Sustainability Report **2016-2017**

The drip revolution

www.netafim.com

NETAFIM™
GROW MORE WITH LESS

Contents

About this report

This is our fourth Sustainability Report, and it describes our approach to sustainability and the key actions taken in 2016-2017 to advance responsible practices across our global business. The report provides our stakeholders with a transparent account of our impact on society and the environment. Data in this report relates to the 2016-2017 calendar years unless otherwise stated. Our last report was published in 2016. 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 2017.

Our Chief Sustainability Officer and other Netafim executives determined the selection of 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) Sustainability Reporting Standards, Core option, published in 2016. GRI is a non-profit multi-stakeholder organization that acts to increase the level of business transparency through sustainability reporting among companies worldwide. For more information, please see: www.globalreporting.org

This report is aligned with the principles for defining report content set out in the GRI Standards. 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.

We welcome your queries and feedback.
Please contact: Naty Barak, Chief Sustainability Officer
Sustainability@netafim.com

Welcome from our CEO

I am delighted to share our 2016-2017 Sustainability Report, describing how we have been advancing our sustainability strategy to help the world grow more with less.

As the years go by, we become increasingly aware of the urgency with which we must act to secure our sustainable future on the planet. Continuing population growth, drastic changes in weather patterns, biodiversity decline, water scarcity and desertification and limited arable land for agricultural use are all taking their toll on our ability to remain within planetary boundaries as we strive for food security and long-term prosperity. Sometimes it seems that only a revolution can actually drive change.

At Netafim, our revolution is Mass Adoption of Drip irrigation. At the nexus of food, water, land and prosperity, precision irrigation is the solution to so many of today's challenges that we consider it to be nothing short of a revolution. And as many revolutions take some time to mature before they emerge to transform society, so drip irrigation has been slowly advancing to transform agriculture since our beginnings more than 50 years ago. We are convinced of the value of drip irrigation in our food and agricultural value chains. We continue to do all we can to raise awareness and support enlightened public policy that favors drip irrigation.

In early 2018, the majority ownership of Netafim moved to Mexichem, a leading provider of products and solutions across multiple sectors, headquartered in Mexico. This is significant for Netafim, enabling us to leverage Mexichem's expertise, products and global presence to accelerate our growth and expand the basket of smart agri-solutions and services we offer to our customers.

As part of Mexichem, Netafim is retaining our Israeli heritage and corporate center in Israel that have helped us achieve so much to date. We are encouraged by Mexichem's appreciation of our advances in sustainability and their support for our strategic approach. In 2016-2017 we have continued to make progress in all three pillars of our sustainability strategy, driving ACTION to embed drip irrigation in markets around the world, supporting EDUCATION to improve awareness and uptake of drip irrigation and strengthening our BACKBONE as a company operating on the basis of our core values, respecting people, communities and the planet.

As the global leader in precision irrigation, we are leading our own climate-positive revolution.
Thank you for joining us on our journey and for your interest in this report. I welcome your feedback.

Ran Maidan

President and CEO

About Netafim

Netafim is the global leader in precision agriculture with drip irrigation 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.

Netafim Ltd is a private company, headquartered in Tel Aviv, Israel. Currently, 80% of Netafim shares are held by Mexichem, the global leader in water conduction solutions for building and infrastructure, the leader in the data conduction market in the U.S., the global leader in the production of specialty resins, one of the global top ten PVC producers, and the owner of the biggest fluorspar reserve globally. Mexichem shares are publicly traded as part of the S&P/BMV Sustainable Index in the Mexican Stock Market. The remaining 20% of Netafim shares are held by Kibbutz Hatzerim (Israel), one of Netafim's founding organizations. During 2017, investment company Permira and Kibbutz Magal sold their shareholdings in Netafim to Mexichem.

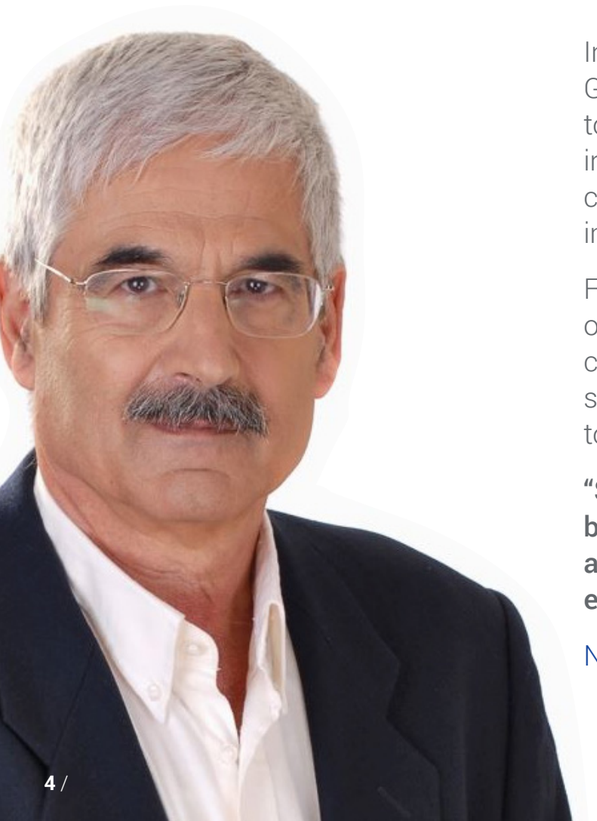
Our **footprint**

> 4,500
employees in our total workforce

29
commercial subsidiaries

17
factories in 13 countries

> 110
countries served with our products



In 2017, Netafim was inducted into the International Green Industry Hall of Fame (IGIHOF) for our contribution to sustainable productivity through offering innovative irrigation solutions that enable farmers to grow more crops with fewer resources and lower environmental impact.

