

SUSTAINABILITY  
REPORT 2012





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“  
*This report maps out our part of the journey towards feeding a growing population in an increasingly changing world.*”

Unless otherwise indicated, "Louis Dreyfus Commodities", "Group", "Company" and related terms such as "our", "we", etc., mean the Louis Dreyfus Commodities B.V. Group as at 31 December 2012, i.e. excluding the Biosev Group which was indirectly upstreamed to Louis Dreyfus Commodities Holdings B.V. on 4 December 2012.

# Message from our CEO

*As a business with over 162 years of history, a culture promoting and supporting sustainable enterprise prevails throughout Louis Dreyfus Commodities.*



Serge Schoen  
Chief Executive Officer

To date that has involved each business unit and region concentrating primarily on legal compliance, the requirements of clients and markets, and the observation of internationally accepted conventions.

More recently, we have increasingly felt compelled to adopt a more structured, consistent and uniform approach to sustainability across all our operations. That thinking has been driven by a diverse set of factors:

## GROWTH

In 2006 Robert Louis-Dreyfus restructured what was then a traditional family business into a genuinely global, diversified processing and merchandising firm – Louis Dreyfus Commodities. Since then, the Company's business activities have grown dramatically. Louis Dreyfus Commodities now handles more trade volume across a more comprehensive product range, and has generated more than a sixfold increase in the size of its asset base. This expansion has highlighted the need to monitor and manage sustainability-related elements uniformly across our diverse portfolio.

## CHANGING DEMAND

The pace of global evolution in food demand will bring massive new challenges. New stresses will come to bear on existing supply chains – chains

that will be required to produce greater output from reduced resource usage. We at Louis Dreyfus Commodities acknowledge that we have a significant role to play in addressing these challenges in a responsible, sustainable way, that continues to enable future generations to meet their own food needs.

## CHANGING APPROACH

It is widely accepted today that scarcity of resources will be an increasing factor in future agricultural production. Fresh water and energy consumption, as well as the need to reduce the generation of waste and carbon emissions will feature more and more in food production methodology. Connected to this, governmental and private sector needs for additional capacity in infrastructure and distribution networks will require enormous investment.

## STAKEHOLDERS

More of Louis Dreyfus Commodities' stakeholders are engaging with the Company on sustainability issues. From the customers (processors, wholesalers and retailing brands) who buy our

commodities for their own processes, to the farmers who supply our raw materials, to the financial institutions that provide us with credit facilities, to the NGOs that we work with in the various commodity roundtables, more attention is being paid to the sustainable provenance of food in addition to the more traditional parameters of quality and price.

## THE WAY FORWARD

I am therefore pleased to present this first stand-alone annual Louis Dreyfus Commodities Sustainability Report as the next step in our vital task of integrating a structured focus on sustainability into all our operations. Our approach draws on stakeholders' views, covers the four pillars of Environment, People, Partners and Community, and tries as much to identify where we can improve as to show where we already succeed.

As we continue to grow as a business, and the markets in which we operate evolve to cater for the growing needs and demands of a rising population, so these challenges will require us to adapt in order to meet those needs sustainably.

In many cases, the path on this journey may be unclear. We are fully committed to a collaborative approach involving all stakeholders in our business as we continue to seek the optimal path, and look forward to ongoing dialogue as we work to ensure a more sustainable future for all.

Finally, I would like to acknowledge the significant role that the different stakeholders in our numerous value chains play in helping us build a more sustainable future. Their advice and engagement in regular dialogue with us, either directly or via institutions like the various commodity roundtables, is an essential element of our collective learning process in this challenging field. I would also like to express my personal gratitude to those stakeholders that have provided comment and testimony specifically for this report.

Serge Schoen  
Chief Executive Officer  
Member of the Supervisory Board

# Current Global Challenges



## AN INCREASINGLY CHANGING WORLD

There is currently enough food produced in the world to feed each and every person. At 7 billion inhabitants that is no small achievement – in 1950 there were barely more than 2.5 billion. Even now, however, many people go without even the minimum amount of food, and it is only going to become more challenging to maintain a level of production that keeps pace with population levels, and to get that food to the people that need it at a price they can afford. Louis Dreyfus Commodities prides itself on having been engaged with that challenge for 162 years. As the challenge grows, so we want our engagement to grow.

### CHANGING DEMAND

Three facets of this growing challenge make finding a solution highly complex.

First, the global population is projected to reach 9 billion by 2050<sup>1</sup>. That is 2 billion more mouths to feed in less than 40 years' time.

Secondly, the population is not only growing but changing. People are moving away from rural areas to urban

areas, prompted to leave farming by more attractive earning prospects. People who once produced food for themselves and others turn to work in urban industries and in their turn need to be fed. Even if population figures stay flat, the same amount of food needs to be produced with fewer workers – as well as transported further to reach the people who used to live near the source of their food.

Thirdly, with urbanization comes a change in food culture. Trends show that as a population's income increases so does their demand for meat protein. Meat protein is less resource-efficient to produce than other foodstuffs like grains and pulses. More resources are therefore going to be drawn from producing food for people into producing food for animals. At present meat production levels 40% of world grain production goes into animal feed. Meeting swelling meat demand will lead this number to rise disproportionately.

These changes mean that, on current projections, food production will need

to double over the next 4 decades to meet demand<sup>2</sup>. To put this challenge into perspective, it will involve producing as much food in the next 40 years as in the last 8 000<sup>3</sup>. That must be contrasted with recent reports showing that yields on agricultural products have grown at only 2% per annum over the last 20 years<sup>4</sup>. Worryingly, that represents a 50% lower growth in yields than that achieved over the previous 20 years.

All stakeholders involved in the production, processing and distribution of food face the task of reversing trends on yield growth and generating greater efficiency gains in the supply chain – a task that Louis Dreyfus Commodities takes very seriously.

### CHANGING CONTEXT

The task set by changing demand has to be met within an ever-changing context of constraints on supply.

High prices – a necessary signal to stakeholders across the whole supply chain of the need for investment – generate understandable public concern.

Key demands, for instance, in several uprisings in the Arab Spring concerned food price inflation. In similar vein, Italy has witnessed protests over the cost of flour and pasta following spikes in wheat prices. This can lead governments to intervene to bring down prices in a manner that discourages investment. While they may protect their people's short-term interests, such policies have serious consequences for supply and prices in the long-term. Signals as to where investment to promote growth and efficiency should be made are obscured, slowing progress towards the goal of getting enough food to where it is needed.

Also at long-term policy level, there has been chronic under-investment in inland and port logistic across the globe. Combined with high fuel prices this can make transport costs so high that the ability to move food to where it is needed is restricted. For example, in some countries it costs more to get food the relatively short distance from the farm to be loaded onto a ship than to ship it to the other side of the world. Logistic efficiencies must be sought amongst this complex of difficulties.

High fuel prices also contribute, along with a desire to find an environmentally sustainable source of fuel, to governments' decisions to mandate the growth of agricultural commodities for biofuels. The obvious knock-on effect is greater, competing demand for agricultural products. This puts further strain on resources for food and on prices.

### CHANGING HABITS

Other challenges in the task of feeding everyone in an increasingly changing world come at the consumer's end of the supply chain.

On the one hand, the urbanization of the world's population and the correlative change in eating habits has been accompanied by increased waste. Current data indicates that 30% to 40% of all food produced is wasted – mostly at the consumer stage<sup>5</sup>. If wastage continues to escalate, unchecked, with urbanization then the task of ensuring food sufficiency will only get harder.

On the other hand, many countries are experiencing mounting problems with obesity. This suggests an increase in demand that may draw a disproportionate amount of food resources to a concentrated portion of the world's population. This issue has received less attention, but may come to represent more of an obstacle in future.

### CHANGING APPROACH

All stakeholders are working towards feeding the world's population in an increasingly changing environment.

Changing weather patterns are leading to greater uncertainty for food producers. Agronomic risk is intensifying and yields are becoming increasingly unpredictable. The problem is compounded by the fact that the production of some crops is concentrated in only a few areas of the world. This creates an over-dependence which can leave countries exposed if yields are significantly affected in any one such area.

The other side of this issue is that stakeholders across the whole of the food supply chain need to make efforts to operate in as environmentally sensitive a way as possible. Global food production is estimated to contribute 29% of greenhouse gas emissions<sup>6</sup>. The aim must be to double the world's food production over the next four decades, but at the same time we must endeavor to alleviate the emissions impact that entails.

Similarly, the huge challenges we face should not be overcome at the expense of the people living and working in and around the food supply chain. The people who have stayed in farming – and much of it is still conducted by smallholders – deserve support to create richer, more sustainable lives for themselves and their communities.

