# PARTNERING FOR PROSPERITY

**NETAFIM SUSTAINABILITY REPORT 2015** 





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# **MESSAGE FROM OUR CEO**



Ran Maidan President & Chief Executive Officer Netafim

"Netafim supports the UN Sustainable Development Goals. Smart irrigation solutions play a critical role in achieving food security, promoting sustainable agriculture and the sustainable management of water and land." Sustainability has been a part of Netafim's essence since our establishment. Founded in 1965 by farmers in Israel's northern Negev desert, we introduced drip irrigation technology to help farmers overcome severe water shortages in the region.

Our connection to sustainability was again evident when we unveiled Netafim's 2020 Sustainability Strategy in our Sustainability Report in 2013. We demonstrated that drip is at the nexus of three global sustainability challenges – food security, water conservation and arable land optimization. Recognizing drip's unique ability to increase crop yields with fewer resources, we defined our goal to make drip the most accessible and preferred solution for irrigated crops worldwide.

As the global leader in smart irrigation, we are committed to driving mass adoption of smart irrigation solutions to fight scarcity of food, water and land. Offering the most advanced solutions for all crop types and for farmers of all sizes – from large-scale agri producers to smallholders – we are helping the world grow more with less. In September 2015, the UN adopted a set of Sustainable Development Goals (SDGs) as part of its 2030 Agenda for Sustainable Development to end poverty, fight inequality and injustice, and tackle climate change. A review of the 17 SDGs shows that over half of these goals are connected to our work in advancing sustainable agricultural practices worldwide.

In this report, we show several examples of our Sustainability Strategy in action, and demonstrate how these actions are aligned with the UN's SDGs. While the challenges remain great, we are confident that our efforts, together with our many partners across the globe, will help make the world a better, more sustainable place.

Thank you for your interest in this report, and I welcome your feedback.

WITH THE PLANET'S POPULATION EXPECTED TO SURPASS 9 BILLION BY 2050, FOOD SCARCITY IS ONE OF OUR MAJOR GLOBAL CHALLENGES. AS THE WORLD LEADER IN SMART IRRIGATION, NETAFIM IS DRIVING MASS ADOPTION OF INNOVATIVE, SIMPLE AND RELIABLE SOLUTIONS FOR ALL CROPS AND GROWERS. TOGETHER WITH OUR PARTNERS FOR SUCCESS, WE ARE COMMITTED TO ENSURING FOOD SECURITY FOR A SUSTAINABLE FUTURE.

# **REPORT HIGHLIGHTS**



## **SUSTAINABILITY ACHIEVEMENTS 2015**

ACTION	EDUCATION	OUR BACKBONE
<b>25%</b> water savings and <b>25%</b> reduction in greenhouse gas emissions for alfalfa growers in the US using drip irrigation	More than <b>100,000</b> farmers in 2015 trained in drip irrigation in over <b>2,500</b> events organized by Netafim around the world	<b>99%</b> of employees received a performance evaluation in 2015
<b>Zero</b> crop damage for a grower in Denmark using our new irrigation system that combats extremely cold weather	Netafim was honored to be <b>1 of 10</b> companies invited to the launch of the Sustainable Development Goals at the General Assembly of the UN in 2015	<b>300</b> employees in South America completed e-learning courses in 2015
<b>20%</b> increase in income for sweet potato growers in Israel using drip irrigation	<b>5,000</b> farmers received training in a USAID program featuring Netafim's drip irrigation technology in Kenya	Average employee engagement score of <b>4</b> (out of 5) based on a 2015 survey
<b>60%</b> less water and <b>20%</b> increase in yield for rice farmers in India using drip irrigation	Monetary and product donations of <b>\$367,200</b> and <b>12,243</b> volunteering hours by our employees in 2015	<b>37%</b> reduction in injury rate and <b>27%</b> reduction in lost day rate in 2015
<b>23,000</b> farmers in India received a total of <b>\$33</b> million in Ioans from NAFA (Netafim India partner) to fund drip irrigation for 3 years	More than <b>8,000</b> farmers trained in China in 2014-2015	<b>2%</b> reduction in electricity use per ton of raw material at our sites in 2015

## **SUSTAINABILITY DASHBOARD 2015**

Netafim Performance Summary														
EMPLOYEES BY GENDER AND	04	UNIT	20	013	2	2014 2015		CHANGE (	%) IN 2015					
CONTRACT	G4		MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE				
Total employees by gender	G4-10	Year-end head count	N/A	N/A	3,088	641	2,985	519	-3%	-19%				
Total employees by year	G4-10	Total	3,279		3,279		3,279		3,	729	З,	504	-6	5%
Permanent contract employees	G4-10	Percentage	N/A	N/A	70%	14%	72%	13%	3%	-10%				
Temporary contract employees	G4-10	Percentage	N/A	N/A	13%	3%	13%	2%	4%	-36%				
NEW HIRES AND TURNOVER	G4	UNIT	20	013	2	014	2	015	CHANGE (	%) IN 2015				
Employee new hires	G4-LA1	Head count	4	68	6	25	8	860	38	3%				
Employee leavers	G4-LA1	Head count	5	26	٩	J/A	8	859	Ν	/A				
Employee turnover	G4-LA1	% year-end leavers	16%		٩	J/A	2	5%	Ν	/A				
HEALTH AND SAFETY	G4	UNIT	2013		2013		2014		2	015	CHANGE (	%) IN 2015		
Number of injuries	G4-LA6	Injuries	6	64		39	ć	33	-1	5%				
Number of lost days due to injury	G4-LA6	Days	863		422		4	10	-3	3%				
Number of fatalities	G4-LA6	Number		0		0		0	:	=				
EMPLOYEE DEVELOPMENT	G4	UNIT	20	013	2014		2015		CHANGE (	%) IN 2015				
Employee performance reviews	G4-LA11	% of employees	88	8%	9	4%	9	9%	5	%				
COMMUNITY INVESTMENT	G4	UNIT	2013		2014 2015		015	CHANGE (	%) IN 2015					
Total value of community investment	G4-SO1	US dollars	Ν	N/A 119,756		367	7,203	20	7%					
Employee volunteers	G4-SO1	Head count	7	700		'52	7	68	2	%				
Volunteered hours	G4-SO1	Hours	7,	7,700		,724	12	,243	14	1%				
ENVIRONMENTAL PERFORMANCE	G4	UNIT	20	013	2	014	2	015	CHANGE (	%) IN 2015				
Water withdrawal	G4-EN8	m <sup>3</sup>	144	1,528	120	0,107	124	1,535	4	%				
Electricity consumption	G4-EN5	GJ/ton of raw material	3.	.10	3	.21	3	.14	-2	.%				
GHG emissions (Scope 2)	G4-EN18	Metric tons CO2e/ton of raw material	0.	.53	0	.52	0	.53	2	%				
Waste to recycling	G4-EN23	Metric tons	1,4	445	1,	286	1,	379	7	%				
Waste to landfill	G4-EN23	Metric tons	5	62	6	634	9	34	47	7%				
Total waste	G4-EN23	Metric tons	2,0	007	1,	920	2,	313	20	)%				
Percentage of waste recycled	G4-EN23	Percentage	72	2%	6	7%	6	0%	-1	1%				

# **NETAFIM AT A GLANCE**

Netafim is the global leader in smart irrigation solutions for a sustainable future. Our solutions advance sustainable productivity by enabling growers to cost efficiently produce better and higher yields, while using fewer of the world's limited resources – water, land and energy. Delivering state-of-the-art technology, deep agronomic expertise and capacity-building training, we are dedicated to helping our customers achieve their goals by growing more with less.



Headquarters in Tel Aviv, Israel

## **SMART IRRIGATION SOLUTIONS**

#### AGRICULTURE

We offer drip irrigation solutions that are suitable for a broad range of crops, and support growers from the planning phase to crop management and harvest.

#### LANDSCAPE

Our products incorporate advanced water management practices and technologies for enhanced landscape irrigation, providing the basis for water conservation and recycling solutions while improving city and residential landscape planning.

#### GREENHOUSES

Our greenhouse specialists offer comprehensive solutions, from planning and greenhouse construction to after-sale agronomic support.

#### MINING

Our drip irrigation solutions for the extractive industries ensure uniform coverage, minimal clogging and optimal metal recovery in leaching processes for mining applications.

## **OUR BACKBONE**

#### **OUR PURPOSE**

Helping the world grow more with less

#### **OUR VISION**

As the world's leading irrigation company, we will drive mass adoption of smart irrigation solutions to fight scarcity of food, water and land.

#### **OUR MISSION**

Together with our partners, we will revolutionize irrigation globally for a sustainable future. We will drive mass adoption of innovative, simple and reliable drip irrigation solutions. Our teams around the world will provide customers with the best agronomic and technical support to ensure outstanding results and peace of mind.

#### **OUR VALUES**

- Make it Happen
- Dare
- Create an Impact
- Partner for Success



## "Let There Be Water"



We were delighted and honored when author Seth M. Siegel published his book in 2015, LetThere Be Water: Israel's Solution for a Water-Starved World (2015, St. Martin'sPress).

Let There Be Water illustrates how Israel can serve as a model to resolve water scarcity for countries everywhere. Mr. Siegel shares Netafim's history and the critical role we have played in solving Israel's water problem.

# **OUR 2020 SUSTAINABILITY STRATEGY**

Our 2020 Sustainability Strategy, published in 2013, was the result of considerable feedback from internal and external stakeholders. Our Executive Management Team and Sustainability Steering Team analyzed the interests and issues raised in dialogue and consultation with our stakeholders and prioritized them, while assessing their impact on our business in the coming years. During the past two years, we have continued our interaction with stakeholders in many ways, and reconfirmed seven priority sustainability impacts. In line with feedback received, we have adapted one impact area relating to material use and recycling, and have broadened it to cover supply chain efficiency and overall environmental impacts in our supply chain. Our material impacts continue to shape our sustainability strategy, which we have slightly revised to provide greater clarity as we develop strategic objective targets in the coming years.

## NETAFIM'S MATERIAL SUSTAINABILITY IMPACTS

- Mass adoption of drip irrigation
- Sustainable productivity
- Enhancing customer capabilities
- Supporting sustainable agriculture policy
- Lean supply chain
- Water conservation
- Employee performance

Our 2014-2015 Sustainability Report discloses our performance relating to these material impacts. You will find the alignment of each impact to the Global Reporting Initiative G4 Standard Content Index at the end of this report, together with cross-references for the UN Global Compact and the CEO Water Mandate reporting requirements.





## THREE PILLARS OF OUR SUSTAINABILITY STRATEGY FOR PROSPERITY

Make smart irrigation solutions the most accessible and preferred choice for irrigated crops worldwide

#### ACTION

# Help farmers achieve sustainable livelihoods

#### **TECHNOLOGY AND INNOVATION**

Provide simple and affordable technology to enable mass adoption of smart irrigation for farmers of all sizes, from large-scale agri producers to smallholders

**TARGET:** Continue to develop new products and methods

#### **AGRI-TECH PARTNERSHIPS**

Engage in partnerships to advance technology uptake and to adapt to the needs of local farmers

**TARGET:** Create collaborative opportunities for the development and application of drip irrigation technologies

#### **ADVANCED KNOWLEDGE SHARING**

Increase practical support and technology knowledge sharing for small and large farmers to enable tailored irrigation solutions

**TARGET:** Drive an increase in the percentage of micro irrigation of total irrigated land from 5% to 10% by 2020

#### **EDUCATION**

Increase awareness of the benefits of drip, and increase its access for farmers worldwide

#### **ACCESS AND EDUCATION**

Raise awareness and educate farmers in the use of drip irrigation to help them grow more with less

**TARGET:** Hold at least 2,000 annual training events for farmers

#### **PUBLIC SECTOR COLLABORATION**

Maintain active involvement with governments, the UN, and other international organizations and NGOs to advance policy that helps farmers improve their livelihood by using drip irrigation

**TARGET:** Continue our support and activities for promoting the adoption of policies enabling the use of drip irrigation

#### **PRIVATE SECTOR COLLABORATION**

Collaborate with private sector companies, NGOs and the government sector to promote smart irrigation solutions throughout the entire food value chain

**TARGET:** Develop and deepen collaboration with private sector companies to implement new irrigation initiatives in their supply chains

#### **OUR BACKBONE**

Conduct our business ethically, responsibly and transparently

#### **EMPLOYEE ENGAGEMENT**

Develop our employees, improve their wellbeing, and engage them in our sustainability goals and ethical approach

**TARGET:** Maintain an employee engagement score of 4 or above

#### **LEAN SUPPLY CHAIN**

Reduce our direct environmental impacts and contribute to global efforts to mitigate climate change

#### TARGET:

- Reduce energy consumption by 10% by 2020
- Increase % of recycled waste by 7% by 2020

#### **PRODUCT DEVELOPMENT FOR CLIMATE CHANGE**

Focus product development priorities on smart irrigation solutions for crops that have the biggest impact on climate change

**TARGET:** Introduce new initiatives for the top three crops by 2020

## THE UN 2030 SUSTAINABLE DEVELOPMENT GOALS (SDGs)

In 2015, the UN adopted a new framework of 17 global goals supported by 169 targets, as an action plan for the achievement of sustainable development for people, planet and prosperity. These goals are now being developed and formulated into national plans (and in some cases, legislation) in all UN member countries.