Founded in 2008, the International Green Industry Hall of Fame recognizes those pioneers, leaders, innovators, creators of excellence and visionaries who have made significant contributions to the green industry and towards an environmentally sustainable future.

"Sustainability is not only Netafim's commitment but also our business. Such recognition helps us amplify our message that drip irrigation is an essential element of our sustainable future."

Naty Barak, Chief Sustainability Officer

Our **backbone**

Purpose
Helping the world grow more with less

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.

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.

Values

DARE	MAKE IT HAPPEN	CREATE AN IMPACT	PARTNER FOR SUCCESS

Our **products**

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
We offer comprehensive solutions for greenhouses, from planning and construction, through irrigation systems and other equipment, 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.

Netafim's Sustainability Strategy

Our 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 expectations raised in dialogue and consultation with our stakeholders and prioritized them, while assessing their impact on our business in the coming years. We continue our interaction with stakeholders in many ways and reconfirm seven priority sustainability impacts. Our material impacts continue to shape our sustainability strategy.

Our Material Impacts:

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

Our Sustainability Strategy is aligned with the UN Sustainable Development Goals (SDGs), adopted by the UN in 2015. 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.

"The SDGs promote sustained economic growth, higher levels of productivity and technological innovation. Encouraging entrepreneurship and job creation are key to this, as are effective measures to eradicate forced labor, slavery and human trafficking. With these targets in mind, the goal is to achieve full and productive employment, and decent work, for all women and men by 2030."

(UNDP)

Our Sustainability Strategy has three pillars: Action, Education, and Backbone representing the key ways in which we can make a difference with drip. In each area, we show our commitments, targets, and progress made in 2017.

Action

Help farmers achieve sustainable livelihoods

/ 1

Commitments

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.

Agritech partnerships:

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

Advance knowledge sharing:

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

Targets

Continue to develop new products and methods.

Create collaborative opportunities for the development and applications of drip irrigation technologies.

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

Progress

In 2016-2017 we introduced innovative solutions including the NetMaize app for corn growers, NetBeat products for digital farming and new, more efficient and resilient drip equipment.

- Partnered with Bayer to provide a new sustainable approach to crop protection,
- Advanced Netafim financial solutions in India and the U.S. to increase growers' access to drip systems.
- Collaborated with researchers to develop new solutions for sustainable agriculture.

The percentage of micro irrigation of total irrigated land currently is 6% (ICID).

Education

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

/2

Commitments

Access and education:

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

Public sector collaboration:

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

Private sector collaboration:

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

Targets

At least 2,000 annual training events for farmers.

Continue our support and activities for promoting policies enabling the use of drip irrigation.

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

Progress

In 2017 we conducted over 3,000 events for over 200,000 farmers including field tours, training, lectures, and road shows.

In 2017, we continued to support the Grow Africa Partnership, and participate in the UNGC Lead program, and the CEO Water Mandate. We participated in developing quality standards for irrigation, and in global events and forums on water and agriculture.

- Collaborated with USAID and the IFC on capacity building in Africa.
- Completed the Ramthal project in India, in collaboration with the local government.
- Collaborated with companies and organizations to launch the Better Farming Alliance.

Backbone

Conduct our business ethically, responsibly and transparently

/3

Commitments	**Employee engagement:** Develop our employees, improve their wellbeing, and engage them in our sustainability goals and ethical approach.	**Lean supply chain:** Reduce our direct environmental impacts and contribute to global efforts to mitigate climate change.	**Product development for climate change:** Focus product development priorities on smart irrigation solutions for crops that have the biggest impact on climate change.
Targets	Maintain employee engagement score of 4 or above.	• Maintain electricity consumption per ton raw material at 2015 level or reduce. • Increase % of recycled waste to 75% by 2020	Introduce new initiatives for the top three crops by 2020.
Progress	The last survey took place in 2015, with an average engagement score of 4.	• Electricity consumption per ton raw material: -0.25% in 2017 versus 2015 • Recycled waste: 73% in 2017	We continue to invest in research and trials to increase the use of drip irrigation in rice cultivation.

ACTION

As the first pillar in our sustainability strategy, ACTION is the key. Our business is a call to action to farmers and users of agricultural output around the world to insist on farming that uses less, wastes less and delivers more. At Netafim, we are no strangers to action. Since our pioneering beginnings more than 50 years ago, we have relentlessly pursued action on several fronts to drive the uptake of drip irrigation solutions to advance global food security while conserving planetary resources.

The three core aspects of our action pillar are:

- **Continuous innovation** in irrigation technology, leading the world in climate-smart irrigation solutions that are consistently more resource efficient, effective, durable and adaptable to the needs of different farmers, crops and climatic conditions. In recent years, integrative digital solutions offer even greater possibilities for sustainable productivity.

- **Partnering to drive** systemic solutions to the most pressing agricultural and environmental needs with corporate, academic and non-profit organizations.

- **Sharing knowledge** with farmers around the world as they implement drip irrigation solutions to help them get the most from their investment and deliver the optimal benefits for their business, their communities and our planet.

→ Please read about what we are doing in each of these areas in the following pages in this report.

"Land degradation, declining soil fertility, unsustainable water use, overfishing and marine environment degradation are all lessening the ability of the natural resource base to supply food."

(UNDP)

"Should the global population reach 9.6 billion by 2050, the equivalent of almost three planets could be required to provide the natural resources needed to sustain current lifestyles."

