Improve the reliability, completeness, and transparency of recyclability claims through a nationally relevant data set on access to recycling for all packaging materials and forms;
- Provide incentive for industry to participate in a pre-competitive labeling initiative that follows Federal Trade Commission Green Guides.

The On-Pack Recycling Label scheme<sup>363</sup> in the UK was launched in March 2009 to communicate better with consumers about what types of packaging can be recycled. The British Retail Consortium developed the scheme for retailers and brand owners in partnership with WRAP. Under the scheme, packaging can be labelled as 'widely recycled', 'check local recycling' and 'not currently recycled'. Special labels were also created for packaging that is mainly collected at collection points rather than at the kerbside, like composite beverage cartons and some plastic films that are collected with carrier bags. Over 145 organizations signed up to the scheme with the label being used in over 75,000 product lines. They include a diverse range of grocery and non-grocery brands and retailers like Asda, Marks & Spencer, Morrisons, Sainsbury's, Tesco, The Co-op, Waitrose, John Lewis, B&Q, Boots, PepsiCo, Ecover, Warburtons and The Home Retail Group.



### HURDLE: LACK OF STANDARDS TO IMPOSE SUSTAINABLE PACKAGING

There is no universal definition of 'sustainable packaging' and no one body to regulate its use. This is partly due to the complexity of packaging.

**Solution:** Initiatives where companies can collaborate with parties throughout the entire value chain are developing, and self-regulation is possible through communication of measurable time-bound milestones which allow stakeholders to hold the company to account. Companies can also refer to the Global Packaging Protocol to guide them toward best practice.

Examples: Nestlé SA's self-imposed sustainability goals and packaging policy saved the company between 40 and 70 million kg of materials over the two decades up to 2012.<sup>364</sup> The policy focuses on reducing the environmental impact of Nestlé SA's packaging, while not compromising on safety, quality or consumer acceptance.<sup>365</sup>

**Procter & Gamble Co** announced in 2014<sup>366</sup> an expanded set of sustainability goals to include packaging sustainability as a key priority. The company is on track to reduce packaging by 20 per cent per unit of production by 2020. Given this progress, P&G is raising the bar, committing to doubling the use of recycled resin in plastic packaging, and ensuring 90 per cent of its product packaging is recyclable or that programmes are in place to create the ability to recycle it.

In addition to these two expanded goals, P&G is working across its supply chain to develop the capability by 2020 to replace top petroleum-derived raw materials with renewable materials, as cost and scale permit.

The **Bioplastic Feedstock Alliance**, <sup>367</sup> convened by WWF, is a good example of a collaboration to help guide sustainable packaging developments. It was launched by eight of the world's leading consumer brands with the aim to support the responsible development of plastics made from plant-based material and thereby help build a more sustainable future for the bioplastics industry. These founding members include Coca-Cola Co, Danone SA, H.J. Heinz Company and Nestlé SA. Together with respected academic and NGO thought-leaders such as WWF they are committed to guiding the responsible selection of feedstocks for bio-based plastic. This will ensure that plantbased plastics are sourced from renewable materials whose production is responsibly managed, does not result in the destruction of critical ecosystems and provides environmental benefits with minimal negative impacts.



### HURDLE: CREATING AN EFFECTIVE RECOVERY AND RECYCLING SYSTEM IS **CHALLENGING**

Efforts to optimize resources and find the best packaging can be jeopardized by low recovery rates and lack of subsequent recycling facilities thus limiting the availability of high quality recycled material and the value of designing packaging for recovery.



An effective recovery and recycling system requires behavioural change on the part of consumers to ensure high recovery rates and also on the part of governments to invest in adequate recycling infrastructure.

Solution: FMCG companies can participate in recovery efforts, support waste policies and raise consumer awareness of the need to sort waste and recycle. Strategies to promote recovery and recycling of recyclable products should also be put in place to diminish the overall footprint of individual products and collect limited resources.

**Examples: Tetra Pak Inc**, <sup>368</sup> a large packaging supplier to the FMCG sector, works together with many of its FMCG customers (and governments and civil society) to increase recycling rates, for example by improving consumer access to recycling infrastructure. In Japan, Tetra Pak Inc developed together with a branded soy milk producer, Marusan-Ai Co Ltd, and a transport company, the Marusan-Tetra Pak Recycling Service.<sup>369</sup> This is a collection system in which consumers recycle their used cartons by mail, for free. The cartons are then shipped to a paper manufacturer to be turned into a range of recycled paper products.

Unilever Brazil Ltd<sup>370</sup> works closely with other CGF companies and a local NGO called CEMPRE to promote recycling, raise awareness at government and NGO level, and help workers economically. The programme increases the number of drop-off points for packaging, and increases the number of cooperatives who sort and bale recyclable materials. It also increases the number of material types recycled. Unilever's partner, Brazilian retailer Pão de Açúcar (part of the Casino group), has drop-off points outside its stores where consumers can bring used packaging for recycling. Unilever brands also engage with consumers to encourage recycling. It currently supports 139 recycling stations across 12 states, as well as 39 cooperatives that generate income (directly and indirectly) for more than 5,500 people. In 2014, it collected over 10,000 tonnes of material for recycling. It has collected over 85,000 tonnes since the programme began. Unilever NV is now working with TIMPSE in Thailand, CEMPRE Colombia and CEMPRE Uruguay to replicate the success of CEMPRE Brazil.

The Closed Loop Fund is an initiative in the US supported by FMCG companies such as Coca-Cola Co, Pepsi Co Inc, Unilever NV, Procter & Gamble Co, Johnson & Johnson and other US corporations such as Wal-Mart Stores Inc and Goldman Sachs Group Inc. They have invested millions of dollars in a social impact fund charged with increasing the recycling and recovery rate in the US. The fund will achieve this goal by providing zero interest loans to communities to develop recycling infrastructure. The fund links the financial interest of companies that need recycled material back in their supply chain (to reduce cost) to the capital that municipalities need to invest in recycling infrastructure.

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# THE IMPORTANCE OF SUSTAINABILITY



### **BIOCAPACITY**

It takes 1.5 years for the Earth to regenerate the renewable resources that people use, and absorb the CO2 waste they produce in that same year.

### **BIODIVERSITY**

Biodiversity, ecosystems and ecosystem services - our natural capital - must be preserved as the foundation of well-being for all.



**BETTER CHOICES** 

Living within ecological boundaries requires a global consumption and production pattern in balance with the Earth's biocapacity.

Equitable resource governance is essential to shrink and share our resource use.



#### Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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