Netafim's business and approach have always been aligned with broad sustainable development objectives. As such, we took the opportunity to specifically align our

strategy and aspirations with the SDGs upon their introduction so that our stakeholders can be clear about how Netafim supports this important global agenda.

After reviewing our activities and strategy in the context of the SDGs, we identified nine (of the 17) goals that we most directly support through our business activities, and where we can continue to make an even stronger impact over the coming years. These goals are:



In our 2014-2015 Sustainability Report, we reference these SDGs, showing how our business practices specifically align with each goal.

# **ACTION FOR PROSPERITY**

The first pillar in our sustainability strategy is about action – developing technology, forming partnerships to facilitate the use of technology, and sharing our expertise and knowledge with our partners and customers to help farmers achieve sustainable livelihoods through climate-smart agriculture. By continuously investing in innovation and collaboration across our trusted network, our actions will help drive prosperity for individuals and society as a whole.

In this section, we offer examples of our actions over the past two years, as we build on Netafim's 50-year legacy to help farmers achieve sustainable livelihoods.

ACTION	TECHNOLOGY AND INNOVATION	AGRI-TECH PARTNERSHIPS	ADVANCED KNOWLEDGE SHARING
STRATEGIC GOAL	Provide simple and affordable technology to enable mass adoption of smart irrigation for farmers of all sizes, from large-scale agri producers to smallholders	Engage in partnerships to advance technology uptake and to adapt to the needs of local farmers	Increase practical support and technology knowledge sharing for small and large farmers to enable tailored irrigation solutions
MEASURE	MEASURE Development of new products and methods		Percentage of micro irrigation of total irrigated land
TARGET	Continue to develop new products and methods	Ongoing collaboration	Increase from 5% to 10% by 2020
MATERIAL TOPIC	Sustainable productivity	Mass adoption of drip irrigation	Enhancing customer capabilities
GRI MATERIAL ASPECT	Indirect economic impacts	Indirect economic impacts	Product and service labelling
<b>GRI G4 PERFORMANCE INDICATOR</b> G4-EC8		G4-EC8	G4-PR5

RELATED SUSTAINABLE DEVELOPMENT GOALS:



## **PROVIDING SIMPLE AND AFFORDABLE TECHNOLOGY MAKES DRIP IRRIGATION MORE ACCESSIBLE**

## DEVELOPING BREAKTHROUGH TECHNOLOGY FOR CLIMATE-SMART ALFALFA

In 2014, the team at Sustainable Conservation, a California non-profit organization that advances the stewardship of natural resources, presented Netafim with a challenge: How can dairy farmers manage their resources more efficiently to meet increasingly stringent wastewater treatment regulations? As the global leader in irrigation technology innovation for agriculture, we were happy to accept this challenge. And our efforts led to greater water savings, greater GHG emission reductions, greater yields, and greater overall prosperity.

Sustainable Conservation uses innovative strategies that actively engage businesses and private landowners in conservation. Given the significant drought in California, the importance of alfalfa for dairy farmers, and the low penetration of subsurface drip irrigation (SDI) in the state (less than 2% of all irrigated land), the opportunity for us was clear. Our solution was to create a new fertigation process using dairy wastewater (i.e. liquid manure) that is high in nutrients and and has a positive impact on the health of the groundwater supply.

To validate our new solution, we worked with a long-time customer, Mike De Jager, the owner of California's Corona Farms and De Jager North. The farms are part of the De Jager Farms corporation, covering about 8,000 hectares with a regular feed requirement for over 2,500 dairy cows. At Corona and De Jager North, silage corn and winter wheat forage are cultivated across 800 hectares. In three 16-hectare field trials, we compared irrigation by flooding (traditional approach), SDI with synthetic fertilizers, and SDI with effluent wastewater. The results to date show

water savings of around 25% compared to flood irrigation, as well as significant fertilizer savings. Other benefits include:

- The SDI system has a positive impact on the health of the groundwater supply by reducing nitrate leaching.
- The system requires less energy as farmers need to pump less groundwater for irrigation.
- GHG emissions from the field irrigated by wastewater were 25% less than the field that was flood irrigated.
- The system's life cycle can be extended by several years for farmers with access to clear groundwater.

### Alfalfa fast facts

- Alfalfa is the 4<sup>th</sup> most important economic crop in the US
- Alfalfa accounts for over 20% of California's agriculture revenue
- 6 millions tons of alfalfa hay are annually produced in California alone across 1 million acres; less than 2% of the land is drip irrigated
- Alfalfa consumes about 16% of all agriculture water in California
- 60% of the US alfalfa production is for dairy farmers' supplying animal feed

# Precisely blending dairy wastewater and freshwater

Our innovative solution for Californian dairy farmers is an SDI system using advanced proprietary technology that precisely blends dairy wastewater with freshwater by monitoring the electrical conductivity in the water as it passes a sensor.

As water conductivity changes, real-time adjustments to the blending valves are made to keep the fertilizer mixture at a constant state as the alfalfa roots are irrigated. "We approached Netafim with the idea that drip irrigation could be used as a production tool to manage some of the regulatory issues that dairy farmers come up against in dealing with their wastewater. We are confident that we are well on our way to removing a major roadblock to the adoption of subsurface drip irrigation, by demonstrating that with the right technology, SDI is a very efficient method for applying nutrient-rich water to forage crops."

John Cardoza, Project Manager, Sustainable Conservation



## RESEARCH SHOWS THAT SDI DELIVERS HIGHER ALFALFA YIELDS

During the past seven years, scientists from the University of California (UC) have been working with growers to examine the potential of subsurface drip irrigation for alfalfa.

Netafim has collaborated with UC by contributing staff resources, materials, funding, and most importantly, expertise. Over the last two years, we have facilitated visits to 18 drip irrigated farms, providing equipment and technical support for field trials.

Working closely with alfalfa farmers, UC researchers have found that almost all growers have reported positive results with subsurface drip irrigation, and that yields are significantly higher than with flood irrigation.

"In the long term, particularly with water-demanding crops such as alfalfa, we have to seek greater efficiency in the future. Drip irrigation is one way to achieve it. It's terrific to work with a company that is interested in the same issues, and is willing to support what we are doing. In my perspective, it's important to make sure that my data is independent and does not promote a particular company, but the principles involved."

Dan Putnam, PhD, CE Forage Specialist, Department of Plant Sciences, University of California, Davis

## PRODUCING MORE CROP WITH LESS WATER AND FEWER RESOURCES

Another alfalfa success story comes from our work with Wegis & Young in Buttonwillow, California.

The farming conglomerate grows alfalfa for several dairies. In 2014, Netafim installed the first phase of an SDI system across 30 hectares, and the results have been very encouraging.

While benefiting from shorter wait times for water to reach the crops' roots, less labor for managing fields, and continuous automation, Wegis & Young has produced more alfalfa with less water and fewer resources.

"For an operation of this size, the benefits of drip irrigation are felt throughout the region, helping dairy farmers prosper, while reducing the impacts of farming."

#### Maureen Nassie, Marketing and Communications Manager, Netafim USA





## PROTECTING CROPS FROM THE COLD

We often use our expertise to develop technology for addressing specific climate conditions. For example, susceptibility to harsh cold spells can destroy certain crops. In addition, severe spring cold that occurs in many parts of the world can damage the newly-sprouted leaves and buds of deciduous crops. Irrigation helps mitigate the effects of cold, as it warms the air around the plant and prevents freezing. The traditional approach, however, has been to use sprinklers that cover the crop, which requires a continuous influx of 30m<sup>3</sup> per hour of water per hectare.

Netafim's new Pulsar<sup>™</sup> system was designed specifically to combat the cold. It is a sprinkler system that operates with great precision, enabling up to 70% water savings versus the full coverage sprinkler method. With Pulsar's unprecedented low flow rate of 8 liters per hour, growers can also avoid an investment in pumps and filters, enabling energy savings as well.

### Keeping a winery frost free

Vester Vedsted's small family-run winery in Ribe, Denmark, installed Netafim's Pulsar irrigation system for 10,000 vines producing red and white wine grapes in the winter of 2015. Three cold events during the following spring were automatically detected by the system. As a result, the vines were protected and virtually no damage was incurred. Other growers in the region suffered between 20-100% yield losses over the same period. Not only that, but we also estimate that the winery saved the equivalent of over 5,500 bathtubs of water (around 900m<sup>3</sup>) during the season, representing about half of its total water requirements.

#### Saving 14 Olympic-sized swimming pools of water

According to our calculations, the hundreds of thousands of Pulsar systems installed worldwide enable growers to save 36,000m<sup>3</sup> of water annually, or the equivalent of 14 Olympic-sized swimming pools.

# SETTING NEW EFFICIENCY STANDARDS WITH NANO-IRRIGATION

Today's most common flow rates for drippers are 1.6-2 liter per hours. However, we have led the market to success with flow rates as low as 0.4 liter per hour – we call it nanoirrigation. Low-flow irrigation has several advantages; it reduces the total cost of the irrigation system, raises agronomic performance through more efficient irrigation and fertigation, and improves yields. Overcoming clogging, especially when inferior water is used, is one of the major challenges in successfully carrying out nano-irrigation. Netafim's drippers, which feature a superior patented water passage and a built-in smart filter, were designed to overcome these clogging challenges. Farmers can now nano-irrigate to achieve better results and improve their livelihood.

"No other company has reached low-flow levels of 0.4-0.8 liters per hour that work well. To continue providing the market's lowest flow rates while maintaining all other product capabilities, we focus on designing new drippers that can work with low quality water, as well as technologies to address water filtration and treatment issues. We do this by using in-house knowledge and expertise, or in partnership with other water technology experts."

Lior Doron, Director, New Product Development

#### Measuring the quality of water

Total suspension solids (TSS) measures water quality; a high TSS rate represents low-quality water. Today, Netafim's low-flow systems typically process irrigation water with a TSS rate of 150-250 milligrams/liter. In comparison, these systems could only process irrigation water with TSS rates of 80 milligrams/liter or less 30 years ago. In other words, Netafim's current products work effectively with water quality that is 3 times worse than it was 30 years ago.







## COLLABORATING TO DEVELOP NEW RICE IRRIGATION TECHNOLOGIES

The majority of rice around the world is grown by smallholders, and rice is the main source of nutrition in many regions. Drip irrigation helps increase rice yields with fewer resources, while leading to lower land preparation and fertilizer costs, lower greenhouse gas emissions, and less physical labor, making rice farming a more attractive proposition for young farmers.

Netafim's drip technology for rice cultivation is based on the direct sowing of rice in the soil, thereby eliminating the need to prepare and manually plant seedlings in a flooded

### **Testing best rice-growing conditions**

We are conducting collaborative research initiatives for rice irrigation in many countries, including Japan, China, Thailand, Australia, Ukraine and Spain, in order to test the best growing conditions and drip techniques for achieving high-quality yields with fewer resources. field. It also includes adapting specific varieties, weed control and nutrients to support the efficient growth of rice plants, enabling seasonal rotation of crops, providing farmers with a source of year-round income.

In India, we are collaborating with universities and government institutions to test our rice technologies. In Tamil Nadu, 56% of the cropland area is owned by smallholders, who constitute 90% of the state's agricultural workforce, while over 40% of the population is dependent on agriculture. Growing rice more efficiently supports the region's prosperity, especially in light of extreme weather events exacerbated by climate change, such as erratic monsoons, prolonged periods of drought, typhoons and flooding.

In 2015, our planned launch of a large-scale rice irrigation pilot with the Tamil Nadu government and 600 farmers was delayed due to monsoon conditions. Meanwhile, however, three Tamil Nadu farmers have installed a drip system for rice using their own funds. The results so far are a 20% increase in yields and a 60% decrease in water use.

#### **Reducing arsenic content in rice**

In 2015, we expanded research on rice toxicity to seven countries in Europe and the Middle East. One effect of flood irrigation is increased arsenic absorption from the soil by rice plants. Arsenic exposure has been associated with certain cancer risks if ingested in high quantities. Through our research with the University of Pisa in Italy, researchers were able to reduce the arsenic content of drip irrigated rice to almost zero.

# Indian farmer employing drip wins innovation award

M. Parthasarathy, a farmer from Tamil Nadu, was chosen from among 30 nominees to receive the 2015 Innovative Rice Farmer Award granted by the Indian Institute of Rice Research, Hyderabad. The award was granted for the cultivation of rice with drip irrigation and the application of a crop rotation that increased yields by 20% and decreased water usage by 60%.

## NETAFIM INDIA WINS BEST IRRIGATION SOLUTION PROVIDER AWARD



Netafim India was named the Best Irrigation Solution Provider of the Year in the Technology Excellence category at the Brands Academy Business and Service Excellence Awards 2014. Brands Academy is a premier brand management consulting firm in India.