Operators in this highly complex industry also face demands to make all stages of the supply chain more transparent. More and more, consumers want to know how their food is made and where it comes from. The importance of meeting that demand has also been highlighted by the recent scandal in Europe where horsemeat found its way into various meat products illegally. Such practices are a global concern – rising demand for food makes such practices more of a risk – and transparency greatly assists in rooting them out.

However, creating that transparency is an enormous undertaking in a supply chain that spans a vast array of partners, people and processes. There is hope, of course, that in establishing greater transparency further goals can be identified and attained – precisely the kind of goals that need to be met in facing the challenges of our increasingly changing world.

1. UN, World Population to 2300

2. FAO, How to Feed the World in 2050 3. Jason Clay, WWF, interview, Momentum, Winter 2012, University of Minnesota 4. HSBC, The World in 2050 5. FAO, Global Food Losses and Food Waste 6. CGIAR Annual Review 2012, Climate Change and Food Systems

# Sustainability Strategy

## People



### TARGETS

**2013: Reduce frequency of workplace accidents by 20% year-on-year**

**2013: Reduce lost time accidents to zero**

**2013: Establish Behavior-Based Safety program across all locations**

**2013: Collect and analyze more diversity data**

**2014: Identify potential strategies for improving diversity across metrics, business divisions and regions**



Louis Dreyfus Commodities has over 20 000 employees worldwide in peak season and engages many others on a joint venture, contract or temporary basis. As with our engagement with the communities our operations touch upon, we recognize we have strong duties towards our people. We want their work with us to provide the platform for the kind of lives they want to live.

The Company's growth plans also depend directly on our team members and their enthusiastic engagement. Louis Dreyfus Commodities sees it as fundamental to our business that we respect our employees and their wellbeing as the Company grows more and more into its role of meeting the challenges posed by our changing world.

“...we recognize we have strong duties towards our people.”



Norfolk, US

### HEALTH & SAFETY

The Company has historically had a good record of health and safety compliance. However, we are always striving to improve. As the figures below show, those efforts are reflected in continual improvement in our key safety metrics. For 2012, we set ourselves the target of reducing both the frequency and gravity of workplace accidents by 20%, year-on-year. We met the target on the gravity of accidents and exceeded our goal on the frequency of accidents, reducing the overall number of accidents causing injury by 34%, as shown in Figure 1.1.

While we are content with the results in 2012, we are keen to keep progressing. We have set even more ambitious targets for the coming year – a 20% reduction in frequency of workplace accidents and a total elimination of any accidents that lead to a person needing time off work. That means we aim for none of our people – across all of our business – to be involved in a workplace accident causing an injury serious enough that they need time away from work in 2013. There is a case study illustrating the steps we are taking to achieve these very challenging goals below. We hope to report back on our success in our next report.

### GLOBAL FREQUENCY AND GRAVITY INDEXES

18 month average

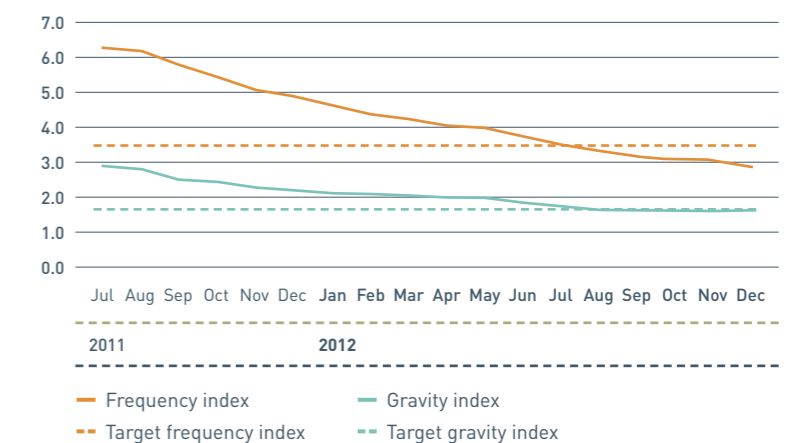


Figure 1.1

The Frequency Index expresses the relation between the number of workplace injuries requiring medical attention and hours worked. The ratio expresses the number of employees in every 100 that experienced an injury requiring medical attention during the year. The Gravity Index is a subset of the Frequency Index and shows the relation between the number of workplace injuries serious enough to result in time away from work and hours worked.

### CASE STUDY: FOCUS GROUPS ON SPECIFIC RISK AREAS

At our sister company Biosev, analysis of health and safety data revealed that a higher than average number of accidents occurred in the sugar storage area at each of its facilities. A multidisciplinary team was formed to assess and address the issue, with the power to shut down operations if that proved necessary. Its objectives were to:

- ▶ Analyze the extent of the problem – the most common causal factors and risk activities involved
- ▶ Understand the issues involved – such as lack of understanding, training or broader cultural issues
- ▶ Determine the existing preventative measures, what new measures might be required and their cost
- ▶ Encourage the recognition, across the Company, that improving safety requires cultural change, with buy-in at all levels of seniority and across all functions
- ▶ Raise awareness of the rules that apply to each task, in each area
- ▶ Develop and support strategies for sharing best practice across the business



Maracaju, Brazil

In meeting these objectives, the team visited all of Biosev's sites over the first 5 months of 2013. There was a 28% year-on-year reduction and, during the last two months of the team's work, no accidents occurred in the sugar storage areas at all. Biosev is now treating this as a pilot program which it will roll out over the other areas of its business. The program will be applied across Louis Dreyfus Commodities globally in 2013.

“Develop and support strategies for sharing best practice across the business.”

# Sustainability Strategy

## People continued...



Mombasa, Kenya

“Every year since 2009, all Louis Dreyfus Commodities employees take part in our Safety Day.”

### SAFETY DAY

Every year since 2009, all Louis Dreyfus Commodities employees take part in our Safety Day. It was introduced to focus everyone's attention on the importance of operating safely in all areas of business, and as we go about our lives outside work. The theme for 2012 was “Safety is Everyone's Responsibility”. Events were organized in all Louis Dreyfus Commodities locations, and even extended to many contractors' facilities, to emphasize that safety must be a core value for every single person who works for and with our Company.

### OTHER SHE PROGRAMS

Our Safety, Health and Environmental (SHE) vision is to be a global leader in SHE matters. This is a highly ambitious goal requiring long, sustained effort. In 2009 we introduced a new internal SHE management system modelled on ISO 14001 and OHSAS 18001, and in 2011 we commenced an equivalent program for contractors. Several of our facilities have since attained ISO certification and we continue to work to bring all of them up to that standard.



### HUMAN AND LABOR RIGHTS

Violations of human and labor rights are a serious issue in some value chains. It is also a practice we unequivocally condemn.

An example illustrating the complexity of this challenge can be seen in our dealing with cotton originating from Uzbekistan, where there are concerns about associated labor practices.



Dakar, Senegal

“Our Safety, Health and Environmental (SHE) vision is to be a global leader in SHE matters.”

“As we expand and our workforce grows, we want it to be representative of the diverse communities we work in.”



Douala, Cameroon

Our policies strictly prevent any form of discrimination in hiring employees and contractors. In some regions, such as in Brazil where we have set up an Acesso program to help people with disabilities gain valuable skills and prepare them for employment, we proactively encourage applications and seek to recruit from under-represented groups. We are currently seeking to understand how we might expand such an approach across the Company.

“Louis Dreyfus Commodities is immensely proud of all its people.”

Following the leadership of governments and international institutions, we have chosen to remain engaged with the country in order to have more leverage in our efforts to bring about real improvements. We believe that a collaborative, multilateral approach is the best way to drive reform, so we are raising the issue with sellers and officials to keep it high up the agenda. For example, we helped to set up and participate in a working group of the European Cotton Merchants' Association to deal with this and other issues. That group has been pressuring the government of Uzbekistan to admit a delegation of the International Labor Organization (ILO) for a proper audit of the situation. We actively back this up through our own lines of communication with the government and the ILO.

More broadly, we have approached a number of trade associations which deal with a range of commodities with a proposal to include a clause on human rights and child/forced labor in their standard contracts for the sale and purchase of their respective commodities. We will continue to work closely with all relevant parties to help bring about lasting change.

### DIVERSITY

Louis Dreyfus Commodities is immensely proud of all its people. As we expand and our workforce grows, we want it to be representative of the diverse communities we work in.

We present here a view of the percentage of people we employ by gender, age and region. We are publishing this data here, shown in Figure 1.3 and Figure 1.4, with a view to building a more proactive diversity strategy.