(UNDP)

Technology and innovation

Our strategic goal is to provide simple and affordable technology to enable mass adoption of smart irrigation for farmers of all sizes, from large-scale agri-producers to smallholders.

Underpinning the ease of use of our irrigation solutions is a wealth of know-how and leading-edge technology: the way we craft our dripperlines and their precise specification, strength, thickness, adaptability and durability in all forms of soil and conditions; emitter technology that feeds crops with precise amounts of water and nutrients, and digital tools that help growers deliver higher quality yields using fewer resources. Our consistent investment in technology and innovation has kept Netafim at the forefront of drip irrigation solutions for the past 50 years. In the past two years, record achievements in delivering technology for higher precision irrigation and enhanced digitization have characterized our advancements in innovation.

CONTINUING TO LEAD INNOVATIVE IRRIGATION TECHNOLOGY

Low-flow is the name of the game in irrigation technology as it reduces the total cost of the irrigation system, raises agronomic performance through more efficient irrigation and fertigation, and improves yields. We have led the market over the years with irrigation systems that offer the lowest flow rates in the industry. In 2017 we launched our Typhoon™ Plus thin wall dripperline with a low flow of 0.5 liter/hour, setting a new standard in clog resistance and enhanced performance in challenging water conditions.

In 2017, we also launched an innovative solution that prevents root intrusion into the dripper, one of the most challenging problems affecting the use of Sub-surface Drip Irrigation (SDI). Buried underground, close to plant roots, the SDI drippers are susceptible to the intrusion of roots into the dripper, which cause uneven water flow, affecting the health and quality of crops. As a response to this issue, we created our XR dripperline coating, a copper-dioxide based antimicrobial technology providing a unique, cost effective, safe solution to prevent root intrusion. Our trials have demonstrated a reduction of more than 50% in the penetration of roots in the dripper versus non-XR protected irrigation.

“Though several products in the market attempted to prevent root intrusion in SDI systems, the XR is the first to effectively reduce root penetration. In addition, it is also sustainable - the XR coating is chemical free and non-deteriorating, meaning there is no leaching of harmful materials into the soil.”

Shai Albaranes, Head of Products & Strategic Solutions

SOLVING FARMER CHALLENGES WITH INNOVATION

Wherever we operate, we aim to understand the needs of local growers and develop solutions to help them succeed.

Reducing costs and increasing efficiency in California

In 2016, we began trials for an improved irrigation solution, designed to address the pressing challenges of farmers in the U.S., mainly in the state of California. The main issue was two-fold: the critical shortage of farm labor with increasing costs of attracting and retaining employees, and stricter regulatory controls on the use of water and nutrients in farming. To address these issues, we developed an enhanced Streamline™ dripperline that significantly reduces overall costs as well as logistics surrounding installation of drip irrigation equipment. Our new Streamline™ dripperline is 15% lighter, uses 20% less storage space and eliminates complex labor-intensive installation procedures. It was developed in collaboration with local growers in 15 field trials and we refined our product development in line with their actual experience. Today, within 18 months of experience in the field, our improved dripperline has gained popularity and is used to irrigate crops across more than 70,000 hectares in the California region.

Modernizing sugarcane production in India

In India, as in other sugarcane-growing countries, more than 50% of crops are manually harvested by more than 12 million workers in rural areas employed primarily by smallholder farmers. The sugar industry in India is the second largest agri-based industry after cotton, and to date, cultivation has been very labor intensive. Understanding that farmers needed a way to produce sugarcane more profitably, we set about delivering a mechanized solution that would transform their operations and give them a better chance of improving their livelihood. Our solution is a dual system: on the one hand, a mechanized planter and on the other, a mechanized harvester. The planter uses seedlings grown in the nursery, instead of the traditional planting of cane sections, enabling a much simpler and faster planting process with a higher rate (96%) of seedling survival. The harvester that we are developing specifically for Indian farmers will help them eliminate much of the manual harvesting process and get to market faster. The prototype is currently being finalized and we plan to manufacture this equipment locally in India in the coming months. Of course, these solutions will be applicable to farmers facing similar challenges in other Asian countries.

The single-season Streamline irrigation solution saves time, labor and money for farmers across **70,000 hectares** in California

Mechanized sugarcane planting and harvesting **improves yields** with **lower labor costs** in India

The Internet of Things (IOT) refers to the linking of many different internet-connected devices to transfer vast amounts of data without human interaction. Applying IOT systems to farming, we know more than ever about the state of soil, crops and yield effectiveness, enabling true precision farming for sustainable productivity.

A REVOLUTION IN FARMING - ENTER DIGITAL

The use of technology in agriculture is no stranger to Netafim. We have been steadily improving our understanding and development of digital solutions, enhancing our digital offerings as technologies such as cloud computing, big data and the Internet of Things continue to evolve and become a platform for agricultural transformation. In the past, what we called Crop Management Technology (CMT) is now Digital Farming, and it supports leading-edge solutions to global sustainable farming challenges, addressing food security, water scarcity, land availability and climate change mitigation. Digital Farming technologies include irrigation monitoring, water and nutrient control and real-time adjustments for optimum yields with fewer resources.