# PRECISION MOBILE DRIP PROVIDES THE LATEST IN INTEGRATED IRRIGATION



Netafim offers growers smart irrigation solutions with easy, low-cost adoption to maximize crop prosperity. In parts of North America, Netafim now offers a drip irrigation solution that integrates with other irrigation methods such as those using a center pivot or linear motion, thereby offering customers the benefits of drip irrigation without having to invest in new equipment.

In 2014, we acquired the patent for precision mobile drip irrigation (PMDI) technology from TL Irrigation. We supply dripperlines for PMDI systems to TL Irrigation, which continues to serve customers in parts of the US. In other regions, we market PMDI directly to farmers using our in-house team of experts. We have created a comprehensive suite of support materials for farmers wanting to transition to PMDI, so that they can continue to use their legacy systems while enjoying the superior results of drip.

#### **Key PMDI advantages**

PMDI is a solution integrating Netafim's industryleading DripNet PC<sup>™</sup> with a center pivot or linear motion irrigation system. The solution's key advantages include:

- Up to 30% water reduction in water use
- Up to 20% yield increase
- Significantly less evaporation and elimination of wind drift
- Moist soil and virtual elimination of soil compaction
- Less clogged and frozen nozzles during winter

## INTRODUCING NEW PRODUCTS THAT BENEFIT OUR CUSTOMERS

Based on our continuous R&D efforts to bring farmers the best and most reliable irrigation solutions, we launched two more new products at the beginning of 2016. Both products offer lower cost of production, lower cost of equipment and infrastructure, and improved use of labor and water resources.





## SUPPORTING SUSTAINABLE FARMING RESEARCH IN AUSTRALIA

We supported a research program conducted by the Australian firm Applied Horticultural Research that proved the benefits of minimum tillage. Tilling, or plowing fields, is both energy intensive and contributes to the high level of greenhouse gases resulting from crop agriculture. The study aimed to assess the potential of sustainable vegetable farming systems with minimum or no tillage reducing greenhouse gas emissions and sequestering carbon in soil. Netafim was commissioned to design the irrigation system and equipment, and to provide support for trials in Victoria, Australia, across four fields planted with iceberg lettuce, spinach and broccoli. The trials' results showed that the combination of minimum tillage and drip irrigation yield the best outcomes with fewer incidents of crop disease and improved soil quality. This is due to the fact that untilled soil allows nutrients to remain intact, and improved soil structure leads to better drainage.

#### **Minimizing soil manipulation**

Minimizing soil manipulation by eliminating plowing, minimum tillage is a soil conservation method that keeps the soil and its nutrients intact, leading to successful crop production.



## ENGAGING IN AGRITECH PARTNERSHIPS TO ADVANCE TECHNOLOGY UPTAKE **RESOLVING IRRIGATION CHALLENGES WITH PARTNERSHIP AND NANOTECHNOLOGY**

Growers using drip irrigation systems around the and safety benefits, while reducing costs for growers. world employ chlorination to clean microorganisms from dripperlines in order to avoid dripper and emitter clogging. However, chlorine is a pollutant that can lead to potential health disorders when handled.

One of the agritech industry's challenges is to reduce the amount of chlorine needed to disinfect drip irrigation components. Netafim is collaborating in a multi-year initiative with academic researchers from Bar-Ilan University's Institute for Nanotechnology and Advanced Materials (BINA) in Israel in a MAGNET program project that is supported and partially funded by the Office of the Chief Scientist in Israel. The idea is to employ innovative nanotechnology to create a form of slowrelease chlorine whereby one measure of chlorine can be effective over a much longer period of time, thereby reducing the total amount of chlorine needed in any given system. This would deliver environmental

Preliminary results from field trials demonstrate that one chlorine measure can last for up to six months (as compared to just one month), and maintain clog-free irrigation systems for this prolonged period.

"Netafim is an ideal partner for this kind of project. They are experts in matters that are very relevant to our technology. And they provide us with the connections and the equipment to conduct field trials, which help us identify issues and challenges that we could not have encountered in the laboratory alone. Netafim is leading the way in irrigation products in terms of performance, costs and quality standards. They help us raise the bar for the industry as a whole."

**Professor Ehud Banin, Institute of Nanotechnology and Advanced Materials, Bar-Ilan University** 

#### **MAGNET** for collaboration

The MAGNET program was sponsored by Israel's Ministry of Economy and Industry several years ago to integrate the efforts of industry and academia in finding solutions for strategic science-based development issues.

#### **Partnership and progress**

The Bar-Ilan University Institute for Nanotechnology and Advanced Materials (BINA) developed a nano-carrier for chlorine. Netafim supported the research by providing equipment, fields for trials, technical support, agronomic knowledge and partial funding. As a result of these efforts, we have created a patented solution for lowering chlorine use in irrigation systems.



## PRECISE IRRIGATION DELIVERS PRECISE RESULTS

FIGARO, an EU funded project, is entering its final year after having achieved exceptional results. The **F**lexible and preclese irri**G**ation pl**A**tform to improve fa**R**m scale water pr**O**ductivity project aims to enable farmers to make real-time decisions to optimize irrigation and crop Nutrigation<sup>TM</sup> in response to environmental conditions.

The platform runs a model every day that simulates crop growth by using actual parameters such as soil moisture and weather station data, as well as mathematical models of seasonal crop behavior and weather forecasts. The FIGARO platform's innovative feature is the use of real-time online data from weather station and other sensors that provide the most precise irrigation guidance available. Trial results to date show that water usage for drip irrigated fields using the platform can drop by 28-29% compared to drip irrigated fields that do not use a decision support system (DSS).

To obtain these results, the FIGARO platform was tested over three years at 12 fields, representing varied crops, climates and soil types, in nine countries across Europe and Israel. During the last six months of the project in 2016, an optimal version of the platform, supported by myriad economic assessments, energy and water use data, and crop yields, will be finalized. In the final stage, we will support a six-month demo season with field visits and tours to present the technology to EU and UN policymakers, agronomists, academics, agritech experts and farmers.

Our leadership in the FIGARO partnership has enabled us to make a real and lasting impact on future agriculture, by advancing the use of technology and traditional agronomy. Opening up the possibility of delivering water savings of up to 30% in irrigated fields, FIGARO is poised to become a major player in precision irrigation.

### **The FIGARO partnership**

FIGARO is a four-year collaborative research project of 17 partners headed by Netafim and supported by the EU. Its objective is to develop a costeffective precision irrigation management platform, enabling a significant reduction in the use of freshwater for agriculture in Europe. The platform will use Netafim's crop management technology system, uManage<sup>™</sup>, which allows farmers to control crops with field-based sensors that transmit real-time data from the field. **For more information: figaro-irrigation.net.** 

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## FINANCING FARMERS IN INDIA

One of the ways we advance the uptake of irrigation technology in India is by increasing access to financial resources in an innovative partnership that helps smallholders achieve prosperity. In 2013, we established the Netafim Agricultural Financing Agency (NAFA). NAFA is a non-banking financial company (NBFC) that is majority-owned by Netafim (51%) with two partners – Atmaram Properties, an Indian real estate group, and Granite Hill India Opportunities Fund, a private equity fund – that add financial experience and knowledge to the group. A strategic partner of Netafim India, NAFA provides fast financing solutions to new smallholder customers who otherwise could not afford drip irrigation, and cannot secure loans or financing support by other means.

## NAFA'S GROWING IMPACT

NAFA now serves 8 states in India
Since 2013, 23,000 farmers have benefited from loans totaling
\$33 million that have enabled the installation of drip irrigation across
22,000 hectares

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# SHARING KNOWLEDGE AROUND THE WORLD TO SUPPORT OUR CUSTOMERS DRIP IRRIGATING SWEET POTATOES IN ISRAEL

Over the past five years, Netafim Israel has invested in more than 20 field trials across Israel, including in the Negev Desert, involving drip irrigation of sweet potatoes. In most of these trials, yields increased by up to 20%, while in some trials, the growing phase was reduced by several weeks, as was water use by up to 32%. Typically, sweet potatoes have been irrigated only with non-saline fresh water or reclaimed water. Drip irrigation enables the use of saline water at a much lower cost.

Sweet potatoes are grown commercially in Israel by 15 large growers for the local market and for export. As the crop's cost effectiveness improves through irrigation, Israeli farmers are experiencing greater prosperity, sometimes increasing their income by over \$40,000 per 100 hectares.

## **INCREASING YIELDS AND WATER SAVINGS**

Field trials conducted over the past five years in several locations demonstrate the advantages of drip for irrigating sweet potatoes.



8-32% water savings

**%** fewer weeding days

This leads to substantial financial savings for growers and about a

20% increase in income



## DELIVERING BETTER BEETS IN SERBIA

We conducted a drip irrigation trial on beetroot in 2013 in Becej, Serbia, which led to positive results. The average weight of each root was 1.26kg with drip compared to 0.83kg for rain-fed beet (a 39% increase), while the extracted sugar yield rose by 34%. The EU is the world's leading producer of beet sugar, with 50% of all global production. In Serbia, sugar beet is mainly rain fed, but changing climatic conditions affecting rain volumes may jeopardize this crop. Drip irrigation can come to the rescue.

## OFFERING SYSTEM MAINTENANCE GUIDANCE IN SPAIN

Around the world, we provide significant technical support for customers so that they can grow more with less. One example is in Spain, where we regularly visit and offer guidance and advice for our long-time customer, Royal S.A.T, a major Spanish fruit grower. In 2015, we gathered all the technical managers in the Royal S.A.T group together with our water quality experts for a day-long seminar on system maintenance.

## ENHANCING LETTUCE PRODUCTION IN SPAIN

Spain's Primaflor, one of the country's largest agricultural producers, has been a major customer of Netafim for 20 years. The company delivers fresh, ready-to-eat vegetables, including different forms of leaf vegetables, such as iceberg lettuce, from over 6,000 hectares that are primarily irrigated by our thin-walled dripperlines or by our low-flow compensated dripper, DripNet PC<sup>™</sup>. Our low-flow drippers led not only to greater water savings and efficiency, but also to more uniform yields, helping Primaflor's lettuce conform to high standards for agri-produce. Primaflor has been showcased in the Europe Flagship Farms Program for its efficient and sustainable lettuce production.

#### **Keeping Spain sustainable**

Spain is one of the most important agricultural markets in Europe and a major global food supplier. Spain's farmers support the daily supply of food and nutrition for 160 million people, including 80 million tourists, as well as crops exported worldwide.

With almost 25% of crops in Spain supported by Netafim drip irrigation systems, we substantially contribute to the development and expansion of Spanish agriculture and food security in Europe and beyond. In 2012, we established our own production unit in Spain to meet the irrigation needs of Spain and North Africa.





## HELPING GROWERS IN INDIA

We are often engaged in supporting transformational initiatives that change the landscape of farming in entire regions, and significantly improve the local economy and quality of life. One such current project is the Ramthal Community Drip irrigation Project, an initiative advanced by the Water Resources Department of Karnataka, a state in the southwestern region of India. Netafim India is installing drip irrigation systems across 11,700 hectares that are expected to be completed in 2016, slightly later than planned due to extensive drought in the region in 2015. The systems are fully automated with pre-set scheduling to facilitate farmers' usage and management. In addition, we are providing farmers with a full crop management package, including training for cultivating the most commercially profitable crops and making the most of land and equipment. We also help farmers gain access to seed and fertilizers, as well as to stable markets for selling their crops.

### **Transforming Karnataka farming**

Karnataka's community irrigation program is the largest of its kind in Asia, covering 50 villages in the area and impacting 15,000 farmers. Karnataka suffers from drought during its dry season, when land irrigated by traditional canal irrigation systems lies fallow. By using drip irrigation, the initiative has been able to double the land area originally planned due to enhanced water use efficiency resulting from drip irrigation. The project's future success will be a turning point in advancing prosperity for the region and a model for reapplication in several other areas of India.



## DELIVERING MEGA-AGRICULTURE IN PERU

One of our exciting challenges has been contributing to the development of agriculture in Peru. An example is our development of smart irrigation solutions based on pivot technology for a mega sugarcane initiative on virgin land for Grupo Gloria. We provided the customer with a comprehensive turnkey irrigation and fertigation solution that increased yields while saving resources and leading to local prosperity.

Within one year, we installed 91km of irrigation piping, 90 pivot systems, a 14 kilometer electrical backbone, 13 hydrant units, and an automated irrigation, fertigation and monitoring system. To handle this task, we recruited and trained about 250 local unskilled workers, and trained Grupo Gloria's farming staff in irrigation system operation and best practices for optimum results.

"This initiative in Peru has been one of Netafim's biggest projects in the region. Not only that, but also we adapted to our customer's preference to use pivot irrigation. While we generally prefer subsurface drip irrigation, we respected our customer's requirement and developed a world-class system in record time. We are thrilled that our contribution has enabled Grupo Gloria to advance its ambitious plans, while contributing to the local economy by providing our colleagues in Peru with new skills that will support them well beyond the completion of this project."