### 2012 TOTAL EMPLOYEES BY GENDER

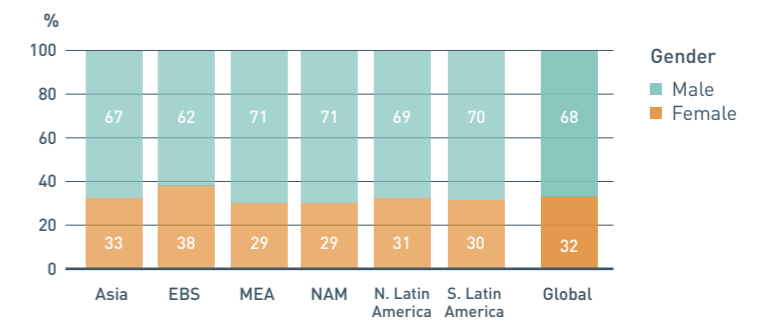


Figure 1.3

### 2012 TOTAL EMPLOYEES BY AGE

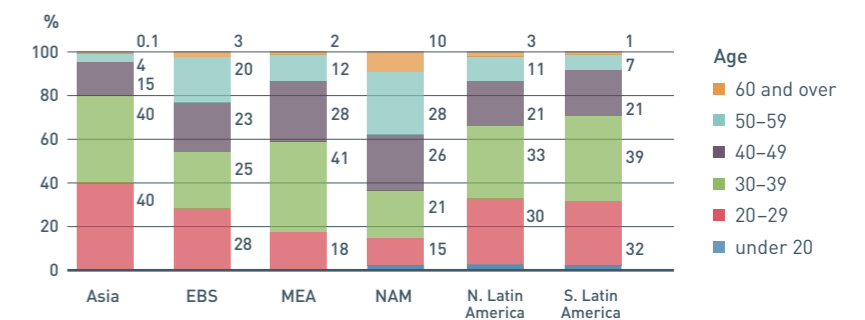


Figure 1.4

Figures 1.3 and 1.4 show professional, production and agriculture workers, including seasonal. Represents average for 2012.

# Sustainability Strategy Community



## TARGETS

*Complete scoping of our current activities to enable us to set targets for increasing our participation in community projects*

*Create model program based on Best Practice Case*

*Identify first group of farming communities for roll-out of Best Practice Case program*



Our operations touch thousands of communities worldwide. That makes us very conscious of our responsibility to ensure our business strategy also strengthens those communities in the face of the challenges of an increasingly changing world. Our business is growing, and our strategy is ambitious – how do we make sure that benefits others? We bring jobs to an area – but are our workers’ communities getting as much out of it as they should? We train our workers – but what about those outside our walls? These are questions we are constantly seeking better answers to.

Rather than set specific projects at a global level, we see our local operations as best placed to understand what is needed and how to accomplish it. Our sustainability policy therefore places responsibility on our operations at regional level to identify the best means to support the communities around all our industrial and farming assets. Guidance is provided by the policy in terms of broad aims and approach, but the actual projects are specifically tailored to meet local needs.

Our Brazilian operations provide a good example of how this policy works in practice. A need was identified locally for more training opportunities for people with disabilities to enable them to access the labor market. Louis Dreyfus Commodities therefore partnered with SENAI (a Brazilian public educational institution) to set up a program called **Acesso** to provide that training. To date, 60 people have received training. Several have been offered jobs within our Company, while others have gone on to find employment elsewhere.

Louis Dreyfus Commodities is particularly concerned to ensure that our business operations directly benefit the communities we work with as much as possible. We think that the cotton growers’ program in Zambia that we are involved in sets a great example – so much so that it has its own section in this report (see page 24, Best Practice Case). It is an example we want to build on. Louis Dreyfus Commodities has some similar projects already, detailed below.

“... projects are specifically tailored to meet local needs.”



São Simão, Brazil

However, we’re aiming higher. A challenge posed by our approach to date was that not directing activities centrally meant we did not have a full picture of the scope of our work, making it hard to set concrete targets for improvement. With this in mind we established a structure to collect the right information centrally in order to be able to set some ambitious targets for improving existing projects and rolling out new ones inspired by the work in Zambia.

## COMMUNITY BUILDING THROUGH CITRUS PRODUCTION

Louis Dreyfus Commodities is well-established as one of the world’s largest producers of orange juice. Our production is largely situated in Brazil. The 4 plants, 10 farms and contracted land of 36 local farmers that we operate service consumer markets across the US, European and domestic Brazilian markets. That still only gives us 30% of our fruit needs, so we buy the remainder from a large number of third party growers.



Engenheiro Coelho, Brazil

“Our aspiration in assuming this kind of responsibility is that others can improve their business hand-in-hand with us as we improve ours.”

extended local knowledge in areas such as increasing tree plantings per hectare, undertaking micro-soil analysis for optimum fertilizer application and carrying out varietal analysis to identify the best variety to grow on each site.

Our aspiration in assuming this kind of responsibility is that others can improve their business hand-in-hand with us as we improve ours.

As part of our strategy to boost yields and meet the increased demand of our changing world, we research and implement various agricultural improvements. To ensure our own strategy has the greatest possible impact, we share those improvements with our local community of farmers. Communicating via local producers’ associations we keep a large network of growers up-to-date on how to farm more efficiently. As a result, Louis Dreyfus Commodities has

# Sustainability Strategy Community continued...

## COMMUNITY BUILDING THROUGH PALM OIL PRODUCTION

Louis Dreyfus Commodities is a relative newcomer to this area. We operate in a number of locations in Indonesia through a joint venture company.

In setting up new facilities we make sure that we engage with the local community and we establish plasma schemes – schemes that seek to deal with land use issues and to allocate a proportion of the income from the facility to the local community. The aim is always to promote the local community's autonomy and self-sufficiency.



Balikpapan, Indonesia

Each facility has a development plan in place from the start which provides support for local people to build small and medium-sized businesses around our facilities. In some rural communities the plan involves providing animal breeding stock to allow the community to foster a self-sufficient food supply. In other cases we have provided tools to local blacksmiths and committed to buying a certain quantity of their output on a regular basis.

We also help maintain local communities' existing ways of life. Indonesia is culturally enormously diverse. Since our operations spread across a number of geographical areas, we are engaged with communities with a huge range of different cultures and religions. We recognize the importance of respecting and building up these different cultures. Accordingly, we contribute in various ways – providing food for festivals and feast days, and materials for renovating temples and churches when the need arises.

In conducting our business this way we hope to make possible the steps that local communities want to take to improve their livelihood.

“Over 100 individual projects currently invested in and supported around the world.”

“Louis Dreyfus Commodities employees are also encouraged to bring their own time and fundraising talents to bear on local projects.”

## ENCOURAGING VOLUNTEERISM

Louis Dreyfus Commodities has a long-standing culture across all regions of encouraging our employees to bring forward their ideas and projects for work in the local community. We think that they are best placed to know where support should be directed. We want to listen and to act on that knowledge. It already happens, resulting in things like our building schools, creating gardens and funding a rehabilitation center for disabled people.

Louis Dreyfus Commodities employees are also encouraged to bring their own time and fundraising talents to bear on local projects. For example, in our Ukraine office, employees were moved to assist an orphanage near Odessa after a visit in late 2011. They approached the director of the orphanage to discover what help was most needed. With his instructions, they announced the project across our European operations, and



Odessa, Ukraine

collected donations of clothes and money to provide what was required. In 2012, the Ukraine team delivered the clothes, funds and food to the orphanage.

In Argentina we helped to build a school as part of our project to redevelop a piece of land lying between two of our existing facilities in the Municipality of Timbúes. As well as providing the land, we invested US\$700 000 (70% of the budget) in what was an ambitious project to provide a fully equipped school with areas for sport

and recreation in a carefully landscaped setting. Volunteering played a big part as a team of Louis Dreyfus Commodities employees managed the project from start to finish. The school was opened in September 2011.

The Company has also been involved in supporting the USA's National Multiple Sclerosis Society (NMSS) since 1992. As part of that support, employees in our Wilton, CT office have organized themselves to participate in the annual West Connecticut MS bike ride. Each year, around 50 employees take part as a team, often led by our North American regional CEO, raising in the region of US\$50 000 annually.

There are numerous projects of a similar nature in each of our regions. We also want to do more. As our Company grows, with our ambitious investment and expansion plans, we will touch the lives of more people and communities. We want not only to grow our investment in those communities, but also to make sure that the culture of commitment to volunteer projects continues to deepen as we grow. Our systematic scoping will enable us to optimize, enhance and focus these efforts.

“In Argentina we helped to build a school as part of our project to redevelop a piece of land...”



Timbúes, Argentina



# Sustainability Strategy Environment



## TARGETS

**2012: collect data**  
across relevant  
metrics to establish  
baseline

**2013: harmonize**  
data collection across  
all business divisions

**2014: fold individual**  
5-year plant optimization  
plans into a single  
global plan

**2015: set global**  
time-bound targets for  
reducing resource usage  
and emissions



Louis Dreyfus Commodities has a big part to play in working towards the goal of sustainably producing enough food for all and ensuring it is available where it is needed. As our business grows and world food demand increases and evolves, we need to remain focused on resource efficiency so that growth is not achieved at the expense of the environment.