For the past 3 years, we have been developing the next generation of our Digital Farming solutions - NetBeat™, launched in May 2018 following testing in numerous field trials. NetBeat integrates the capabilities of current Netafim automated crop management products to offer the first digital solution to enable automated irrigation, fertigation and crop protection. Combining everything into one closed-loop platform, NetBeat enables farmers to monitor, analyze and control irrigation systems remotely. In addition, NetBeat features crop models for 15 different crops, incorporating years of amassed data and experience at Netafim together with other industry best practice and statistics, providing farmers with growing models that are crop, geography, climate and weather specific. Once in the field, the NetBeat continually collects weather, soil and plant conditions data through sensors and weather stations, comparing live data with the crop growth protocol and making automatic irrigation adjustments.

“NetBeat is the first system in the world, that provides a solution for all elements together: monitoring field conditions, collecting and analyzing data, delivering recommendations for irrigation and fertigation, and automated control of the full growing cycle. Results we have seen across the world are truly incredible. This is just the start of our digital farming revolution.”

Guy Leventon, Head of Digital Farming

A digital solution for corn growing

Irrigation has always been a challenge with commodity crops where farmers have been reluctant to adapt to new technology. As part of our mission to encourage mass adoption of drip irrigation to enable all farmers, including corn farmers, to grow more with less, we are continually developing tools to help farmers do just that. In 2016, we introduced our NetMaize application, helping farmers determine the best quantities of water and nutrients to ensure optimum corn yields.

To test the app’s effectiveness, we conducted a friendly challenge between leading Netafim agronomists and field trials in corn plots in Israel managed using NetMaize. Using the app, we were able to deliver 29% more corn using 15% less water. This proves that the combination of human knowledge and experience that builds the basic functionality of the app can be exponentially amplified through technology, considering masses of data in real time that no human team can achieve. NetMaize enables all corn farmers to have their own personal agronomist in their pocket at all times, helping them deliver more with less.

29% more corn
(from 16 to 21 tons/hectare)
with **15% less** water
achieved in trials using
NetMaize

NetMaize app has been
downloaded more than
6,000 times by users from
49 countries across
5 continents.

Check out the NetMaize app for IOS or Android here: NetMaize

Agritech partnerships

Our strategic goal is to engage in partnerships to advance technology uptake and to adapt to the needs of local farmers.

Driving the uptake of drip irrigation is best done in partnership. At Netafim, we collaborate with partners who are as committed as we are to improve farming practice for the benefit of people, planet and prosperity. Complementing our agronomic knowledge with other solutions to provide more options for farmers, we are able to support the uptake of drip more effectively.

CROP PROTECTION WITH EVERY DROP

In 2017, we engaged with multinational life sciences company, Bayer, through its Crop Science Division, on a new crop protection approach which we call “DripByDrip”. DripByDrip is the targeted application of Bayer’s crop protection products through Netafim’s irrigation systems, enabling direct, controlled administration of crop protection to specific parts of the plant roots. A very important advantage of the new system is its high safety level for the farmer. It is a closed transfer system, so that the farmer does not touch, smell or have any direct contact with the crop protection product. The system rinses the crop protection canister once the injection is complete. Aside from the labor savings through automated application of crop protection, and the optimization of quantities used through our drip systems, there is another major advantage of DripByDrip versus alternative methods of applying crop protection: minimizing quantities of crop protection products leaching into the ground and contaminating subsurface soil and water, as well as reduced chemical residues on fruits and vegetables.

“To satisfy the increasing global food demand, we need to find clever solutions to further reduce the environmental impact of farming and save natural resources while assuring high agricultural productivity. With the new system, farmers will need less water and crop protection products, because the crops are taking them up directly through the roots, which results in higher yields and better quality for farmers and consumers.”

Mathias Kremer, Head of Strategy and Portfolio Management at Crop Science, a division of Bayer

Together with Bayer, we conducted several trials, among others on a farm in Mexico for peppers and tomatoes. The test results showed that yields increased, and net revenues rose due to improved quality, and the number of crop protection product applications was reduced by up to 53%. Successful proof-of-concept trials were also carried out in Israel, Spain and Vietnam.

“DripByDrip is a solution to long-standing challenges of farmers. Drip irrigation increases the efficiency of fertilizer application, and helps prevent nitrate leaching into groundwater, which becomes a serious hazard in agricultural regions where overdosing of nitrogen is commonplace. With DripByDrip, we advance precision application of fertilizer and other products, making the entire farming system more efficient and more environmentally favorable.”

Dubi Raz, Corporate Agronomy Director

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

DripByDrip improves yields, reduces water use and most significantly, helps avoid nitrate groundwater contamination.

MAKING FARMING SAFER

Nitrates are vital for modern agriculture and widely used as fertilizers to support crop growth. However, an excess of added nitrates can seep into groundwater, posing health risks for humans with high costs for purification. Regulatory bodies are taking a stricter approach regarding the use of natural or chemical nitrate-based fertilizers, especially in Europe.

To help address this increasingly concerning issues, we are collaborating with a leading agronomist and research partner in Israel to develop a system that continuously identifies the presence of nitrates in the soil through use of special sensors. Our system is currently in prototype and we are looking to bring this to market in the coming years. In the meantime, we are planning trials in Germany and hope to demonstrate positive results next year.

COLLABORATING TO PROVIDE FINANCING SOLUTIONS IN THE U.S.

In 2017, Netafim USA launched drip irrigation financing for growers, a service we developed in collaboration with DLL Group, a subsidiary and the financing solutions partner of the Dutch Rabobank. As the industry's only program that offers end-to-end financing of complete drip irrigation systems - including materials, design, installation and labor costs – we are extending our commitment to agriculture beyond the field and into the business of more profitable farming. Our offering involves a fast and easy credit review process, competitive rates and no additional collateral -- meaning no trips to the bank for busy farmers. Farmers pay back the loans when they receive their crop revenue, allowing them the flexibility to expand their fields and improve their cash flow while using drip irrigation to make their entire farming operation more efficient. To date, around 20 farmers have received loans totaling $1.5 million, and we forecast more than $4 million in loans in 2018.