Luis Galvez, Marketing Manager, Netafim GBU Peru, Ecuador and Colombia

### Grupo Gloria leading the way in sugarcane

Grupo Gloria is an industrial conglomerate of Peruvian investors with a business presence throughout Peru and several other countries. The group is a major sugar producer in the region. Producing nearly 4,000 tons of sugar and over 700,000 liters of ethanol daily, Grupo Gloria maintains a 40% share of the domestic sugar market and 60% of the country's sugar exports.

In recent years, Grupo Gloria, which invested in 15,400 hectares in the region of Olmos in northern Peru to grow sugarcane for refined sugar and ethanol production, is constructing a large sugar mill to process the harvest. Netafim supported this initiative by designing and installing pivot irrigation for more than 8,000 hectares of virgin land.



## **GROWING ALMONDS IN CALIFORNIA**

Duarte Nursery is a family-owned and operated nursery located near Modesto in the Central Valley of California. Duarte maintains its own vineyards and orchards, and leverages innovative methods, including an on-site lab that tests micro-propagation and tissue culture for developing and growing fruit and nut trees. The nursery installed two almond orchard blocks with drip several years ago, and now is installing drip in older orchards that had been flood irrigated. Productivity of the drip irrigated orchards increased by 40% due to higher yields combined with savings in equipment and machinery as well as fertilizer.

#### **More almonds**

About 13% of California's farmland, or 7.9 million acres, are irrigated almond orchards, with a 2015 harvest of 1.85 billion pounds.

- Almonds use about 3 million acre-feet of water per year, which is 9% of California's agricultural water total. Advanced irrigation practices have helped almond growers improve water efficiency by 33%.
- 70% of almond orchards use micro-irrigation systems, leading to reduced water runoff, direct placement of water in the root zone, and more precise timing and irrigation rates.



"In my old practice using flood irrigation, I added larger amounts of fertilizers. Now with the drip system, I can inject smaller amounts and just spoon-feed the trees throughout the growing season without putting large amounts of nitrates and nitrogen into the soil where the trees may not be able to pick it up. Drip is a wonderful tool to getting the right nutrients to the trees, which allows me to achieve higher productivity faster."

Steve Scheuber, Field Sales Manager, Duarte Nursery, Inc., California

## SUPPORTING ECONOMIC GROWTH IN SENEGAL

We continue to support the development of sustainable sugarcane in Senegal via a multiyear project that contributes to local prosperity in many ways. Our customer, the Senegal Sugar Company (CSS), used drip irrigation to achieve higher yields while minimizing water, nutrients, fertilizers, energy consumption and labor costs. This has enabled the company to continue to grow and advance the social and economic development of the region, thousands of its employees, and many suppliers and partners.

By the end of 2015, 700 hectares of drip irrigation were installed, and the remaining 750 hectares will be completed in 2016.

Since the start of the project, CSS has already seen an impressive increase in yields from 120 tons/hectare to around 200 tons/hectare (66%), alongside a reduction in costs.

2015 was a successful year for CSS. Hundreds of families are thriving due to CSS's operations, and the economic profile in this region is well above the national average.

"The technical support we received – from design and research to in-field support during installation – enabled us to prepare hundreds of hectares in a short time. I believe the development of current and future projects with drip irrigation will be one of the main factors for improving our productivity."

#### Andre Froissard, CEO, Senegal Sugar Company

#### Making more sugar

The Senegal Sugar Company (CSS) is owned by the multinational Mimran Group, and is Senegal's largest private sector employer with 1,400 regular employees and more than 2,000 seasonal employees.

CSS started growing sugarcane over 40 years ago. Producing over 1.3 million tons of sugarcane annually, the company initially adopted drip irrigation technology in 2005 in order to expand production to the region's desert areas. In 2011, Netafim won an initial \$11 million contract with CSS as sole designer and supplier of a comprehensive river-to-plantation drip irrigation solution, including infrastructure, covering 1,450 hectares. Marking its first independently developed end-to-end sugarcane solution, Netafim completed this complex project in just one year.

In 2015, Netafim continued to support CSS with another multi-million-dollar contract for installing additional irrigation systems.



## SAVING FRANCE'S WINE

Grapevine irrigation can harm grape quality due to its impact on soil salinity and crop growth. Historically, irrigation was prohibited in the European Union. However, several member states have lifted the ban in recent years since changing weather patterns and lower rainfall are threatening the future of vines. Our smart irrigation solutions offer great precision to growers, who are slowly becoming convinced of the benefits. This is especially true in France, where an additional threat – US and Australian competition – are encroaching on the traditional market of French wines.

#### **Drip turns around Rhone Valley vineyards**

The Aubert brothers are one of the biggest landowners in France's Rhone Valley, with over 450 hectares of vineyards. Many years of very hot and dry summers lowered their vineyards' performance and wine quality, and threatened their livelihood. As such, the brothers decided a few years ago to irrigate over 80% of their vineyards. With the help of Netafim's drip irrigation solutions, the Aubert's vineyards are flourishing.





## INSTALLING GREENHOUSE PARK IN GEORGIA

Netafim Turkistan, in cooperation with the Bar-Lev Net Group, Netafim's representative in Georgia, recently completed the installation of a comprehensive polyethylene greenhouse project for Stimor Associates, Georgia's leading investment group, as part of a greenhouse park project in Zugdidi, Georgia. The greenhouses are being used to grow tomatoes and cucumbers with soilless technologies for local consumption and for exporting to Russia. The crops are irrigated by an automated drip system. The project started in 2014, and includes the design and installation of four greenhouses covering 15 hectares by 2016.

The park utilizes geothermal water from three wells to heat the greenhouses. Netafim designed a unique energy center solution enabling maximum efficiency of available heated water; hot water from the wells are transported through pipes to one energy center, where automated pumps distribute the water to the greenhouses according to their specific needs. Leveraging the wells is at the heart of the project's business model. The crops can grow in the winter, when the market price for fresh vegetables is at a premium, while energy costs for heating are kept at a minimum, enabling highly profitable operations.

# **EDUCATION FOR PROSPERITY**

The second pillar in our sustainability strategy is about education and collaboration. This involves working at all levels to advance awareness and an understanding of the benefits of drip irrigation, and engaging in extensive sharing of knowledge and expertise with farmers and others throughout the industry.

In this section, we provide examples of our actions over the past few years aimed at increasing awareness of the benefits of, and access to, drip for farmers worldwide.

ACTION	ACCESS AND EDUCATION	PUBLIC SECTOR COLLABORATION	PRIVATE SECTOR COLLABORATION
STRATEGIC GOAL	Raise awareness and educate farmers in the use of drip irrigation to help them grow more with less	Maintain active involvement with governments, the UN, and other international organizations and NGOs to advance policy that helps farmers improve their livelihood by using drip irrigation	Collaborate with private sector companies, NGOs and the government sector to promote smart irrigation solutions throughout the entire food value chain
MEASURE	MEASURE Number of training events conducted globally by Netafim		Ongoing collaboration
TARGET	At least 2,000 training events for farmers per year	Continue our support and activities for promoting the adoption of policies that enable farmers the use of drip irrigation	Develop and deepen collaboration with a range of private sector companies to implement new irrigation initiatives in their supply chains
MATERIAL TOPIC	Sustainable productivity	Supporting sustainable agriculture policy	Mass adoption of drip irrigation
GRI MATERIAL ASPECT	Indirect economic impacts	Indirect economic impacts Public policy	Indirect economic impacts
GRI G4 PERFORMANCE INDICATOR	G4-EC8	G4-EC8 G4-SO6	G4-EC8

RELATED SUSTAINABLE DEVELOPMENT GOALS:



## **RAISING AWARENESS OF DRIP THROUGH FARMER TRAINING AND EDUCATION**

We have made it our mission to raise awareness of the benefits of using drip by annually conducting thousands of education sessions in dozens of countries worldwide. These gatherings not only provide farmers with tips for optimizing their operations by using drip irrigation, but also bring growers from the same region together for networking, knowledge sharing and mutual support. We estimate that through our team of technical experts and agronomists, as well as our extensive global partner network of over 2,500 dealers, we annually reach hundreds of thousands of farmers via thousands of training sessions worldwide.

### Driving mass adoption of drip

One of the most significant ways we can contribute to an increase in global prosperity is to continue to drive mass adoption of drip (MAD). Many of the millions of smallholders worldwide are reluctant to try new approaches to traditional farming practices that have been handed down from generation to generation, and many have still not heard of drip.



## **SELECTED DRIP AWARENESS EVENTS, 2014-2015**



Holding an annual irrigation road show hosted by Regaber, our Spanish distributor for **35** 

years, at 🔓 locations, with up to

**70%** of our local customers in attendance

## CHINA

One-to-three-day technical **1,000** government employees and training seminars for over **1,000** state-supported farmers,

3,280 private and agri-producer 3,870 dealers

## ECUADOR

Training of 630 small-and-large-scale farmers and distributors, of which 150 had no prior knowledge of drip



training sessions and seminars for growers and dealers

## INDIA

Over **430** days of training **900** dealers and their **2,200** meetings for **100,000** farmers, and **50** factory visits **1,000** farmers **64** dealers

## **ACTIVELY SUPPORTING SUSTAINABLE AGRICULTURE POLICY**

## SHAPING THE SDGs

The Sustainable Development Goals (SDGs), ratified by the UN in September 2015, is part of an all-embracing plan to achieve global prosperity and a better future for all through the realization of 17 goals and 169 targets by 2030. Action by all sectors and collaboration within and between sectors are starting to take shape to ensure that progress will be made to achieve this ambitious global agenda. Netafim is fully supportive of global goals, and we have aligned our business and sustainability strategy to nine individual goals where our efforts can make the most difference. But our contributions have gone far beyond adopting this new direction. Through our participation in the UN Global Compact (UNGC) LEAD program, we played an influential role in helping shape the SDGs, attending multiple meetings and conferences where member companies provided guidance in areas of their expertise. We were honored to be one of only 10 private companies invited to the launch of the SDGs at the General Assembly of the UN Sustainable Development Summit in 2015.

## ADVANCING INVESTMENT IN AFRICA'S SMALLHOLDERS

In 2015, Netafim joined 40 leading companies in declaring their commitment to responsible investment in Africa's agriculture industry. We signed a letter of intent to invest in projects promoting drip irrigation for smallholders in Ethiopia and Kenya. This is part of the Grow Africa Partnership that was founded by the African Union (AU), the New Partnership for Africa's Development (NEPAD), and the World Economic Forum in 2011. Grow Africa works to increase private sector investment in agriculture and accelerate the execution

## **CARING FOR CLIMATE**

Caring for Climate is an initiative jointly convened by the United Nations Global Compact, the secretariat of the UN Framework Convention on Climate Change (UNFCCC), and the United Nations Environment Program (UNEP). In 2015, Caring for Climate published a report highlighting the ways in which companies adapt to climate change and impact of investments. Its aim is to enable African countries to realize the potential of agriculture for economic growth and job creation, particularly among farmers, women and youth.

"We are committed to invest and operate in Africa. It is a challenging territory and the wheels are slow to turn, but we have the determination to succeed."

Naty Barak, Chief Sustainability Officer

and address the most pressing challenges to private sector progress. Netafim was showcased in this report with a case study demonstrating how the introduction of new cultivation methods supported increased income for farmers and reduced greenhouse gas emissions from rice cultivation.

# Staying involved in sustainable development

We support the advancement of policy that promotes and facilitates access to tools and practices for sustainable agriculture through our work with local, national and municipal authorities, engagement with global organizations for policy change, and partnerships with NGOs.

We share our knowledge and expertise in water conservation, access to water and agricultural efficiency as part of the global dialogue for advancing sustainable development.

We participate in global conferences on water and food sustainability, and are active in several UN frameworks including the UNGC LEAD program and CEO Water Mandate.

All these platforms allow us to participate in multi-stakeholder projects and working groups, including the Sustainable Agriculture Business Principles Core Advisory Group of the UNGC program.

We are also involved in primary areas of policy advancement relating to water and human rights, corporate water disclosure and engagement, and collective action for water conservation.

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## **COLLABORATING ACROSS SECTORS FOR BETTER AND GREENER AGRICULTURE**

## TURNING MOROCCO GREEN

Netafim is engaged in an ongoing Moroccan government initiative to support sustainable agriculture and to turn the country green. As a key partner in this initiative, we provide farmers with drip irrigation and training to obtain optimal results.

Morocco launched an initial program offering 80-100% subsidies for drip systems in 2010. By 2014, it was apparent that larger farmers were applying for and receiving subsidies, while smallholders were not, mainly due to the complex application process.

Therefore. Morocco launched a second initiative in 2014. Project Collective, that specifically targets smallholders. The program provided full drip systems across 2,000 hectares for 400 farmers irrigating olives, citrus fruits, corn and other crops. By 2015, we had installed drip systems across 16,000 hectares and had engaged over 3,000 local farmers. The main system we provided included an Aries<sup>™</sup> dripper and new manual disc filter, which represented user-friendly equipment for farmers lacking technical knowledge.