We realize that one of our key responsibilities is to set ambitious, realistic goals for the efficient use of resources while minimizing emissions. Previously, Louis Dreyfus Commodities has used a site-by-site, division-by-division approach of trying to produce and deliver as much as possible using as little as possible. That has generated significant efficiency gains – such as in the case studies below.

However until 2012, there was no single, uniform measurement system across all our installations. We have therefore begun the process of establishing a single policy and our first series of goals. All divisions of Louis Dreyfus Commodities' business started collecting the information needed in 2012.

This data gathering was conducted by our Safety, Health and Environment (SHE) team throughout our 6 regions, and covers the more than 200 processing and logistic assets in the Louis Dreyfus Commodities portfolio. The map on the following page (Figure 2.1) illustrates those locations where our environmental key performance indicators (KPIs) were measured. The only facilities not included in the study are those locations marked with the x symbol, representing tolling agreements, off-take contracts, minority stakes, and land leases. The KPIs comprise energy used, greenhouse gases emitted, water consumed and waste produced. Figure 2.2 quantifies the relative efficiency of various fuels used in our calculations.

“ We have therefore begun the process of establishing a single policy and our first series of goals. ”

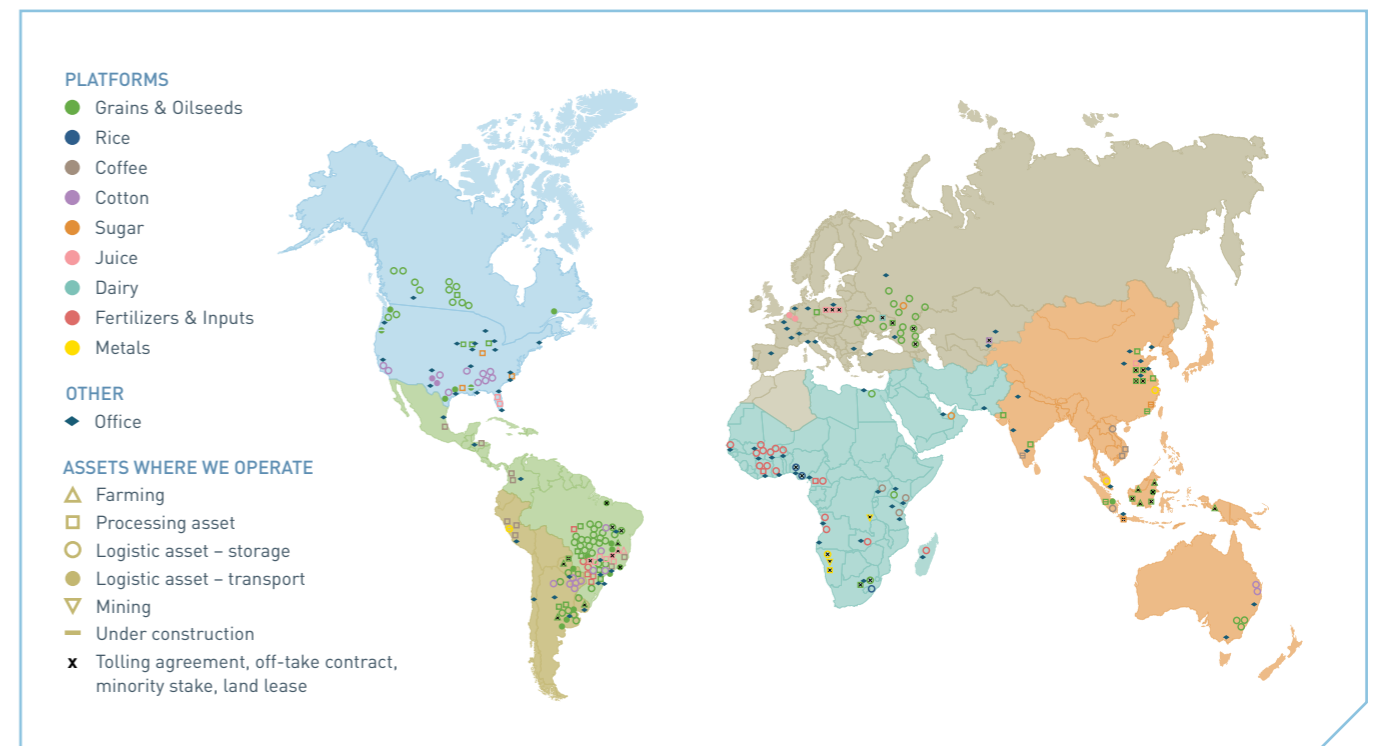


Figure 2.1

We set out that high level data here, and will continue to do so with each year's data in future reports. Our installations are diverse and range across many global value chains from agricultural production to international transport. This means that they present very different environmental profiles, so the evolution of these KPIs over time will be easier for readers to follow than absolute numbers.

With these metrics we can form an ambitious, realistic, co-ordinated approach to sustainability. Over the next 3 years we will continue to analyze all the information collected so that, in 2015, we are in a position to set global as well as individual plant targets for reducing our consumption and impact on the environment in a single co-ordinated plan.

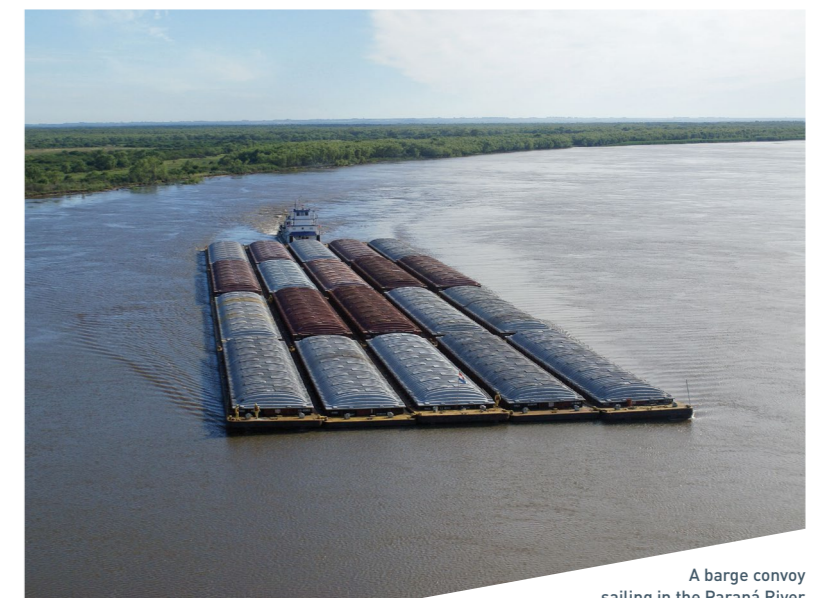
“ With these metrics we can form an ambitious, realistic, co-ordinated approach to sustainability. ”

## ENERGY EMISSION FACTORS

CONVERSION FACTORS:			
Natural Gas	.0388 GJ/M <sup>3</sup>	Natural Gas	2.053 Kg CO <sub>2</sub> e/M <sup>3</sup>
Anthracite Coal	29.16 GJ/MT	Coal	2331.50 Kg CO <sub>2</sub> e/MT
Bituminous Coal	28.91 GJ/MT	Diesel Fuel (No. 2)	2.706 Kg CO <sub>2</sub> e/Liter
Diesel Fuel (No. 2)	.0385 GJ/L	Gasoline	2.342 Kg CO <sub>2</sub> e/Liter
Gasoline	.0306 GJ/L	Wood / Wood Residuals	1623.68 Kg CO <sub>2</sub> e/MT
Wood / Wood Residuals	17.88 GJ/MT	Liquefied Petroleum Gas	1.537 Kg CO <sub>2</sub> e/Liter
Liquefied Petroleum Gas	.0256 GJ/L	Bagasse	0.000 Kg CO <sub>2</sub> e/MT

Figure 2.2

Source: US Environmental Protection Agency



A barge convoy sailing in the Paraná River

# Sustainability Strategy Environment continued...

## ENERGY CONSUMPTION

At our facilities, the level of energy consumption tends to be determined by the age of the industrial plant, with newer plants being more efficient. Production improvements and replacement of equipment reduce demand for energy. We are also exploring opportunities to reuse energy within our plants.