"Faced with rising production costs and increased global competition, the decision to invest in drip irrigation technology is more than an equipment purchase; it is an investment in the future of a farm. At Netafim, we are invested in the success of U.S. agriculture, having been a prominent leader in this market for decades. It makes absolute sense for us to collaborate to help our customers and prospective customers ensure they can get the best out of their farms, now and in the future."

Ze'ev Barylka, Marketing Director, Netafim USA

COLLABORATING TO PROVIDE FINANCING SOLUTIONS IN INDIA

In 2013, Netafim India established the Netafim Agricultural Financing Agency (NAFA) - a non-banking financial company to provide fast financing solutions to smallholder farmers who are not able to fund an initial investment in drip irrigation and cannot secure loans or financing support by other means. NAFA is a collaboration between Netafim India (51%), Atmaram Properties, an Indian real estate group, and Granite Hill India Opportunities Fund, a private equity fund.

NAFA has provided a route to financing for smallholder farmers that understand the benefits of drip but fail at the first hurdle – getting the finance. NAFA makes it easy, enabling tens of thousands of farmers to grow more with less. In 2017 alone, $31 million were granted in loans to farmers to cultivate 26,000 hectares with drip irrigation.

In Khopdi village in Maharashtra state, farmer Mr. Nayan Sanjay Wankhade has been growing cotton and turmeric for many years. He wanted to install drip irrigation to improve his crop yields but was not able to obtain a bank loan. He approached NAFA and in a matter of weeks, received a loan as well as practical support from the local Netafim team. Mr. Wankhade has now installed drip irrigation on a 4-hectare plot and confirms the following benefits in the first year starting in 2017:

40% increase in cotton yield
35% water saving
20% reduction in labor costs
20% increase in income

Mr. Panjab Bhange grows cotton, sugarcane and soybean at Karnajkhed village, Maharashtra state, on a 35-hectare-field. He was refused a bank loan but remained keen to install an irrigation system before the sowing season. After being referred to NAFA via an existing Netafim customer, Mr. Bhange obtained financing with a customized repayment schedule adapted to his specific capabilities and needs. In 2017, Mr. Bhange was able to install drip irrigation on a 4.85 hectares plot. He confirms the following benefits in the first year:

45% increase in sugarcane yield
50% water saving
10% reduction in labor costs
30% increase in income

Between 2013 and 2017, **69,000 farmers** from **9 states** in India benefited from loans totaling **$104 million**, enabling them to install drip irrigation across **81,000 hectares** (around 150,000 football fields)

Advance knowledge sharing

Our strategic goal is to increase practical support and technology knowledge sharing for small and large farmers to enable tailored irrigation solutions.

Effective drip irrigation relies on expert agronomic knowledge that is specific to crops, climates, agricultural conditions and, of course, the drip irrigation systems in use. At Netafim, we have more than 850 agronomists and product experts on our team, and we count many more among our distributor network of partners around the world. And we like to share our experience. It is mission critical for us that farmers obtain optimal results from their irrigation systems because that both ensures their success and encourages other farmers to consider converting to drip as well. We are also happy to share success stories of growers from all corners of the globe using drip with the support of our expert teams. Their success demonstrates the contribution of drip irrigation to advancing food security, managing water and land scarcity and improving livelihoods and prosperity.

INNOVATING WITH DRIP IN MONGOLIA

In 2017, Netafim implemented smart irrigation and fertigation solutions in a green belt project in Inner Mongolia. The project was conducted for Tian Long Ecology Company, a government contractor charged with maintaining the green belt lining the 100-kilometer main express highway.

This is an important project for Mongolia, deemed necessary to help combat the pollution coming from Mongolia that has been affecting air quality in Beijing, China and the millions of people in the area. The idea is that vegetation absorbs the sand and pollution and helps reduce the number of particles traveling in the air and polluting Beijing and neighboring areas. Tian Long established the green belt some years ago with trees and vegetation - however, maintenance was costly and water use was intensive.

Enter Netafim. We worked closely with Tian Long Ecology and developed a tailored drip irrigation solution for the highway green belt. Installation was a challenge as the highway remained in use as irrigation systems were installed on both sides of the route. The installation took place in three phases and involved the best of Netafim's smart solutions for automated irrigation and fertigation. All key efficiency parameters improved, improving the quality of life for residents of Mongolia and China, and helping create a cleaner planet.

Netafim's drip irrigation systems in Mongolia achieved:

70%
water saving versus manual irrigation

400%
faster tree growth (50-70 centimeters yearly)

$3 million
savings in maintenance costs over 2 years

FAMILY FARMING WITH DRIP IN KANSAS

In western Kansas, the hot sun and prairie winds dry up the water from field crops, making most irrigation methods ineffective. In addition, the depletion of the Ogallala Aquifer, the main water source in the area, has led to stringent water restrictions for farmers. This was the context causing the Eitel family to move to drip irrigation in 1996. Seeking ways to use less water than flood irrigation, while reducing labor intensity, the family installed their first subsurface drip system on a 60 hectares field, becoming drip irrigation pioneers in their county. 20 years later, the family now cultivates crops across 320 hectares.