#### Subsidizing small and large farms

- 100% subsidy for drip irrigation equipment for smallholder farms of up to 5 hectares
- 80% subsidy for drip irrigation equipment for farms over 5 hectares

## **PROJECT COLLECTIVE**





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tons per hectare with other methods

## SUPPORTING FARMERS IN KENYA

In 2015, we continued collaborating with our local Kenyan distributor in the two-year Financing Drip Irrigation Systems training project. Part of the USAID-funded Feed the Future Partnering for Innovation program, the project provides training for smallholders to improve yields and crop efficiency. Since the start of the program, 5,000 farmers have received training and farmers have purchased our Family Drip System (FDS<sup>™</sup>) kit. Financing for farmers has been secured through local banks, and buyers in Europe are already partnering with Kenyan farmers to procure their produce. With greater earnings, the farmers can pay off their loans and benefit from sustainable crops and a stable income.

#### Feed the Future, Kenya

The two-year project offers smallholders an FDS™ kit and access to micro financing and training by local agronomists who help farmers create optimal growing conditions for local crops. It also empowers African women farmers, since at least half of all participating growers must be women.

"People often thought that one could not get good yields of vegetables on Kenya's coast. But with modern farming like drip irrigation, I can use less water at the right time and the right amount. The drip irrigation system helps me save on labor, since all I need to do is open a water tap for my plants to receive the water and nutrients. My crops are doing great, and I look forward to going to the marketplace soon, since I most definitely expect to attract the best prices."

William Mwendo, kale, tomatoes and eggplant farmer (2-acre plot), Kilifi, Kenya "Drip irrigation systems are game changers for agriculture, particularly with the uncertainty of rainfall that occurs because of climate change. Those farmers who use irrigation technologies are significantly more productive, and can increase their sales three to four times compared to rain-fed agriculture, and use less fertilizer and pest management products. The challenges remain training smallholders in using the technology, and also convincing financial institutions that lending money for drip irrigation is a good risk to take."

**Bob Rabatsky, Director, Feed the Future Partnering for Innovation** 



## SUPPORTING SMALL-SCALE FARMERS IN MACEDONIA

Netafim partnered with the Carana Corporation in the USAID-funded Small Business Expansion project in Macedonia. Launched in 2013, the project supplies small-scale farmers with drip irrigation systems and improved farming protocols, while offering training and knowledge sharing to help them achieve the best possible results. In the initial project pilot, we installed drip systems across 44 hectares owned by 100 smallholders. These plots not only are used for commercial production, but also act as a training center for other regional farmers. In light of the project's positive results over the last two years, the Carana Corporation decided in 2015 to invest in small businesses via the same model. As such, it is now supporting a 3-million-euro investment in a 1,500 hectare drip-irrigation corn field that will help local farmers prosper and contribute to more sustainable corn production in Macedonia.

## **INCREASING CORN YIELDS**

In the summer of 2013, one of the driest on record, drip irrigation led to corn yields of up to

**COMPARED TO** 

tons per hectare with drip

# **BACKBONE FOR PROSPERITY**

The third pillar in our sustainability strategy is about how we operate as a responsible business and good corporate citizen – for our employees, for our communities and for the environment. We continue to keep abreast of opportunities for improving our performance.

In this section, we provide examples of actions over the past years in which we conducted our business ethically, responsibly and transparently, while caring for all our stakeholders and trying to serve them well.

ACTION	EMPLOYEE ENGAGEMENT	LEAN SUPPLY CHAIN	PRODUCT DEVELOPMENT FOR CLIMATE CHANGE
STRATEGIC GOAL	Develop our employees, improve their well-being, and engage them in our sustainability goals and ethical approach	Reduce our direct environmental impacts, and contribute to global efforts to mitigate climate change	Focus product development priorities on smart irrigation solutions for crops that have the biggest impact on climate change
MEASURE	Employee engagement	Energy and waste per ton of raw material	Initiatives for the top 3 crops
TARGET	Maintain score of 4 or above	<ul> <li>Reduce energy consumption by 10% by 2020</li> <li>Increase % of recycled waste by 7% by 2020</li> </ul>	New initiatives for the top 3 crops by 2020
MATERIAL TOPIC	Employee performance	Water conservation Lean supply chain	Sustainable productivity
GRI MATERIAL ASPECT	Employee practices Health and safety Training and education	Energy Emissions Water Effluents and waste	Indirect economic impact
GRI G4 PERFORMANCE INDICATOR	G4-LA1 G4-LA6 G4-LA11	G4-EN5 G4-EN6 G4-EN8 G4-EN18 G4-EN23	G4-EC8



## **OUR EMPLOYEES**

Our employees are the drivers of our success. We rely on their engagement and passion for making the world a better place through our contribution to sustainable agriculture and global prosperity, as well as on their creativity and skills to continue to develop our business. Our aim is to provide a meaningful work environment that empowers employees to be highly effective, motivated and engaged, and to offer fair compensation so that as we prosper as a business, so will they. Spread across 25 countries, our employees are highly motivated to meet the needs of our growing customer base.



**All employees** 

Employees participating in performance evaluation



Note: The above charts relate to Netafim's permanent employees. In addition, we employ up to 1,000 temporary and contract employees at different times.



Employees by region in 2015



## **CREATING OUR NEW BACKBONE TOGETHER**

In 2014, we embarked upon a process to redefine our backbone – the mission, vision and values that define and guide us - in order to refresh our focus and address new challenges and business changes we have experienced in recent years.

The process began with over 200 seniors managers working together to propose a new direction in defining our vision, mission and values. The result was a holistic definition of Netafim's contribution to society – fighting food scarcity by enabling higher yields and more efficient water and land usage via our irrigation solutions.

Then we embarked on an appreciative inquiry process to explore our values through stories shared by employees. Our most senior management participated in an appreciative inquiry workshop to prepare them for the process, and 1,000 employees participated by sharing stories in personal interviews and workshops. We launched a dedicated site for employees in which they could share and respond to stories defining Netafim. The stories were analyzed to identify the most strongly reflected values. Among the 70 values identified, four were selected to guide Netafim forward.

"Defining our backbone has been one of the most illuminating and integrative processes that we have ever undertaken at Netafim. As important as the output – our new vision, mission and values - was, even more significant was the active engagement of so many of our people at Netafim. We have not only refocused our direction and created a new language, but also have embraced the spirit and deepest motivations of our people to make a positive difference in the world through our business."

#### **Ran Maidan, President and CEO**

"The backbone development process reinforced the great pride of our employees in Netafim's brand and their strong belief in our future success."

**Rachel Shaul, Head of Corporate Marketing and External Affairs** 

workshops, **170** personal interviews and a **4-week** intranet competition in which

1,000 employees participated in 20

7 stories were submitted yielding hundres of Likes and Shares 11

## **BRINGING OUR VALUES TO LIFE**

In order to make our vision, mission and values meaningful for every single Netafim employee, we embarked on a global process through which each subsidiary implemented a plan that best fit its local approach and culture. Netafim USA held activities in each quarter of 2015 that were dedicated to one of our four values. Netafim France held outdoor activities reflecting the challenges of each value. Netafim Turkey employees spent a day on a boat in the Mediterranean Sea engaging in activities reflecting our new values. And Netafim India employees participated in activities on Netafim Day at a holiday resort where our values were presented.

"The tangible effects of this deep engagement in embedding our new values are noticeable throughout our organization. In October 2015, we surveyed employees to hear their thoughts about how the values are integrated in the way we do business. Overwhelmingly, the response was positive. This is proof that an inclusive process that takes into account the motivations of employees as well as our mission as a business can be effective in building a new and inspiring organizational culture."

#### Hila Mukevisuis, VP Human Resources

# Award for backbone process

Netafim won the 2015 Excellence in HR Competition in the Strategic Partner category held by the Israeli Society for Human Resource Management, Research and Development for our backbone process.





## ENABLING EFFECTIVE DIALOGUE FOR LEADERS

In 2015 and early 2016, we held a series of experiential workshops in Israel aimed at creating a culture of effective dialogue between managers and employees. Our objective was to make the manager-employee interface more positive and empowering for both managers and employees.

"The effective dialogue culture is important and should be implemented throughout the organization."

Workshop participant, Manager, Netafim

## **DIALOGUE FOR LEADERSHIP**

**90** managers participated in

8 workshops that included a total of

hours of training in leading constructive dialogue and the role of empathy in interaction with employees

# TECHNICAL TRAINING FOR BEST PRODUCT KNOWLEDGE

Netafim Mexico developed an online training platform aimed at utilizing the knowledge of individual experts at Netafim for the benefit of all employees, especially those in sales roles. The platform will help employees achieve their business objectives and accelerate their development within the company. By sharing tools for success, both employees and Netafim succeed.

The training content is designed to manage and share knowledge and know-how across the company. Employees follow the course using an online tutorial, and must pass a test to receive a certificate of completion. This program is now rolling out across Netafim to ensure that all relevant employees gain the same level of knowledge and improve their capabilities accordingly.

#### e-learning platform

- Launched in 2015
- Online e-learning platform
- Available in Portuguese, Spanish and English
- 24 modules covering products, technical aspects of irrigation, agronomy and hydraulics
- Each module takes about 2 hours to complete
- Employees who achieve an "outstanding" score further use their knowledge to train others
- In 2015, 300 employees completed e-learning courses



## ENGAGING OUR EMPLOYEES

Engaging with our employees to understand their sense of belonging at Netafim and their satisfaction with their working environment is critical to our ability to provide employees with what they need to succeed and be happy. In 2015, we again conducted a global employee engagement survey in which 93.3% of our employees participated. Our overall average engagement score was 4.0 (out of a possible 5). Against all benchmarks, this is a strong level of engagement, and we aspire to maintain and even improve this score.

## **REVIEWING PERFORMANCE**

In 2014-2015, we continued the implementation of our Performance Review Process (PRP) across our global operations using a new online platform for PRP data inputs and tracking. The PRP has been adapted to reflect employee performance against Netafim's new organizational framework, including our updated values and leadership competencies, as well as against individual specific objectives and targets. The online platform was rolled out in phases during this two-year period, concluding with Netafim India (managers' level) and Japan in 2015. In 2016-2017, we plan to conclude the process with all of our team worldwide. The value of the online platform is that it encourages consistency in the management of the PRP process across our global organization. In addition, it enables better dialogue between managers and employees across geographical boundaries, improved performance tracking, and better planning of training programs to meet individual and organizational needs.

## LEVERAGING INTERNAL COMMUNICATIONS CHANNELS

We maintain several internal communications channels and platforms to ensure that our employees know what's going on and have the opportunity to get involved. While this is always a work progress, we can always do more.

In 2015, we launched Yammer, an internal social network that also facilitates knowledge sharing and participation in forums on a range of topics. Employees are responding positively; four months after Yammer's launch, 65% of employees (with email accounts) have already signed up.

**Staying connected** 

- Global Leadership Conference (GLC): All business units and country managers meet annually to share practices and align business goals
- Management forum: Global business unit managers convene twice a year
- Roundtables: Meetings with our CEO and other executives

Also, we are in the process of installing new digital screens in all companies to ensure that our news gets to all employees at all of our sites.

In order to increase awareness of sustainability, we launched a special Yammer campaign to celebrate World Water Day in March 2016. We created a Yammer-based Netafim sustainability forum and invited employees to share pictures and stories regarding water in a fun competition. Many employees participated, and overall employee engagement with our sustainability agenda got a significant boost.

"We continue to work on improving the way we engage with our employees, and employ many platforms to communicate and encourage active dialogue within the company. In fact, this was highlighted as an important aspiration for employees in our internal surveys in 2012 and 2015. Apparently, we can never invest too much in communication. It's always valued."

Maya Perry-Mitelpunkt, Global OD



## **KEEPING OUR EMPLOYEES SAFE**

We remain committed to maintaining a safe and healthy work environment, and comply with occupational health and safety regulations and applicable standards across all of our operations. We offer employees annual health checks, and regularly conduct noise, hazardous materials, air quality, and radiation surveys to ensure the safest working environment possible. We provide our employees with comprehensive training in safety procedures both when they join the company and throughout their employment. All Netafim factories track safety performance, review safety incidents and implement corrective action as required. On an ongoing basis, we discuss safety performance across all out sites and share learnings where possible. In Israel, Netafim is certified to the Israeli Occupational Health and Safety Standard ISO 18001 at all three local plants.

# "With just 33 minor injuries in 2015, the lowest figure we have recorded for some years, we are seeing the results of ongoing emphasis on safety. However, even 30 injuries are too many. Therefore, we continue to drive top-down emphasis on accident and injury prevention, with a renewed focus in 2015, on safety risk assessment, prevention, improved accident recording, and more thorough incident investigation. We aspire to achieve zero accidents, and we will continue along this journey to a zero-injury environment as part of our journey to operations excellence."

#### **Guy Sagie, VP Global Operations**

#### **IMPROVING SAFETY**

In 2015

0

injuries at our sites in India, Turkey and South Africa

reduction in injury rate globally compared to 2014 (32% versus 2013)

27%

37%

reduction in lost day rate globally compared to 2014 (37% versus 2013)



reduction in lost day rate in Israel in 2015 versus 2014 (60% versus 2013)

## **EMBEDDING A CULTURE OF SAFETY**

We are pleased to share some highlights of recent activities aimed at embedding a culture of safety at our sites. Each activity is part of a comprehensive program designed to raise awareness of, identify and address safety risks, and make safety practice a matter of habit. Our results in 2014 and 2015 demonstrate that we are making progress.