*Our energy consumption index shows the average ratio of fossil fuel energy consumed by each of our processes per unit of feedstock processed. Depending on the particular facility, the feedstock element of that ratio represents feedstock*

*crushed, in the case of an industrial facility, or feedstock processed, in the case of a warehouse or logistic facility. The unit of measurement is gigajoules per metric ton (GJ/MT).*

### ENERGY CONSUMPTION: MAIN OBSERVATIONS

In line with our industrial profile, the majority of our energy consumption occurs in the Americas. Brazil is the highest energy consuming area, followed by the US and Argentina. However, data collection has revealed that Argentina

has slightly higher energy consumption per ton of feedstock crushed or handled, presenting opportunities for efficiency gains. Compared to Brazil and the US, Argentina has considerably fewer logistic assets relative to industrial assets, which largely accounts for the higher ratio of energy consumption per unit of feedstock.

### ENERGY CONSUMPTION INDEX

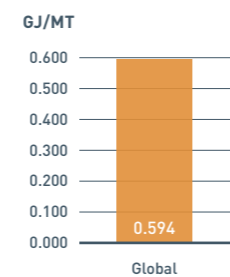


Figure 2.3

### CASE STUDY

Many of our plants have identified and implemented energy savings opportunities. For example, at our grain export facility in Port Allen, Louisiana, US we upgraded the facility's lighting system by switching to energy-saving LED lights throughout. This resulted in a 33% reduction in energy consumption for plant lighting.

## GREENHOUSE GAS EMISSIONS

Greenhouse Gas (GHG) emission levels are determined by fuel type and consumption. Regions with significant numbers of industrial assets therefore drive this data. A lack of economical renewable or clean fuel types in many regions means that we must rely on fossil fuels. We are making progress by reusing waste heat and improving boiler efficiency. Using the data we gather, we are identifying the highest emitters in the Company and focusing on reduction opportunities over the next few years.

*Our greenhouse gas emissions index shows the quantity of GHGs emitted per ton of feedstock either crushed or processed. This is measured in kilograms of carbon dioxide-equivalent per metric ton of feedstock (kg CO<sub>2</sub>e/mt).*

### GREENHOUSE GAS EMISSIONS: MAIN OBSERVATIONS

Since our GHG emissions profile relates directly to fuel consumption, emissions again were highest in Brazil. As with energy consumption, Argentina

produced the highest level of emissions – and for the same reasons referred to above. By way of comparison, GHG emissions in our Europe and Black Sea operations are lower because we have a higher ratio of logistic installations and at our largest industrial unit we have the opportunity to use steam from a neighboring plant, rather than produce it on site.

### GHG EMISSION INDEX

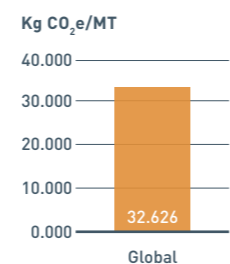


Figure 2.4

### CASE STUDY

Our sister company Biosev operates cogenerative boilers with turbines using bagasse (the solid waste from sugarcane production) as a fuel source in 8 of its 12 sugarcane processing facilities. Another is coming on-line in 2013. These units supply each facility with electricity and send surplus electricity into the local power grid, using a renewable, carbon neutral fuel source from the sugar production process.

Recently we have been increasing our use of biodiesel in order to reduce the emissions from our operations. Using biodiesel reduces emissions of a range of harmful air pollutants. It can be far more sustainable to produce since it can be made from waste products such as cooking oil. It is therefore both potentially renewable and also avoids conventional waste disposal. In our North Latin America operations, along with Biosev, we have seen significant reductions in emissions by this process. Across both entities, we used 109,091,988 liters of diesel in 2011 to 2012. By ensuring that 5% of that diesel was composed of biodiesel – 5,454,599.44 liters – we were able to reduce the resulting CO<sub>2</sub> emissions by 1,165,102.43 kg.

## WATER CONSUMPTION



Yorkton, Canada

As with energy consumption, water consumption is higher in older industrial facilities. We have implemented several water recycling and reuse projects to deal with this. In some locations local water supply is strained, making water consumption our highest priority for analyzing and identifying strategies to reduce consumption at those locations. Across our fruit juice division, for instance, we use water that is extracted from the oranges during the juice manufacturing process to meet some of our water needs and reduce our consumption of local water resources.

*Our water consumption index presents the ratio of water used for each metric ton of feedstock crushed or processed. The ratio is given in cubic meters per metric ton (m<sup>3</sup>/MT).*

### WATER CONSUMPTION INDEX

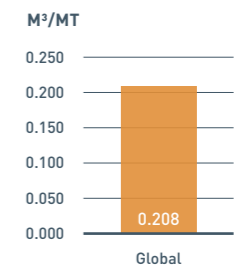


Figure 2.5

### CASE STUDY

At our canola crushing facility in Yorkton, Saskatchewan, Canada we explored opportunities to reduce water consumption. A team of employees identified that our steam condensate recovery system could be made more efficient by installing an iron filter. Improving the effectiveness of the filtration system enabled more steam to be captured, condensated, filtered and returned to the process, thus reducing demand for water at the facility.

“In some locations local water supply is strained...”

## WASTE PRODUCTION

By the nature of our business, our facilities tend to produce little solid waste since we are able to use secondary components of commodities to produce useful by-products.

Indeed, we have already specifically designed most of our processing facilities so that they either generate little or no waste, or transform any waste into a useable by-product. A good example of how we have done this is given in the case study below. We therefore already aim to extract maximum value from raw materials. By co-ordinated data collection and analysis we hope to identify more opportunities to further this aim.

For example, collecting consolidated data has already revealed that the mechanisms for capturing and reusing grain dust in

our Europe and Black Sea processing operations is, in some instances, less efficient than in other regions. We are therefore now focusing waste reduction efforts on this issue and hope to show improvements in future reports.

*The ratio given here shows the amount of waste produced for every ton of feedstock crushed or processed, in metric tons of waste produced per metric ton of feedstock (MT/MT).*

### WASTE INDEX

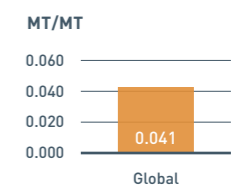


Figure 2.6

### CASE STUDY

In the 1980s our sugarcane mills in Brazil identified the need to dispose safely of vinasse – the main waste product of sugar refining. To give an idea of the scale of the problem, producing 1 liter of ethanol generates 12 liters of vinasse. We investigated and found that vinasse could be used as a fertilizer on agricultural land. We established a plan to apply the vinasse as a fertilizer and worked with the relevant state authorities to get the plan authorized. Years on, this innovation has meant that the use of industrially produced fertilizer has been greatly reduced with significant environmental and cost benefits.

## BIODIVERSITY

The challenge of producing more food in an increasingly changing world brings with it a potential threat to biodiversity if production is not increased sensitively. Louis Dreyfus Commodities is very mindful of this as we consider our expansion, especially in Africa and Asia. We proceed with new projects only after careful consideration of credible social and environmental impact assessments when a sensitive area is concerned.

We engage transparently with our various stakeholders about the findings of such assessments and our responses to them.

In this context, palm oil presents a particular challenge. Our first concern is always to work with partners to ensure we are complying with all relevant laws – an occasionally challenging task in an often opaque area. In addition, we are implementing a plan to ensure that all our palm oil operations comply with a

robust internal policy on environmental compliance. Ultimately, as indicated in the Partners section of this report, that will also include setting a time-bound goal for securing Roundtable for Sustainable Palm Oil certification.

“...work with partners to ensure we are complying with all relevant laws...”

# Sustainability Strategy Partners



## TARGETS

*Actively engage in process of setting up a new grain roundtable*

*Complete production mapping and benchmarking to be in a position to create a time-bound plan for RSPO-certifying palm oil production*



Louis Dreyfus Commodities takes its role in tackling the enormous challenge of feeding people in our changing world very seriously. Our business and the way that it is conducted affects millions of people worldwide. We deal with a huge number of smallholder farmers in this process – they need sustainable growth. We process and merchandise large volumes of key commodities like rice, sugar and cotton – everyone needs those supply chains to operate sustainably.

## MULTI-STAKEHOLDER APPROACH

We have a 162-year history of conducting business with integrity and we carry that integrity wherever we do business. We also have a great deal of know-how that we can bring to the issues facing food producers. Still, on most of these goals there remains plenty to be done and we cannot act effectively if we act alone. We believe best-practice on solving many such issues involves solving them multilaterally and collaboratively.

Consequently, we focus strongly on participating in multi-stakeholder roundtables and projects. Our policy is to participate in multi-stakeholder roundtable initiatives across all our main commodities. If a roundtable does not exist we work towards setting one up – as was the case with the **Sustainable Rice Platform** (SRP), of which we were a founder member, and as we hope to be the case with the grain roundtable we are currently actively promoting. This is an approach we want to roll out further across our business over the coming years, and we aim to take up every opportunity to engage in such roundtables.

We are active members of the **Roundtable for Sustainable Palm Oil** (RSPO) and the **Roundtable for Responsible Soy**. To explain more fully how we use this approach and why it is the best means to meeting sustainability challenges, here are some focal examples from less well-known projects in key commodity markets.