Overall, subsurface drip irrigation and holistic management for soil health generates ongoing savings of up to 25% of water alongside other labor and cost savings. Equally important, corn yields have increased from 450 to 525 bushels per hectare (17%). In 2017, Mark Eitel installed sensor-based soil moisture monitoring that makes water use even more efficient. In addition, he installed cloud-based software to monitor his corn crops remotely in real time, enabling true precision agriculture in a sustainable format.

CLICK TO WATCH

CLIMATE-RIGHT VEGETABLES IN PAPUA NEW GUINEA

Salad vegetables respond very differently in different climatic conditions. In a tropical climate, such as that of Papua New Guinea in the South-Western Pacific, it's not easy to grow salad vegetables. Having established a new 5-hectare greenhouse farm with a further hectare of trestle-grown crops to grow cucumber, tomatoes, lettuce and peppers, our customer was getting yields well below expectation and well below a sustainable financial threshold. After three years of trying to improve both quality and yield, our customer was desperate.

Therefore, after our assessment in 2017, we installed Crop Management Technology (CMT) for full automation, reset irrigation patterns, revised Nutrigation™ protocols, trained the local staff, established measuring stations to track water drainage and got the system up and running to standards that our customer hadn't believed possible – all within a few short months. After our work, our customer was happy, producing a much higher yield of several tons of tomatoes per week, using less than half the previous volumes of water and achieving drastic cost reductions through using less fertilizer.

Such a transformation is not only about agriculture. It's a benefit to the entire community. Vegetable prices in Papua New Guinea are high as most crops are imported due to the challenges of local growing. By helping our customer grow more with less, we increase access to home grown, affordable food.

More tomatoes

Less water

Less fertilizer

Happy in Papua New Guinea

MORE MELONS PER HECTARE IN VIETNAM

In Vietnam, we assisted our customer, a Vietnamese multi-billion-dollar conglomerate, to more than double its yield of melons in 30 hectares of greenhouses. Historically, there is a low yield for melons grown traditionally in Vietnam. In Asia, where the sweetness of melons is highly valued, tropical conditions challenge the plant to distribute sugar to several melons, so traditionally, only one fruit per plant is cultivated.

Netafim undertook to deliver a turnkey greenhouse array to grow melons, and potentially other fruits and vegetables. In early 2016, we got started. Using our smart irrigation solutions, we demonstrated to our customer how to deliver up to three melons per plant in the rainy season and two in the dry season, doubling or tripling the yield while retaining the sweet flavor. We proceeded with the installation of smart greenhouses with complete Crop Management Technology (CMT) for automated control of growing conditions and nutrigation supply to ensure the best, consistent quality across the entire crop.

DRIP IRRIGATION FOR WINE GRAPES IN CHINA

Yantai Changyu Group is China's first industrial producer of wine with a vineyard located in Yantai, Shandong Province. The 266-hectare vineyard can produce 3,500 tons of high-quality wine grapes annually and is part of a park developed by Yantai Changyu Group that includes a Research and Development Center and production facility, attracting tourists from all over the world. In planning the vineyard park, Yantai Changyu adopted advanced garden planning and viticulture concepts as well as best agronomic practices, including irrigation. During 2016-2017, Netafim installed automated irrigation and fertigation based on real time monitoring of the soil and plants through sensors, ensuring precision irrigation and safe administration of fertilizer for the best crop results. Netafim agronomists and Digital Farming specialists supported the park leaders and plantation managers at each stage of the development to ensure optimum outcomes. This initiative, an important economic and social development for the region, was recognized by the Director General of the China Water Resources Department, the Deputy Governor of Shandong province and the leaders of various local governments who visited the park on its completion.

EDUCATION

As the second pillar in our sustainability strategy, EDUCATION is essential to drive the mass uptake of drip irrigation solutions. We have often said that we are creating the market we serve in drip irrigation, as transforming agriculture requires a fundamental change in mindset and practice. This means, first of all, understanding new possibilities and, including the use of technology, that has the possibility to deliver real benefits for people, the planet, and our global prosperity. Drip irrigation represents a big change for traditional farmers, so we spend much of our time and efforts in helping educate farmers and those who influence policy and farming practice.

The three core aspects of our education pillar are:

- **Access and education:** Raising awareness and educating farmers in the use of drip irrigation to help them grow more with less.

- **Public sector collaboration**: Maintaining active involvement with governments, the United Nations and other international organizations and NGOs to advance policies that helps farmers improve their livelihood by using drip irrigation.

- **Private sector collaboration**: Collaborating with private sector companies, NGOs and the government sector to promote smart irrigation solutions throughout the entire food value chain.

→ Please read about what we are doing in each of these areas in the following pages in this report.

"Water is key to the success of all the Sustainable Development Goals, SDGs, and therefore essential for delivering on the 2030 Agenda that aims to transform our world into the future we want."

(SIWI Stockholm International Water Institute)

"More than 2 billion people globally are living in countries with excess water stress, defined as the ratio of total freshwater withdrawn to total renewable freshwater resources above a threshold of 25%. Northern Africa and Western Asia experience water stress levels above 60%, which indicates the strong probability of future water scarcity."

(UN Sustainabledevelopment.org)

Access and education

Our strategic goal is raising awareness and educating farmers in the use of drip irrigation to help them grow more with less.

Driving the uptake of drip irrigation is, perhaps surprisingly, rather a complex task. Despite the indisputable benefits of drip irrigation for sustainable agriculture, farmer livelihoods and climate mitigation, barriers remain. These include reluctance of farmers to change traditional growing methods, initial equipment outlay for low-income smallholders and lack of awareness and education. We have made it part of our strategic mission to change this. We do so by talking about drip irrigation at every opportunity and providing tools and training to thousands of farmers each year around the world.