"It's a matter of consistent, repetitive and visible actions through all different parts of our operations. This builds safety habits incrementally."

#### Mike Farrell, Director of Operations, Netafim USA

## INDIA

- Tool Box Talk: 5-minute brief at the start of each shift to ensure that all employees, including temporary ones, are attentive to safety risks
- Regular Safety Committee meetings with representatives from each department
- Corrective safety actions are posted and tracked on notice boards to enable visual tracking of each task for completion
- We celebrate National Safety Day every year by organizing events to create awareness among employees, including safety quizzes and several competitions
- Safety training on a wide range of topics is conducted regularly

## ISRAEL

- Morning briefings 2-3 times a week at each site for a review of safety issues, and plant tours to review risks
- Ergonomic improvements in factories such as installing lifting equipment to remove heavy lifting from all roles
- New protective equipment installed around production lines to reduce risk of injury
- Fitting of ergonomic carpets with air bubbles to ease strain on employees who stand for long periods of time in production operations

#### USA

- New Safety Steering Team comprised of leadership team members to direct the safety program and monitor results
- Monthly Gemba walk conducted by the Safety Steering Team
- New safety communication board in every area of the company
- Rigorous implementation of monthly department safety meetings with employees and meeting summaries reviewed by the Safety Steering Team
- Robust root cause and corrective action program

## **IMPROVING OUR OPERATIONS**

We maintain a supply chain across 17 manufacturing plants located close to our customers in most of our primary markets. By manufacturing locally, we create efficiencies in logistics and a strong platform for providing attentive local service to customers and being readily available to meet their needs. All our plants operate according to the same rigorous manufacturing standards, and most sites have obtained certification to ISO standards. Each plant conducts a rigorous monthly review of its operations, including adherence to responsible supply chain standards.

In addition to our internal supply chain, we operate a global distributor network with more than 2,500 dealer-distributors in over 110 countries. We view our dealers as partners who share our values, aspirations and professional approach. A key objective is to ensure that our dealers can source our products at all times, and supply their customers to meet their needs. Beyond product supply, we work closely with our strategic dealers to update them with professional and technical knowledge and customer service tools.

		OUR SUPPLY CHAIN		
SOURCE	CONVERT	DISTRIBUTE	SERVICE	COLLECT
raw materials for dripperlines and other peripheral products	raw materials into drip irrigation products	products to our customers directly or through our global dealer network	installation support, technology backing and agronomic advice to our customers	used dripperlines for recycling and the utilization of various drip irrigation applications

"Throughout our operations, we aspire to achieve increasing levels of operational excellence with greater efficiencies, reduced waste in our processes, and improved impacts on the environment. Our environmental performance has been improving over time, and we closely monitor our electricity consumption, emissions, water use and waste levels at each of our sites based on their monthly performance reports. We continue to share our learnings across Netafim's entire supply network, and commit to further efficiencies as we continue to develop and expand our business."

#### **Guy Sagie, VP Global Operations**



## ENVIRONMENTAL PERFORMANCE

13 CELIMATE

Electricity Electricity in gigajoules per ton raw material



**Greenhouse gas emissions** Greenhouse gas emissions (Scope 2) in tons CO2e per ton raw material



**Water withdrawal** Total water withdrawal in m<sup>3</sup>



Waste Waste by disposal type in tons



For details of data calculations, please see our GRI Content Index at the end of this report.

## **ENVIRONMENTAL EFFICIENCY INITIATIVES IN 2015**

## INDIA

- In India, we achieved a 4% reduction in electricity consumption per ton of raw material through the installation of a direct line to the local electrical company sub-station from our site in Baroda. This enables a more stable electricity supply, thereby preventing current fluctuations that disrupt production and cause inefficiencies.
- We achieved a 46% reduction in water use per ton of raw material at our Baroda site through:
  - A new water meter to measure water consumption on a daily basis to rapidly identify leaks or supply level changes
  - New sensors in water tanks to prevent water overflow
  - Use of treated wastewater to irrigate on-site gardens

## ISRAEL

- We introduced a new system called eSave at our Magal plant in 2015. eSave stabilizes the electrical current, thereby enabling up to a 15% reduction in electricity requirements, and improves production continuity.
- In early 2016, we implemented a digital salary slip platform for employees who have email access, representing over 80% of all local employees. As a result of not printing salary slips, we save 215kg of paper annually.

#### UK

- In order to comply with the EU Energy Efficiency Directive, Netafim UK joined in 2015 the UK Environment Agency's Energy Saving Opportunities Scheme (ESOS), and conducted its first environmental audit.
- Energy saving opportunities were identified, including conversion to LED lighting, sensor installation and other automation capabilities in order to control lighting, heating and ventilation systems, and to reduce unnecessary power use outside of working hours.



## SUPPORTING COMMUNITY DEVELOPMENT

At Netafim, we believe in supporting the communities in which we live and work, engaging in multiple community projects and initiatives around the world. Our employees volunteer their time and energy to support activities that promote the efficient use of natural resources, education for sustainability, and local economic

empowerment. Generally, we focus on activities that reflect our core business, and utilize the knowledge and experience of our employees to advance sustainability and agriculture education, the construction of community gardens, and the promotion of industry and technology for young people.

Global community investment (\$)	2014	2015	Employee volunteering	2014	2015
Cash donations	35,756	268,404	Number of volunteers	752	768
Product donations (cost value)	84,000	98,799	Number of volunteer hours	10,724	12,243
Total	119,756	367,203			

#### Notes

- 2014 data relates to our operations in Israel, Australia and Brazil, which represents some 32% of our global workforce.
- 2015 data includes eight countries that represent 79% of our global workforce. Employee volunteering data is not managed in all countries, and includes Mexico, Peru, South Africa, Brazil and Israel. Cash donations include employee charitable donations made in Peru, Australia and Brazil, and donations matched by the company for employee donations made in Australia.

## EDUCATING SCHOOLCHILDREN WITH DRIP KITS

One of the best ways we can educate children to appreciate agriculture is via our specially designed school kits. These kits enable schoolchildren to learn and gain practical farming experience in their school vegetable gardens. We have implemented the kits in several countries with great success, since they encourage sustainability and healthy eating at a young age to enable a better future for all.

In Australia, we collaborated with Syngenta and AUSVEG, the national industry body for Australian vegetable and potato growers, to develop a unique kit for vegetable gardens in schools. This kit includes irrigation equipment for a 50m<sup>2</sup> plot and vegetable seeds.

In Israel, we developed a training kit for kindergarten and elementary schoolchildren. The kit is used by our employees to educate their children and grandchildren about sustainable agriculture. The kit includes a demonstration irrigation system to give the children a hands-on experience. The children build and operate the system with their teacher, irrigating flowers planted during the school session. In 2015, Netafim Italy adopted the program and kit, and now employees are carrying out training in schools across the country.

"In addition to educating children about drip irrigation, the kit also helps our employees who are not farmers or agronomists understand plants and irrigation better. Since they need to explain the kit to children, they learn about it themselves. Both the children and our employees get a chance to learn about sustainability."

#### Ofer Rimon, CSR Manager, Netafim Israel



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## PROVIDING VEGETABLE GARDENS IN AN ISRAELI-ARAB TOWN

In 2015, we engaged in a community garden initiative aimed at educating and raising awareness for healthy eating habits among children in the Israeli-Arab community of Baqa al-Gharbiyye in the northern Israel. In collaboration with Joint Israel, a local humanitarian aid organization and the municipality of Baqa al-Gharbiyye, we developed an initiative to construct vegetable gardens in each of the 35 kindergartens in the city, donating 35 drip irrigation systems, as well as the time and expertise of 80 of our employees who supported the project from design through to full installation. Our team met with all 35 teachers to plan each garden according to local needs and schoolyard conditions.

#### Netafim Magal wins Social and Environmental Leadership award

In 2015, partly due to our project in Baqa al-Gharbiyye, Netafim Magal received the Industry Award for Social and Environmental Leadership granted by the Manufacturers Association of Israel.



"The gardens created community involvement from the start, as parents and children joined together to participate. The fact that the gardens remain active and are being maintained properly by both teachers and parents, and that teachers contact me for advice, demonstrates the project's success."

## PRACTICING SUSTAINABLE FARMING WITH AT-RISK ISRAELI YOUTH

In 2015, we supported the construction of the Kayma Farm in the central Israeli community of Be'erotayim. The farm is a private initiative that employs at-risk youth, helping them to learn a profession, earn a living and acquire new skills. The farm sustains itself by selling its own produce. Netafim not only donated drip systems, but also supported farm construction and maintenance throughout the year.

#### Mounir Ahuisat, Manufacturing Planner



## PARTNERING IN A SOUTH AFRICAN GARDEN PROJECT

We continue to invest in our partnership in South Africa through Learn2Live, a non-profit organization dedicated to the development of preschools in poor communities. Over the last three years, we helped Learn2Live develop the HomeGrown Garden program to educate preschoolers about healthy nutrition. We install drip irrigation systems in preschools, create education materials to demonstrate water-saving methods, train teachers, and regularly help with gardening and maintenance.

In 2015, we supported the construction of a 225m<sup>2</sup> vegetable garden at the Learn2Live building together with its own drip irrigation system. The garden provides vegetables, such as spinach, onions, parsley, beans, cauliflower, lettuce and tomatoes, to preschools. We also continued to be involved in Learn2Live's educational activities about healthy eating and growing vegetables for preschoolers and their parents. Forty preschools participated in this program in 2015, involving more than 1,000 preschoolers.

## SUPPORTING FLOOD VICTIMS IN PERU

Netafim Peru donated emergency supplies to help the victims of a flash flood in the town of Mirave in Peru's Tacna region in March 2015. These supplies helped 400 families who were displaced from their homes.



1 poverty Attack

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# **ABOUT THIS REPORT**

This is our third Sustainability Report, and it describes our approach to sustainability and the key actions taken in 2014-2015 to advance responsible practices across our global business. The report is designed to provide our stakeholders with a transparent account of our impact on society and the environment. In all cases, data in this report relates to the 2014-2015 calendar years unless otherwise stated. Our last report was published in 2014. In the interim years between Sustainability Reports, we publish a standalone Communication on Progress (COP) to the UN Global Compact. Our last COP was published in 2015.

Our Chief Sustainability Officer and other Netafim executives selected the content for this report. This was based on an assessment of material issues, including those known to be important to stakeholders, and a further review of our material impacts and strategy alongside the global Sustainable Development Goals. We did not undertake any additional specific consultations for the purpose of this report.

This report is written in accordance with the Global Reporting Initiative (GRI) G4 sustainability reporting standard, core option, which we believe represents the most advanced sustainability reporting framework available today. GRI is a non-profit multi-stakeholder organization that acts to increase the level of business transparency

through sustainability reporting among companies worldwide. The main tool for assimilating sustainability reporting is the GRI reporting standard, which contains detailed guidelines for reporting on sustainability, and provides a consistent structure that thousands of companies worldwide use for disclosing their sustainability approach and performance. For more information, please see: globalreporting.org.

This report is aligned with the principles for defining report content set out in the G4 guidelines. These principles are: Materiality (issues most important to our long-term business growth and stakeholders), Stakeholder Inclusiveness (responding to stakeholder expectations and interests), Sustainability Context (presenting our performance in the wider context of sustainability issues), and Completeness (inclusion of all information that reflects significant economic impacts enabling stakeholders to assess our performance).

We did not seek external assurance for our report as we rely on robust internal data systems. External consultants and reporting experts assisted us in the report preparation and data collection processes, and verified inconsistencies. This report also complies with our commitment to submit an annual COP to the UN Global Compact and to the CEO Water Mandate.

## SUPPORTING THE SUSTAINABLE DEVELOPMENT GOALS

BELOW IS AN OVERVIEW OF SOME OF THE STORIES WE HAVE SHARED IN THIS SUSTAINABILITY REPORT TO DEMONSTRATE HOW OUR ACTIONS SUPPORT THE UN SUSTAINABLE DEVELOPMENT GOALS.