## RICE

**Target:** Assist the **Sustainable Rice Platform** to establish effective scientific assessment and outreach mechanisms

Rice is the staple food for the majority of the world's population. Rice production is also responsible for 40% of all the water used in producing food.

While the vast majority of all rice produced is consumed where it is grown, Louis Dreyfus Commodities is one of the world's largest merchandisers of the share that is merchandised internationally and so we have a major role to play in promoting sustainable practices in rice production. We can also bring a distinctive perspective to any discussions on the issue. A large portion of our rice business involves bringing surplus rice from South East Asia to markets in Africa. That is a trade flow rarely focused on by any commodities company. As the population in South



Puebla, Mexico

East Asia grows, there is a high risk that surpluses will dwindle. That may leave Africa with a significant shortage. We are in a unique position to bring that concern forward in a market focused on other issues. The **Sustainable Rice Platform** is therefore the perfect forum to channel our efforts – to increase yields and promote production in Africa – where they are most needed.

## Sustainable Rice Platform (SRP)

The SRP is a new roundtable initiative conceived by the **United Nations Environment Program** (UNEP) and the **International Rice Research Institute** (IRRI). Its purpose is to enable growers to improve yields – something our own growers tell us is crucial to enable them to improve their livelihoods, as well as being crucial to feeding a growing population – incomes and livelihoods, protect the environment and create safer working conditions.

As a new initiative, the SRP aims to develop its scientific assessment tools for setting and achieving standards for cleaner, cheaper, more sustainable rice production. It also has significant work to do in setting up an effective mechanism for reaching out to actors in the rice market and providing them with access to its assessment tools.

Continuing from its role as founder member, Louis Dreyfus Commodities drives that work from its seat on the inaugural SRP steering committee. In particular, we bring our perspective on African rice consumption to the table. Our proposals focus not only on improving rice yields in the key production areas in South East Asia, but also on the need to increase production in Africa to reduce reliance on imports. In this vein, we are currently developing rice production projects in West Africa.

1. USDA, November 2011

## SUGAR

**Targets:** Complete production mapping and benchmarking to be in position to set a target date for **Bonsucro**-certifying all the Group's sugar mills

Set a plan with **Bonsucro** for how we promote their activities with growers whose sugar we buy

Sugar is a major commodity. In 2011, global sugar production exceeded 168 million metric tons. Brazil is the largest producer and by far the largest exporter of sugar in the world<sup>1</sup>.

Louis Dreyfus Commodities is one of the world's largest sugar merchandisers and through our sister company Biosev is the second largest sugarcane processor by volume. Biosev operates 12 sugar mills in Brazil, giving the Group a strong position in the world's largest sugar producing and exporting country. We also operate mills through joint venture projects in China and Indonesia, and in 2012 we acquired one of the leading sugar refiners in North America – Imperial Sugar. This makes us well-placed to promote and implement good, sustainable business practices.



Rio Brilhante, Brazil

## Bonsucro

**Bonsucro** brings together a range of stakeholders in the sugarcane industry to design and set a certificated standard for sugar producers and processors. The standard requires operators seeking certification to adhere to international and domestic labor and human rights laws, track and improve usage of inputs and emissions, actively manage biodiversity and ecosystem impacts, and to have systems in place with a view to continuously improving on each of these counts.

Biosev achieved certification for all of the operations of its first sugar mill in 2012. It is currently working on achieving the same certification for the other 11 mills and aims to be in a position to set a time-bound goal for certification of more of those mills in the next 12 months.

Through our participation in this scheme, we are looking to ensure that our sugar operations – and consequently a significant portion of the world's sugar value chain – are as resource-efficient and as respectful of participants in the value chain as possible.

This is a major challenge since **Bonsucro** is still relatively unknown in many sugar-producing countries. We are therefore consulting with them as to how Louis Dreyfus Commodities can best assist in promoting their organization and standards worldwide. One of the main issues is how we, as a buyer of sugar, can introduce the scheme to the growers whose sugar we buy and prompt them to seek certification.

“Biosev achieved certification for all of the operations of its first sugar mill in 2012.”

# Sustainability Strategy

## Partners continued...

### COTTON

**Targets:**  
Promote knowledge and use of **Better Cotton Initiative** standards among brands, retailers and producers

All cotton merchandised by Louis Dreyfus Commodities companies to be Better Cotton

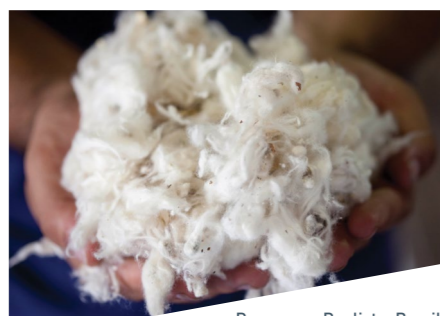
Cotton is perhaps the world's most important natural fiber. Approximately 2.5% of the world's arable land is dedicated to cultivating it, across 80 countries, to produce some 25 million metric tons per year<sup>2</sup>. It is estimated that 300 million people depend on cotton for their livelihoods.

However, in many areas, cultivation relies heavily on irrigation and so uses substantial water resources. Market conditions are also made more difficult for growers in developing countries by government subsidies for growers in the developed world.

Louis Dreyfus Commodities is a major merchandiser of raw cotton. We deal with many cotton farmers and recognize our responsibility to work towards globally and locally sustainable production. That recognition has led to our involvement in a number of best-practice initiatives and we are currently looking to use these initiatives as models across our cotton operations.



Greenville, US



Paraguaçu Paulista, Brazil

“It is estimated that 300 million people depend on cotton for their livelihoods.”

We hope, through such projects, to improve the lives of a considerable proportion of the millions whose livelihoods depend on cotton.

### Better Cotton Initiative (BCI)

We are a member of this new multi-stakeholder initiative, which aims to help farmers move towards more efficient, socially, financially and environmentally sustainable cotton production. Better Cotton is cotton traceably produced according to 6 core BCI principles. As well as participating in the knowledge-sharing aspects of the program, we were part of a BCI sub-group tasked with defining a chain-of-custody standard that guarantees the necessary transparency and insight to ensure full traceability of all Better Cotton in future. We are working towards making all cotton we merchandise Better Cotton or from schemes which are equivalent in sustainability terms.

### Cotton made in Africa (CmiA)

Louis Dreyfus Commodities has directly funded this aid-by-trade initiative.



Varginha, Brazil

### COFFEE

#### Targets:

Increase volume of certificated coffee we purchase to 12.5% of our total volume by 2013

Increase volume of certificated coffee we purchase to 22.3% of our total volume by 2015

Unofficial figures put world green coffee production at close to 8 million metric tons per year. It is cultivated across the globe, from Columbia to Papua New Guinea. However, there are considerable concerns about labor practices in coffee farming and growing worries about the high water usage required to grow coffee – as high as 140 liters to grow enough beans for one cup<sup>3</sup> – often in countries that suffer from water shortages.

Louis Dreyfus Commodities is one of the world's largest merchandisers of green coffee by volume. We are therefore concerned to ensure that our purchasing power is directed towards responsible, sustainable goals. We are in a position, for example, to help farmers learn to grow coffee using fewer resources more efficiently. We have engaged in numerous projects in various locations spanning Asia, Africa and Central America to achieve this and hope to expand such projects across our coffee business.

#### Coffee certification

Our efforts to date have focused on taking part in various certification schemes in order to help improve the livelihood of farmers and help them move to more sustainable practices. Through these schemes we have invested in providing agricultural extension

services and experts to educate small coffee growers. This enables farmers to improve returns through better farming techniques and more efficient resource management.

Certificated sustainable coffee represents approximately 7.4% of the total volume of coffee produced. Even that level of demand is a relatively recent phenomenon. Accordingly, as the graph in Figure 3.1 below illustrates, the volume of certificated coffee that we have sold has increased significantly since 2009.

Demand for certificated coffee is growing and is projected to more than double over the next 3 years. As a participant in such schemes, Louis Dreyfus Commodities recognizes the important concerns that motivate them and we want to be ahead of the market in increasing the amount of certificated coffee we buy in order to support their efforts. We have therefore set ourselves targets to purchase 12.5% of our volume in 2013 from certificated sources, and to be purchasing 22.3% by 2015.