GROWER SUCCESS DAY FOR KANSAS FARMERS

Approximately 60 growers attended an educational event we hosted in partnership with our dealer, NutraDrip, in Kansas in 2017. The event included presentations, lectures and a field tour. Netafim staff and dealers presented information on agronomic best practices and a Netafim customer shared his experience with subsurface drip irrigation and the benefits gained.

TRAINING FOR CHINESE FARMERS

During 2017, we conducted more than 40 events in China for dealers, growers, agriculture companies and government officials. These events included training on irrigation technology, fertigation, technical product training and crop-specific seminars.

For example, Netafim's China North West sales team held an Israeli Smart Irrigation Solution Seminar in Xi'an. Seventy-four general managers of agricultural companies participated in this two-day seminar. The first day included lectures by Netafim experts on our technology, products, expertise and customer support as well as a presentation from Haisheng Group, the world's largest concentrated juice producer and exporter, in which they described their successful experience with Netafim's products and services. The second day included a visit to a Haisheng Group plantation to see Netafim's irrigation systems at work first-hand and learn from Haisheng Group's experience.

Farmer education in 2017 by Netafim:

3,128
education events including field tours, training, lectures, worshops and roadshows

18,380
hours of education in total

Over **200,000**
growers reached through all education events

Key countries
Brazil, China, India, Israel, Mexico, Turkey, U.S.

Public sector collaboration

Our strategic goal is maintaining 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.

Advancing access to drip requires more than making our products available and even providing financing solutions as we do in some markets. We also work to influence the policy makers and regulatory frameworks that promote and encourage the uptake of drip irrigation. We maintain a broad range of collaboration ranging from UN Working Groups to regional or national partnerships and participation at significant water or agri-events. In fact, we could fill an annual report just by listing the hundreds of collaborative events we participate in each year. However, we share below just a few examples of these over the past year or two:

- We are active in the UN Global Compact and the UN CEO Water Mandate. Businesses which are committed to these initiatives make a positive impact on people and the planet and align their contributions with UN priorities and 2030 Sustainable Development Agenda.
- We are affiliate members in the **SAI platform** and participate in advancing sustainable agriculture practices.
- We support the **Grow Africa Partnership**, founded jointly by the African Union (AU), The New Partnership for Africa's Development (NEPAD) and the World Economic Forum in 2011. The Grow Africa Partnership comprises over 200 companies and governments in 12 countries who have made formal commitments to invest in agriculture.
- We are regular participants in **Stockholm's annual World Water Week.** This week of events is the annual focal point for the globe's water issues, organized by the Stockholm International Water Institute (SIWI). As the Stockholm Industry Water Award Laureate (2013), signaling our contribution to addressing water scarcity and sustainable development with more than 10 million hectares of irrigated farmland, we remain committed to advancing knowledge, tools and systems to address the world's water and climate challenges. In World Water Week 2017, our Chief Sustainability Officer, Naty Barak, presented to delegates on collective action to support water and climate outcomes with examples of initiatives from the experience and practice of Netafim.

17 PARTNERSHIPS FOR THE GOALS

ADVANCING QUALITY STANDARDS FOR DRIP IRRIGATION

At Netafim, we help advance standards across the industry to set global standards for the benefit of all farmers who use irrigation systems. Industry standards provide farmers with a tool to acquire and deploy irrigation systems that meet the most stringent quality standards and provide a common language for determining quality, and for measuring and testing, so that farmers everywhere can understand what to expect from drip irrigation. All Netafim products are certified to relevant International Standards Organization (ISO) published standards.

Our Chief Sustainability Officer, Naty Barak, serves as the Chairperson for the ISO/TC 282 Water Reuse Technical Committee for the development of standards to define the processes for reuse of wastewater in different ways, including drip irrigation. In 2017-2018, this Committee published ISO 20760: “Water reuse in urban areas - guidelines for centralized water reuse system”.

Netafim also participates in the Technical Committee, chaired by the Standards Institute of Israel (SII), ISO/TC 23/SC 18 for irrigation and drainage equipment and systems. This committee is chaired by Eliezer Kelmeszes, Head of Product Standard at Netafim. In 2018, this Committee published ISO 7714: “Agricultural irrigation equipment -- Volumetric valves - General requirements and test methods”.

In 2017, ISO published an International Workshop Agreement (IWA) called “Understanding and Applying Drip Irrigation for Sustainable Agriculture”, the result of an initiative led by the Standards Institution of Israel, ISO and Netafim. This document reviewed the benefits of drip irrigation in relation to other practiced irrigation methods, such as increased yield, reduced water consumption, reduced energy consumption, reduced contamination of groundwater and surface water, reduced GHG emissions, and reduced labor. The IWA also outlined a future standardization roadmap. Netafim experts Naty Barak, Dubi Raz and Dr. Itamar Nadav led the workshop during Stockholm 2016 World Water Week that enabled the development of this IWA.

WATER BUSINESS DAY

This event in March 2018, an initiative of the business sector, was held in Brazil in preparation for the World Water Forum, organized every three years by the World Water Council, aimed at putting water on the international agenda.

Business leaders, and representatives from industry associations and international organizations participated in Water Business Day in panels and workshops examining innovative approaches and solutions to secure and share water in the industrial sector. The outcome of the event was presented at a special session of the 8th World Water Forum.

Naty Barak, Netafim’s Chief Sustainability Officer, participated in a Leadership Panel discussing Netafim’s solutions, the economic value of water and the need for collaboration between the civil society, governments and businesses to increase the efficiency of water management.