SDG	Out story	Page
	Collaborating to develop new rice irrigation technologies	18
	Financing farmers in India	23
	Drip irrigating sweet potatoes in Israel	24
	Helping growers in India	25
1 POVERTY	Enhancing lettuce production in Spain	25
/Ĩĸŧŧŧ	Raising awareness of drip irrigation	31
2 780 1980-19	Going green in Morocco	34
	Supporting small-scale farmers in Macedonia	35
	Supporting community development	47
	Educating schoolchildren with drip kits	48
	Providing vegetable gardens in an Israeli-Arab town	49
	Partnering in a South African garden project	50
5 селеся срадку Ф	Supporting farmers in Kenya	35
C CLEAN MATER	Developing breakthrough technology for climate-smart alfalfa	14
	Protecting crops from the cold	16

SDG	Out story	Page
	Supporting economic growth in Senegal	28
	Creating our new backbone together	38
	Bringing our values to life	39
	Enabling effective dialogue for leaders	39
ECONOMIC GROWTH	Technical training for best product knowledge	40
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INDUSTRY, INNERLINEN	Setting new efficiency standards with nano-irrigation	17
	Precision mobile drip provides the latest in integrated irrigation	19
	Introducing new products that benefit our customers	20
3 CLIMATE	Environmental efficiency initiatives in 2015	46
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## **UN GLOBAL COMPACT**

"I reconfirm Netafim's continuing participation in the UN Global Compact. We commit to upholding and promoting the 10 principles of the Global Compact, and to supporting broad social, humanitarian and environmental objectives. I reconfirm our intention to maintain our adherence to these principles, and to continue to promote them within our companies and with our business partners. Netafim intends to continue to report annually on our progress."



This is our Communication on Progress in implementing the principles of the United Nations Global Compact.

We welcome feedback on its contents.

#### **UN Global Compact Principles** Netafim's approach **GRI G4 references** Businesses should support and respect the protection of internationally proclaimed human We conduct our business according to the highest Human Rights 1 ethical standards and respect for human rights. rights. We inform our partners in our supply chain, and Human Rights Businesses should ensure that they are not encourage them to adopt similar standards. 2 complicit in human rights abuses. Local Communities • G4-11 We respect the rights of employees to freedom of Businesses should uphold the freedom of association and the effective recognition of the right 3 Freedom of Association and Collective Bargaining association and collective bargaining. We support an to collective bargaining. open culture where all can freely contribute. Labor/Management Relations We do not engage in any practice that could be Businesses should support the elimination of all Forced and Compulsory Labor construed as forced labor. All Netafim employees are forms of forced and compulsory labor. employed of their own free will. Businesses should support the effective abolition of We respect the rights of children, and we do not Child Labor 5 child labor. employ children in any part of our business. Businesses should support the elimination of G4-10 We maintain a policy of equal opportunity and discrimination in respect of employment and 6 inclusive practices for new and current employees. I abor Practices and Decent Work occupation. Businesses should support a precautionary 7 Environmental approach to environmental challenges. We adopt environmentally-oriented practices in all our operations, and have established targets to Businesses should undertake initiatives to promote reduce our impacts on the environment. We strongly 8 **Environmental** greater environmental responsibility. promote drip irrigation, an environmentally-friendly Businesses should encourage the development and technology. Environmental 9 diffusion of environmentally-friendly technologies. Anti-Corruption Businesses should work against corruption in all its We are committed to behaving with integrity and act 10 forms, including extortion and bribery. Public Policy against corruption.

#### Ran Maidan, President & Chief Executive Officer, Netafim

## **UN GLOBAL COMPACT LEAD COMMUNICATION ON PROGRESS**

The UN Global Compact LEAD initiative brings together a group of companies that aim to achieve higher levels of performance, tackle frontier corporate sustainability issues, and encourage greater action by the broader business universe. Netafim is one of around 50 companies that form the LEAD initiative. Accordingly, our Communication on Progress includes reference to all 21 UNGC LEAD criteria in the following table.

Criteria	Detail	GRI G4 reference	Our disclosures
1	Mainstreaming GC principles into corporate functions and business units.	G4-1, G4-36	Message from our CEO, page 3
2	Value chain implementation of GC principles.	G4-12, G4-PR5 Supplier Human Rights Assessment, Supplier Assessment for Impacts on Society	Value chain, page 56
3	Robust commitments, strategies and policies in the area of human rights.	Human Rights Aspects	See our response to UNGC principles 1,2, pages 53, 56
4	Effective management systems to integrate human-rights principles.	G4-56	The UN 2030 Sustainable Development Goals (SDGs), page 12
5	Effective monitoring and evaluation mechanisms of human-rights integration.	G4-HR12	Netafim's whistleblower policy requires employees to report suspected breaches of the Code's provisions. Reports are directed to the Netafim General Counsel or the Human Resources Officer for investigation, and appropriate action is taken.
6	Robust commitments, strategies and policies in the area of labor.	Labor Practices and Decent Work Aspects, Freedom of Association Aspect, Child Labor Aspect, Forced or Compulsory Labor Aspect	Our employees, pages 37-41 See our response to UNGC principles 4, 5, 6, page 53
7	Effective management systems to integrate labor principles.	Labor Practices and Decent Work Aspects	Our employees, pages 37-41
8	Effective monitoring and evaluation mechanisms of labor-principle integration.	Labor Practices and Decent Work Aspects	Our employees, pages 37-41
9	Commitments, strategies and policies in the area of environmental stewardship.	Environmental Aspects	Improving our operations, page 44
10	Effective management systems to integrate environmental principles.	Environmental Aspects	Improving our operations, page 44

## **UN GLOBAL COMPACT LEAD COMMUNICATION ON PROGRESS**

Criteria	Detail	GRI G4 reference	Our disclosures
11	Effective monitoring and evaluation mechanisms for environmental stewardship.	Environmental Aspects	Improving our operations, page 44
12	Commitments, strategies and policies in the area of anti-corruption.	Anti-corruption, Compliance	Our commitment to fight corruption and advance anti-corruption practices is embedded in our Code of Business Conduct.
13	Effective management systems to integrate the anti-corruption principle.	Anti-corruption, Compliance	We observe local anti-corruption laws and regulations. In addition, our Code of Business Conduct includes a strict policy regarding improper payments and giving and receiving of gifts.
14	Effective monitoring and evaluation mechanisms for the integration of anti-corruption.	G4-SO5, G4-SO11, G4-58	Our internal auditor monitors our risk management, compliance, control, and governance processes, and collaborates with Netafim's third-party internal auditor to provide insight and recommendations to improve business processes.
15	Core business contributions to UN goals and issues.	G4-1, G4-EC2, Indirect Economic Impacts, Environmental Aspects, Human Rights Aspects, Local Communities, Anti-corruption	The UN 2030 Sustainable Development Goals (SDGs), page 12
16	Strategic social investments and philanthropy.	G4-SO1	Supporting community development, page 47
17	Advocacy and public engagement.	G4-SO6	Actively supporting sustainable agriculture policy, page 33
18	Partnerships and collective action.	Indirect Economic Impacts	Engaging in agritech partnerships to advance technology uptake, page 21 Collaborating across sectors for better and greener agriculture, page 34
19	CEO commitment and leadership.	G4-1	Message from our CEO, page 3
20	Board adoption and oversight.	G4-34, G4-37, G4-43, G4-45, G4-47, G4-48	The Netafim Board is advised of sustainability performance, and impacts on sustainable productivity throughout our worldwide activities.
21	Stakeholder engagement.	Stakeholder Engagement: G4-24 – G4-27	Page 61

#### **CRITERION 2: VALUE CHAIN IMPLEMENTATION OF GC PRINCIPLES**

Our value chain consists of six stages through which we make an impact and generate value for our stakeholders.

- Development: We invest resources in research and development. We employ a team of 50 R&D professionals that constantly works to develop and bring our customers the best, most accessible irrigation solutions to help them grow more, higher quality produce, while using fewer resources. We collaborate with academic institutions, agricultural organizations and government offices worldwide to enable knowledge sharing and to support the advancement of research in sustainable agriculture.
- Sourcing: We work with a wide range of suppliers of raw materials, products and services in Israel and abroad with whom we have a long-standing professional relationship. We maintain a collaborative partnership with suppliers, working together on new product development and design improvement.
- Manufacturing: We operate 17 plants worldwide that produce billions of meters of dripperlines each year. Our manufacturing facilities are located in local markets where they supply irrigation equipment, helping us maintain a costefficient distribution infrastructure, and preventing additional transportationrelated carbon emissions.

- Logistics and distribution: Our local manufacturing and assembly capabilities are complemented by a network of either Netafim-owned or qualified-dealer distribution facilities in several countries that supply our irrigation products and systems to dealers representing us in various regions.
- Customers: We work with professional, knowledgeable dealers, and invest many hours in training them in the use and application of our systems, while providing ongoing technical and agronomic support directly to customers. In this way, we help increase sustainable productivity in our markets.
- Community: We create economic and social value for local communities through our operations and irrigation systems that help farmers grow more, higher quality produce, while using less water and energy. This generates financial value for growers, their families and their communities, and reaches consumers worldwide in the form of better fruits and vegetables, reduced environmental impact from agriculture, and greater water availability for personal consumption.

## **CEO WATER MANDATE**

The CEO Water Mandate is a special initiative of the UN Secretary-General and the UN Global Compact, providing a multi-stakeholder platform for the development, implementation and disclosure of corporate water sustainability policies and practices. Netafim was one of the first companies to endorse the CEO Water Mandate in 2008. Only 130 companies around the world have endorsed this important initiative to date. This Sustainability Report serves as Netafim's Communication on Progress for the CEO Water Mandate for 2014-2015, in line with the CEO Water Mandate Transparency Policy. Netafim's CEO, Ran Maidan, confirms that Netafim continues to endorse and promote the CEO Water Mandate Mandate, and will continue to disclose transparently the company's water management performance.

Below is a table showing Netafim's progress relating to the six elements of the CEO Water Mandate, cross-referenced to Global Reporting Initiative G4 Standard disclosures.

	Water Mandate Principles	GRI Indicators	Our progress
ELEMENT 1:	Direct operations	G4-EN8 G4-EN9 G4-EN10	Environmental performance and Environmental efficiency initiatives in 2015, pages 45-46
ELEMENT 2:	Supply chain and watershed management	G4-EN32 G4-EN33	Whenever possible, we encourage our suppliers to adopt sustainable water management practices.
ELEMENT 3:	Collective action	G4-16	Actively supporting sustainable agriculture policy, page 33
ELEMENT 4:	Public policy	G4-SO6	Actively supporting sustainable agriculture policy, page 33
ELEMENT 5:	Community engagement	G4-SO1	Supporting community development, page 47
ELEMENT 6:	Transparency	G4-28 - G4-33 G4-18 G4-20 - G4-23	Netafim's material sustainability impacts, page 10 About this report, page 51 GRI Index: G4-20 - G4-23, page 58

G4	General Standard Disclosures	Page/Link	External Assurance
STRATEG	Y AND ANALYSIS		
G4-1	Statement from the most senior decision maker	Message from our CEO, page 3	None
G4-3	Name of the organization	Netafim at a glance, page 8	None
G4-4	Primary brands, products and services	Netafim at a glance, page 8	None
G4-5	Location of the organization's headquarters	Netafim at a glance, page 8	None
G4-6	Number of countries where the organization operates	Netafim at a glance, page 8	None
G4-7	Nature of ownership and legal form	Netafim at a glance, page 8	None
G4-8	Markets served	Netafim at a glance, page 8	None
G4-9	Scale of the organization	Netafim at a glance, page 8	None
G4-10	Employees	Page 60	None
G4-11	Employees covered by collective bargaining agreements	Due to a change in our systems, we are unable to provide this data. We will provide this data in the future.	None
G4-12	Supply chain	UNGC Lead Criterion 2, page 56	None
G4-13	Significant changes during the reporting period	There were no significant changes during the reporting period.	None
G4-14	How the precautionary approach is addressed	Page 44	None
G4-15	Externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or endorses	Actively supporting sustainable agriculture policy, page 33	None
G4-16	Memberships or associations	Actively supporting sustainable agriculture policy, page 33	None
G4-17	Entities included	About this report, page 51	None
G4-18	Process for defining the report content	Our 2020 Sustainability Strategy, page 10	None
G4-19	Material Aspects	Page 10	None
G4-20	Aspect Boundary within the organization	Page 61	None
G4-21	Aspect Boundary outside the organization	Page 61	None

G4-22	Restatements of information provided in previous reports, and the reasons for such restatements	There are no restatements of information provided in previous reports.	None
G4-23	Report significant changes from previous reporting periods	There are no significant changes in the Scope and Aspect Boundaries from previous reporting periods.	None
G4-24	List of stakeholder groups	page 61	None
G4-25	Basis for identification and selection of stakeholders	page 61	None
G4-26	Approach to stakeholder engagement	page 61	None
G4-27	Report key topics and concerns that have been raised through stakeholder engagement	Our 2020 Sustainability Strategy, page 10	None
G4-28	Reporting period	About this report, page 51	None
G4-29	Date of most recent previous report	About this report, page 51	None
G4-30	Reporting cycle (e.g. annual, biennial)	About this report, page 51	None
G4-31	Provide the contact point for questions	Naty Barak, Chief Sustainability Officer, Naty.barak@netafim.com	None
G4-32	"In accordance" option and Content Index	This report is in accordance with the G4 guidelines at core level GRI Content Index, page 58	None
G4-33	External assurance for the report	This report has not been externally assured.	None
G4-34	Report the governance structure of the organization	The highest governing body at Netafim is our Board of Directors, which is comprised of nine members. All board members are non-executive and independent (non-shareholding). The Netafim Board of Directors maintains one committee, the Audit and Finance Committee.	None
G4-56	Describe the organization's values, principles, standards and norms of behavior	Netafim at a glance, page 8	None