### TOTAL SALES

60kg bags volumes by certificate

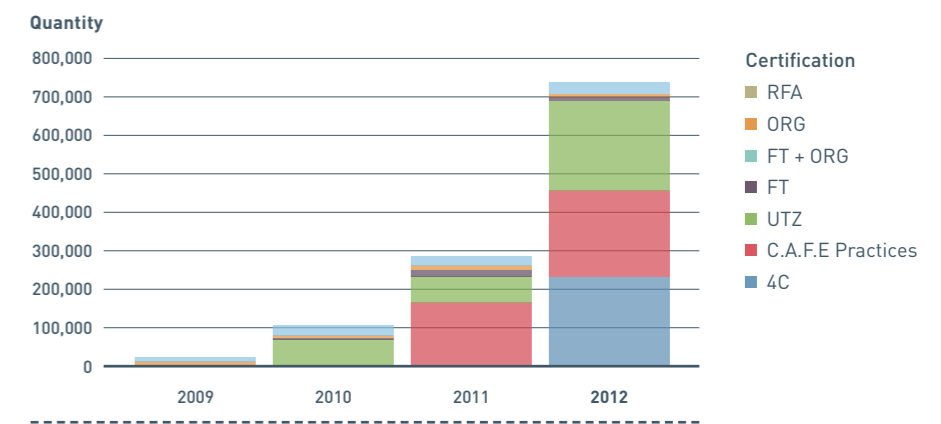


Figure 3.1

“Unofficial figures put world green coffee production at close to 8 million metric tons per year.”

2. International Year of Natural Fibers

3. New Scientist, 2006

# Sustainability Strategy

## Partners continued...

### STAKEHOLDER TESTIMONY

In coming to the decision to produce this report as the next step in our journey to making our business best-in-class sustainable, Louis Dreyfus Commodities was determined to involve stakeholders in the process. At this stage we sought guidance in deciding what our priorities should be as we set out on that journey. We therefore asked key stakeholders for their views on (i) **the main issues and challenges that the food industry faces in the years and decades to come** and; (ii) **the sorts of issues, topics and programs that a company like ours should be engaging in from a sustainability perspective.** This is what 4 of them had to say.

#### WWF



**Dr. Jason Clay, Sr. Vice President, Market Transformation, World Wildlife Fund**

“When it comes to sustainability, the food and agriculture industry has to deal with a variety of challenges that are evolving rapidly. The issues are still about supply and demand, but the conditions have changed. Look at the speed and scope of increased demand. With the industrial revolution, the UK took 155 years to double the per capita GDP in a country of 9 million people. The US took 53 years with 10 million. In recent history, India took 17 years and China took 12 years to achieve the same, each with about a billion people. No one has predicted how rising incomes increase consumption.

“It is not as if the planet is stable. In 2012, four of the eight largest exporters of cereals and oilseeds experienced drought linked to climate change. On a finite and warming planet where people have better incomes and consume more (in particular more animal protein), how we manage natural resources and prepare for weather variability will determine our success meeting consumer expectations. While India

and China are the latest economies to grow so rapidly, they will certainly not be the last. In fact, there is no end in sight for global consumption. This requires supply chain management to be built on relationships with suppliers rather than transactional purchases.

“An unintended consequence of the expansion of our current food production system is that supply chains contain increasing amounts of illegal product. It is no longer sufficient that a product is exported legally; it also needs to be produced legally. Illegal products present legal and reputational risks. Traceability will be key to addressing these risks. It will also help those along the supply chain understand the impacts production has on the environment. Such an effort has numerous implications for commodity traders, considering commodities were created to create efficiency by stripping out all information about who produced a product, how it was produced, where or with what impacts.

“In an uncertain world, forward-looking companies will want long-term contracts with suppliers to lock in access to finite resources. Long-term contracts with producers in different regions are part of a strategy to anticipate the impacts of weather variability and supply uncertainty.

“Sustainability is a precompetitive issue. We must work together to manage the planet’s resources while providing for the improved standards of living that are long overdue in many parts of our world.”

#### NESTLÉ

**Marco Goncalves, Global Head of Procurement, Nestlé**

“‘How the food is being made?’ and ‘where does it come from?’ are the two biggest concerns of Nestlé consumers, usually in developed countries. In many other areas of the world, food security is still what matters: Affordable and safe food is a pre-requisite in these locations – good quality has to be a given for any of these food products. Safe drinking water and sustainability in water resource management come as the third and one of the biggest challenges of agriculture and communities living from agriculture. As the biggest nutrition, health and wellness company Nestlé, together with its suppliers, has a role to play in tackling these challenges globally and locally.

“Nestlé expects Louis Dreyfus Commodities to become: stronger in tracing back ingredients to the source; more reactive in regards to Nestlé responsible sourcing requirements and; more involved with smallholders and farming communities regarding sustainability practices.”

### SMALLHOLDER COFFEE FARMERS, SOUTH-EAST ASIA



#### Indonesia

We gathered the views of five farmers from across the Tanggamus and West Lampung regencies of Sumatra, Indonesia. They explained that their primary concern is to improve their income and livelihood. At the moment yield-size is the priority – as Fikri from Tanggamus put it, “more weight means more cash.” They see learning more about good agricultural practice as central to this – Sunarto said he really wanted to understand “proper, good agricultural practice simultaneously with



**Mr Sunarto, coffee farmer, Tanggamus, Sumatra Indonesia**

understanding quality parameters...that is the key to improve living conditions.” However, they don’t have access to this without our assistance so he asked for “regular farm visits and on-site training” from Louis Dreyfus Commodities to learn what they need to do to produce what the coffee buyers want.

#### Vietnam

We work with a number of farmers in the Krong No district of Dak Nong province, Vietnam. The five we interviewed were unanimous on the main disadvantages they face – unpredictable and more extreme weather, especially hotter, drier conditions causing drought; price volatility and; the ever increasing cost of inputs such as fuel.

Until they were offered a chance to participate in our sustainable farming training and certification program, several had not heard of such schemes. Others said take-up was not as high as it could be since many farmers did not understand what benefits they could gain. The main concern was that they wanted clear financial benefits to come from dealing with us and going through our program:

“I have participated in training sessions and have a lot to learn and apply in my garden. Apart from the

certification program of Louis Dreyfus Commodities (4C, UTZ) I do not know about any other certification programs.”

However, the market – ultimately the consumer – at this stage still does not offer a premium sufficient to satisfy the farmers’ expectations in terms of financial return on their produce after engaging in certification schemes:



**Mr Pham Van Dap, coffee farmer, Daknong Province, Vietnam**

“Also, up till now I and the farmers participating in the sustainability program have not received any benefits in terms of economy, namely selling coffee and not yet receiving bonus.” Mr Pham Van Dap.

Mr Vu Doc Tho, of the same commune, echoed those thoughts but added that the “benefits of the program for farmers and their gardens would clearly show up from the second year.”

#### CITI



**Courtney Lowrance, Director, Environmental and Social Risk Management and Val Smith, Director, Corporate Sustainability, Citi**

“Louis Dreyfus Commodities asked Citi, as its banking partner, to advise on two questions: What should its sustainability report contain, and what future sustainability challenges do we see for its sector? As a financial services institution, Citi believes in using metrics to drive performance, including for deriving business value from effective risk management and innovation.

“Data is at the core of a strong report. Material information includes data on:

- ▶ Resource efficiency (land, water, energy and soil loss)
- ▶ Sustainable supply chain management, including operational efficiency
- ▶ Participation in external initiatives, including sustainability roundtables and third-party certifications such as the Sustainable Agriculture Network

“This data is important for evaluating sustainability program impacts and also can affect risk profile and financial performance.

“Three key challenges that we see for Louis Dreyfus Commodities are risks associated with increased land pressure and conflict, climate change, and food security and safety. Regarding land pressure, the challenge for this sector will be balancing diverse and competing demands on land as we approach a planet of nine billion people.

“Climate change impacts also present challenges, and we look forward to learning how Louis Dreyfus Commodities is addressing risks associated with changing weather patterns and water scarcity. On food

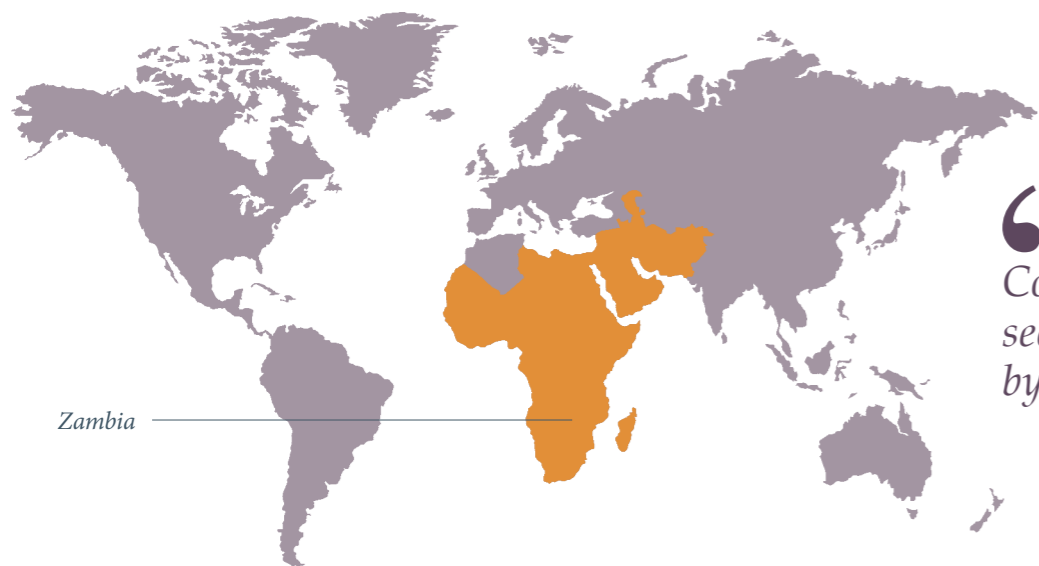
security and safety, Citi encourages Louis Dreyfus Commodities to engage with its stakeholders in the debate around the technologization and genetic modification of food to minimize unforeseen risk in its supply chains.