## SPECIFIC STANDARD DISCLOSURES

MATERIAL ISSUES (G4-19)	SPECIFIC STANDARD DISCLOSURE MATERIAL ASPECTS (DMA) AND PERFORMANCE INDICATORS	PAGE/LINK	OMISSIONS
MASS ADOPTION OF DRIP IRRIGATION	Indirect economic impacts: G4-EC8 Significant indirect economic impacts	Action for Prosperity, page 13 Education for Prosperity, page 30	
ENHANCING CUSTOMER CAPABILITIES	<b>Product and service labeling: G4-PR</b> 5 Results of surveys measuring customer satisfaction	Page 65	We do not survey customer satisfaction. We use the number of customer complaints to measure customer satisfaction.
SUSTAINABLE PRODUCTIVITY	Indirect economic impacts: G4-EC8 Significant indirect economic impacts	Action for Prosperity, page 13 Education for Prosperity, page 30	
SUPPORTING SUSTAINABLE	Public policy: G4-SO6 Political contributions by country and beneficiary	Zero contributions in 2014- 2015 in line with our policy.	
AGRICULTURE POLICY	Indirect economic impacts: G4-EC8 Significant indirect economic impacts	Education for Prosperity, page 30	
	<b>Employment: G4-LA1</b> Total number and rates of new employee hires and employee turnover	Page 62	
EMPLOYEE PERFORMANCE	<b>Occupational health and safety: G4-LA6</b> Type of injury and rates of injury, occupational diseases, lost days, absenteeism, and work-related fatalities	Page 63	Absenteeism is not reported. Injury by gender and employment type are not reported.
	<b>Training and education: G4- LA-11</b> Percentage of employees receiving regular performance and career development reviews	Page 63	
	Energy: G4-EN5 Energy intensity	Page 64	
	Energy: G4-EN6 Reduction of energy consumption	Environmental efficiency initiatives in 2015, page 46	
	Emissions: G4-EN18 Greenhouse gas (GHG) emission intensity	Page 64	
	Effluents and waste: G4-EN23 Waste by type and disposal method	Page 65	
WATER CONSERVATION	Water: G4-EN8 Water withdrawal by source	Page 64	

G4-10

EMPLOYEES BY REGION	2010	2011	2012	2013	2014	2015
INDIA	999	1,106	1,212	1,209	1,392	1,281
ISRAEL	774	831	822	977	981	761
AMERICAS	546	567	592	683	766	820
REST OF THE WORLD	352	366	368	410	590	642
ALL EMPLOYEES	2,671	2,870	2,994	3,279	3,729	3,504

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	2014			2015			
	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	
INDIA	1,269	123	1,392	1,204	77	1,281	
ISRAEL	772	209	981	632	129	761	
AMERICAS	586	180	766	646	174	820	
REST OF THE WORLD	461	129	590	503	139	642	
ALL EMPLOYEES	3,088	641	3,729	2,985	519	3,504	

NOTE: These charts relate to Netafim's permanent employees. In addition, we employ up to 1,000 temporary and contract employees at different times.

#### EMPLOYEES BY CONTRACT AND GENDER

		2014		2015			
	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	
PERMANENT CONTRACT	2,612	541	3,153	2,520	459	2,979	
TEMPORARY CONTRACT	476	100	576	465	60	525	
ALL EMPLOYEES	3,088	641	3,729	2,985	519	3,504	

NOTE: Also in 2015, we employed 243 supervised workers (167 men, 67 women).

#### **EMPLOYEES BY TYPE AND GENDER**

		2014		2015				
	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL		
FULL-TIME	3,058	595	3,653	2,976	497	3,473		
PART-TIME	30	46	76	9	22	31		
ALL EMPLOYEES	3,088	641	3,729	2,985	519	3,504		
	83%	<b>17</b> %		85%	15%			

#### G4-20, G4-21

MATERIAL ISSUES	MATERIAL ASPECTS	MATERIAL INTERNALLY	MATERIAL EXTERNALLY	RELEVANCE EXTERNALLY
MASS ADOPTION OF DRIP IRRIGATION	Indirect economic impacts		$\checkmark$	Impacts people and economic development in all our markets.
ENHANCING CUSTOMER CAPABILITIES	Product and service labeling		$\checkmark$	Enhancing customer capabilities supports social- economic growth and development.
SUSTAINABLE PRODUCTIVITY	Indirect economic impacts		$\checkmark$	Sustainable productivity impacts people and economic development in all our markets.
SUPPORTING SUSTAINABLE AGRICULTURE Policy	Public policy Indirect economic impacts		$\checkmark$	Promoting drip irrigation increases the rate of uptake, improving social, economic and environmental impacts.
EMPLOYEE PERFORMANCE	Employment Occupational health and safety Training and education	$\checkmark$	$\checkmark$	Supporting employee health and safety and investing in their development in the workplace strengthens the communities in which we operate.
LEAN SUPPLY CHAIN	Energy Emissions Effluents and waste		$\checkmark$	Reducing energy consumption, emissions and waste within our operations helps minimize our impacts on the planet's resources
WATER CONSERVATION	Water		$\checkmark$	Reducing water consumption contributes to addressing water scarcity.

#### G4-24, G4-25, G4-26

PRIMARY	STAKEHOLDER INTERACTIONS			
	CUSTOMERS	EMPLOYEES	DISTRIBUTORS, PARTNERS AND SUPPLIERS	POLICY MAKERS AND INFLUENCERS
WHO	Farmers, growers and irrigation managers are at the heart of our business.	Our employees are an inseparable part of our success and the source of our innovative spirit.	Our global network of distributors, suppliers and R&D partners help bring our technology to our customers.	Those who determine and influence agricultural policy play a major role in determining agricultural sustainability.
HOW	Our ongoing dialogue includes customer meetings, conferences, workshops, education programs and field trials.	We engage through meetings, performance discussions, and internal communications processes.	Our interactions with our distributors, suppliers and partners are daily in the course of our global business.	We engage with policy makers and diverse associations to positively influence sustainable agriculture policy.
WHAT	Our customers' key interests include: resource efficiency, crop yield and quality, and excellent service.	Our employees seek professional growth, fair compensation, a safe and healthy workplace, and meaningful work.	Our distributors, suppliers and partners seek collaborative long- term relationships and fair and honest interactions.	Policy makers seek reliable information to support informed decision making, and transparent and ethical behavior.

NOTE: In addition, other stakeholders of Netafim include our owner-shareholders from whom we take strategic direction. We formally report our performance to our shareholders. We also engage, as appropriate, with a diverse range of social and environmental organizations that support the needs of different groups throughout our value chain, including local communities in the countries where we operate.

#### G4-LA1

NEW HIRES BY AGE								
	2014		2015		RATE OF NEW HIRES	RATE OF NEW HIRES	TOTAL NEW HIRE RATE	
	MALE	FEMALE	MALE	FEMALE	IN 2015 (MALES)	IN 2015 (FEMALES)	(%)	
BELOW AGE 30	336	41	436	65	12.44%	1.86%	14.30%	
AGE 30 - 50	183	46	272	62	7.76%	1.77%	9.53%	
OVER AGE 50	18	1	19	6	0.54%	0.17%	0.71%	
ALL NEW HIRES	537	88	727	133	20.74%	3.80%	24.54%	

#### **NEW HIRES BY REGION**

	2014		2015		RATE OF NEW HIRES	RATE OF NEW HIRES	TOTAL NEW HIRE RATE
	MALE	FEMALE	MALE	FEMALE	IN 2015 (MALES)	IN 2015 (FEMALES)	(%)
INDIA	215	6	182	2	5.19%	0.06%	5.25%
ISRAEL	146	14	261	34	7.45%	0.97%	8.42%
AMERICAS	119	55	147	55	4.20%	1.57%	5.76%
REST OF WORLD	57	13	137	42	3.91%	1.20%	5.11%
ALL NEW HIRES	537	88	727	133	<b>20.75</b> %	3.80%	24.54%

#### LEAVERS BY AGE

	2015		TURNOVER RATE IN	TURNOVER RATE IN	TOTAL TURNOVER	
	MALE	FEMALE	2015 (MALES)	2015 (FEMALES)	RATE	
BELOW AGE 30	353	45	10.07%	1.28%	11.36%	
AGE 30 - 50	344	72	9.82%	2.05%	11.87%	
OVER AGE 50	34	11	0.97%	0.31%	1.28%	
ALL NEW LEAVERS	731	128	20.86%	3.64%	24.51%	

#### LEAVERS BY REGION

	20	)15	TURNOVER RATE IN	TURNOVER RATE IN	TOTAL TURNOVER
	MALE	FEMALE	2015 (MALES)	2015 (FEMALES)	RATE
INDIA	300	12	8.56%	0.34%	8.90%
ISRAEL	235	36	6.71%	1.03%	7.73%
AMERICAS	111	48	3.17%	1.37%	4.54%
REST OF WORLD	85	32	2.43%	0.91%	3.34%
ALL NEW HIRES	731	128	20.87%	3.65%	24.51%

Note:

\* Due to a change in our HR information systems, we are unable to provide data on leavers in 2014.

#### **G4-LA6**

INJURIES							
	INJURIES INJURY RATE					RATE CHANGE	
	2013	2014	2015	2013	2014	2015	IN 2015 (%)
ISRAEL	32	23	19	3.22	4.32	3.23	-25%
INDIA	5	6	0	0.97	2.97	0.00	-100%
AMERICAS	22	4	11	4.89	0.96	1.88	97%
REST OF WORLD	5	6	3	1.78	5.04	1.17	-77%
TOTAL	64	39	33	2.86	3.07	1.94	-37%

LOST DAYS							
	LC	LOST DAYS			ST DAYS RAT	RATE CHANGE	
	2013	2014	2015	2013	2014	2015	IN 2015 (%)
ISRAEL	707	333	166	71.06	62.59	28.23	-55%
INDIA	9	16	0	1.75	7.92	0.00	-100%
AMERICAS	63	36	191	14.00	8.61	32.68	279%
REST OF WORLD	84	37	53	29.84	31.09	20.62	-34%
TOTAL	863	422	410	38.54	33.20	24.14	<b>-27</b> %

#### G4-LA11

EMPLOYEES PARTICIPATING IN PERFORMANCE EVALUATIONS								
	201	4	2015					
	Male	Female	Male	Female				
MANAGEMENT	336	88	381	105				
NON-MANAGEMENT	1,369	393	1,335	370				
TOTAL BY GENDER	1,705	481	1,716	475				
TOTAL BY GROUP	2,186 2,191							
PERCENTAGE OF TOTAL EMPLOYEES	94% 99%							

#### G4-EN5

ENERGY CONSUMPTION						
	2013	2014	2015	Change in 2015 (%)		
ENERGY PURCHASED FROM GRID (GJ PER TON RAW MATERIALS)	3.102	3.205	3.141	-2%		

Note:

\* Electricity is converted to gigajoules using the GRI Indicators Protocol set guidelines

#### **G4-EN8**

WATER WITHDRAWAL				
	2013	2014	2015	Change in 2015 (%)
WATER WITHDRAWAL (m <sup>3</sup> )	144,528	120,107	124,535	4%

Note:

- \* Data covers all facilities worldwide except for Ribeirão Preto, Brazil, where water consumption is not measured
- \* 2014 water withdrawal data did not include Peru, thereby accounting for 56% of the increase in water consumption reported in 2015

#### G4-EN18

GREENHOUSE GAS EMISSIONS				
	2013	2014	2015	Change in 2015 (%)
SCOPE 2 INDIRECT ENERGY (TONS CO2e PER TON RAW MATERIALS)	0.53	0.52	0.53	1%

Note:

- \* Emissions for Israel and the US are in tons of CO2e. Emissions for all other sites are in tons
- $\rm CO_2$ . Israel and US facilities represent 62% of total emissions
- \* Data for 2013 has been restated due to a change in the emissions factor used for US facilities

#### G4-EN23

HAZARDOUS AND NON-HAZARDOUS WASTE (TONS)				
	2013	2014	2015	Change in 2015 (%)
RECYCLING	1,445	1,286	1,379	7%
LANDFILL	562	634	934	47%
TOTAL	2,007	1,920	2,313	20%
PERCENTAGE OF WASTE	70.0/	67%	60%	-11%
RECYCLED	12%			

#### Note:

- \* 2014 & 2015 data does not include Brazil. In 2013, waste in Brazil represented 2% of total waste
- \* 2013 & 2014 data does not include Australia. In 2015, waste in Australia represented 3% of total waste, which represented 6% of the increase in waste reported in 2015
- \* We also incinerate small amounts of waste this is excluded from our data and 2013 figures are restated accordingly
- \* Data for 2014 has been restated to include waste streams that were omitted in our 2014 reporting due to a new reporting process

#### G4-PR5

JUSTIFIED COMPLAINTS					
	2014	2015	Change in 2015 (%)		
Number of justified complaints per dripperline meter sold	0.13	0.10	-23%		

#### CONTACT FOR QUERIES AND FEEDBACK: NATY BARAK, CHIEF SUSTAINABILITY OFFICER

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