“These challenges also present an opportunity. If Louis Dreyfus Commodities is able to apply its expertise in product development and innovation to global challenges like land and food security, it can significantly contribute to sustainable development – a win-win for the planet and for Louis Dreyfus Commodities’ business.

“We commend Louis Dreyfus Commodities for building stakeholder dialogue into its strategy to stay on top of trends and stakeholder perspectives. We know that pressure is coming from all sides to be more sustainable – from customers, civil society, and financial institutions. How Louis Dreyfus Commodities manages that pressure will be critical to its success. This external engagement is also important to its continued innovation and business development.”

# Best Practice Case

## Compaci, Zambia



“Cotton is Zambia’s second largest crop by volume.”

### INTRODUCTION

Louis Dreyfus Commodities has a relationship with a Zambian cotton operation. We observed this best-practice initiative and have been enormously impressed with the approach and what it has achieved. It is therefore something that we seek to learn from and replicate across more of our business sectors.



Choombwa, Mumbwa District, Central Province, Zambia

Cotton is Zambia’s second largest crop by volume. Farmers tend to be smallholders, farming small parcels allocated to them by their local tribal chief. This **Zambian cotton operation** has long been one of the **biggest participants in that market**. It deals with **1 700 distributors** and **164 000 farmers** in the country, putting it in an excellent position to make a significant difference to farmers’ lives and sustainable practices.

Indeed, it is in a position to run the initiative precisely because better yields for farmers mean better business for the operation itself. It aims to convince farmers that adopting better farming practices will improve their livelihoods. This initiative was set up to carry that aim forward.

### THE INITIATIVE

In 2009 the Zambian cotton operation started the **Competitive African Cotton Initiative (COMPACI)** under the aegis of **Cotton made in Africa (CmiA)** in association with the **Bill and Melinda Gates Foundation** and other stakeholders.

At launch, the aim was to **increase revenues for 68 000 cotton farmers** who work with the operation by 34% over 3 cropping seasons, while simultaneously:

- ▶ **Ensuring productivity is increased in an economically, ecologically and socially sustainable manner**
- ▶ Improving management capacity for community-based agricultural services provided to the farmers
- ▶ Setting up a sustainable credit scheme for all farmers
- ▶ Strengthening sustainable operational links between the farmers and cotton ginners, traders and retailers

That **3 year phase** has been **completed with all targets exceeded**. The second phase is now ongoing, aiming to **increase the net income and food security of 100 000 additional farmers by 2015**. It has also added two further focal points: **Empowering female farmers and training farmers in business skills**.

“...increase revenues for 68 000 cotton farmers...”

### IN PRACTICE

At the start of the growing season, the cotton operation provides farmers with bags of cotton planting seed and puts clear instructions on the bags for soil preparation, planting times and other good agricultural practices. The bags are provided on open credit terms – repayment coming in cotton at harvest time. This helps farmers with cash-flow and reduces the risks associated with what has historically been a cash-only business.

The cotton operation also provides further information and education on yield optimization. In the course of the year, it gives farmers fertilizers, pesticides and other inputs on the same credit terms, and trains them so that they can use them safely and appropriately. There are formal training sessions where staff from the business and farmers gather to share information and ideas on things like market developments and best practice. Not only do the staff use this additional opportunity to train farmers on good practice, but farmers who have obtained higher yields through such practices also build up their peers by sharing their own experiences.

### TRADE CENTERS

Farmers had expressed major concerns about the amount of time they have to spend away from farming to get to places where they can buy essential items. The distances involved and the difficulties in local transport can lead to many hours being wasted. In response, a network of trade centers is currently



Myooye, Mumbwa District, Zambia

being set up as part of the initiative – to bring the items farmers need closer to their doorstep. Farmers are presently being consulted on the products they want to see stocked in the centers. The hope is that the time saved will give the farmers more time to dedicate to their work as well as giving them more space to enjoy better quality of life.

### WIDER COMMUNITY

Alongside the farming-specific aspects of the initiative the cotton operation, in partnership with stakeholders and local communities, develops schools (currently nine are being built or planned), wells for clean water and health programs. The latter has involved participating in an HIV/AIDS program which educates, tests and treats people in the communities that work with the business. It is also working with Harvard University on a trial scheme to reduce the incidence of malaria among cotton workers.

“The cotton operation also provides further information and education on yield optimization.”

# Looking Ahead

*It is abundantly clear that all stakeholders in the food value chain face enormous challenges over the coming decades.*

We hope that, in this inaugural report, we have mapped out the path we are looking to take on our part of the journey towards feeding a growing population in our increasingly changing world. In doing so, we are deliberately making our efforts transparent to all stakeholders. If we should have different goals, we want to hear alternatives. We welcome constructive criticism as well as praise to help us steer the right course.

## INCREASING YIELDS

To meet increasing demand we already have programs in place to increase yields in our own production, and we have been sharing that with growers who supply us. Our goal is for this sharing process to become wider and more systematic. We are aiming over the next few years to roll out schemes such as the Zambian cotton program set out in the previous section of this report. Though we want to apply this as widely as possible, as soon as possible, we acknowledge that achieving the

full potential extent of the scheme will necessarily come gradually. Our goal for this year is therefore an achievable, but still ambitious one of scoping out how that can be implemented.

There are aspects of this problem which we would like to act on, but which we struggle to find a way meaningfully to contribute to. Changing consumer eating, purchasing and wastage habits, for example, is an issue we may be able to play a part in but needs to be driven by other institutions. We welcome input on how we can get involved.

## ENCOURAGING FARMERS

This report emphasizes the importance of smallholder farmers but recognizes that more and more people (particularly younger generations) are moving away from this traditional way of life. We have highlighted some of our efforts to make sure that smallholders get the best deal they can. There is, doubtless, more work to be done. That is another reason why we want to roll out the best practice approach from Zambia.

It is also part of the reason why we recognize our obligation to the communities that are touched by our operations. While we think that we have done well in supporting individual projects on the basis of local need, we see that we need to expand and focus our approach. Again, we are at the beginning of a journey and so our immediate goals are to build up our information and strategy on this front.

## GENERATING EFFICIENCIES

Louis Dreyfus Commodities is part of an industry which generates its share of the world's greenhouse gas emissions. It is also an industry which faces challenges of operational efficiency in getting enough food to everyone at a price they can afford.

We have been driving for efficiency for some time on an issue-by-issue, location-by-location basis. That is changing, and within a few years we intend to have a set of reduction goals which our stakeholders can hold us accountable for meeting. These kinds of efficiency efforts may only get us so far. If infrastructure and government policies make it impossible to transport food to the right places, for example, then that will limit the effectiveness of our work. Again, we invite our stakeholders to help us see where we might move such issues forward.

## PROTECTING PEOPLE

Louis Dreyfus Commodities has to think about both the people it works with and the consumers at the end of the value chain. We can and we will keep working to ensure that our people are safe and happy. We have a role to play in creating transparency in the bid to eliminate illegal and unsafe products from the supply chain. We are also working with other stakeholders to build up our use of certified products that provide guarantees of sustainable sourcing.

However, we are grappling with how we can leverage those efforts across the parts of the value chain we do not control. How can we make sure that the rest of the chain is transparent? What can we do to encourage others to adopt good practices and seek certification? Through working with partners such as Bonsucro and by listening to the response this report stimulates, we hope to learn and to teach as we progress along the way to more sustainable business.

## COMMENTS

As our CEO explained at the outset, this report tries as much to identify where we can improve as to show where we already succeed. This evolution is taking place in a context where no one has all the answers to a vast array of complex questions. We will continue to work proactively with all our stakeholders to ensure that we determine together the optimal path to take. Since it is the next step in a journey, any comments or feedback on this report will be gratefully received.

### Please send any feedback to:

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