6 CLEAN WATER AND SANITATION

SAI DELEGATES LEARN FROM NETAFIM

In 2017, the Sustainable Agriculture Initiative Platform (SAI Platform), the global food and beverage (F&B) initiative for sustainable agriculture with over 90 corporate members, convened a learning field journey in Israel on Best Practices in Water Management. The purpose of the visit was to learn about practical solutions for areas struggling with drought, water availability and scarcity and other challenges and opportunities that can be reapplied in different sourcing regions. Netafim was privileged to host this visit, with delegates from major F&B companies such as Coca Cola, Danone, PepsiCo, Innocent Drinks and more, together with other water sector players such as the World Wildlife Fund (WWF) and SAI Platform delegates. On the field journey, delegates had the opportunity to visit Netafim's factory at Hatzerim, view drip-irrigated jojoba plantations thriving in the desert, see desalination facilities and meet with local water experts.

"For me, agronomic practices adapting to the local context of very harsh water scarcity were eye openers. The high level of innovative practices is certainly a key component of this high adoption rate, along with farmers' focus on cost management and quick and flexible adaptation to market demand."

Axelle Bodoy, Global CO Manager, Danone

We were thrilled to show SAI Platform colleagues our technology innovations in drip irrigation and examples of best farming practice using irrigation solutions under some of the most challenging conditions. We look forward to assisting more farmers around the world grow more with less using our innovative drip technologies.

A SUMMER OF DIALOGUE ON WATER IN CALIFORNIA

During the summer of 2017, our Chief Sustainability Officer, Naty Barak, embarked upon a dialogue tour of several organizations that are connected to advancing smart farming, sustainable agriculture and alleviating water scarcity. The purpose of these dialogues was to reconnect with our communities in a strategic part of the world for drip irrigation and for Netafim, review current perspectives and share ways of improving our collective contribution to global prosperity.

"It is clear to me that smart farming is changing the destiny of people and communities. For most of my working life I have advanced drip irrigation and promoted its benefits. We have scientific proof that drip irrigation is water, energy and resource efficient, and I share a strong personal conviction that the way to build sustainable livelihoods and change the destiny of people and communities is through smart farming. In California, I was able to see the proof of these theories after 36 years of work in this region by my colleagues here in Netafim USA. Drip irrigation, with Netafim having led the way, has had an undeniably positive impact on California. The magnitude is impressive. The Central Valley, where you can see drip-irrigated fields stretching right out to the horizon, Napa and Sonoma with magnificent scenery, the Salinas area and the coastal farms, and all the way to the south - California is a drip irrigation country."

Naty Barak, Chief Sustainability Officer

Here are some insights from these summer dialogues:

"I believe one of the key solutions to improved water management is drip irrigation and its ability to conserve water efficiently and control the location, quality and timing of water, as well as a blend of water and fertilizer, provided to plants both at the surface and at the root level."

Chris Holmes
Senior Advisor, The Boston Consulting Group

"The fight between urban and agricultural water users has always been at the forefront of water politics in California. While agricultural water use makes up 80% of the consumption in the state, it also provides jobs, adds to our economy, and feeds the world. Water conservation cannot be a one-size-fits-all approach for urban and agricultural uses."

Marc Levine
Chair of the California Legislative Jewish Caucus

"Drip irrigation must be considered as part of the solution to our water challenge. Here in Salinas Valley we grow crops that are quick turning and have critical water requirements. Over the past 25 years, irrigation water use has declined by 12% while crop production has increased by 45%."

Norm Groot, the Executive Director of the Monterey County Farm Bureau

"We believe the biggest challenge is the amount of water that is being pulled out of the aquifers annually. I think we are mismanaging the water that we do have by not using drip irrigation. Drip absolutely must be a part of the solution going forward as it can save over 70% in water usage and it helps to get water to where it is most needed."

Scott Thompson and Brandi deCarli
Farm from a Box

Read the full set of water perspectives on our blog:
blog.netafim.com

Private sector collaboration

Our strategic goal is to collaborate with private sector companies, NGOs and the government sector to promote smart irrigation solutions throughout the entire food value chain

Influencing the habits of farmers can often be accelerated through the work of major nonprofit organizations or private sector customers who fund and advance new ways of working. At Netafim, we are always pleased to support such initiatives and work closely in a range of private sector partnerships to help advance sustainable agriculture goals.

SUSTAINABILITY IN THE DESERT: A UNIQUE INITIATIVE IN ISRAEL

Since 2011, we are proud to support a unique initiative in the Israeli desert. Devised and led by The Sustainability Laboratory, a U.S.-based non-profit organization, and the Hura Municipal Council in Israel, Project Wadi Attir is a sustainable, community-based, organic farming initiative on over 40 hectares of desert land. Netafim has been an active partner of this initiative since its inception, volunteering our expertise, guidance, support, and hosting meetings at our Hatzerim site. Two separate irrigation systems are installed at Project Wadi Attir - one for freshwater and one for treated wastewater.

Project Wadi Attir has developed impressively and now boasts the production of organic olive oil, dairy products and an all-natural line of cosmetics. The Visitors Center hosts hundreds of visitors each month and is helping spread knowledge of sustainable farming and eco-communities as a regional education hub. In 2017 for example, students from 40 schools visited the project - 1,200 students per week.

Project Wadi Attir is making a true contribution to improving the lives of the Bedouin community in the Negev and is a model for making the desert productive in an eco-friendly way. Income from the Project Wadi Attir venture has been increasing steadily each year.

"The planning and implementation of this project was made possible through a multidisciplinary team of dedicated people that shared a big vision and supported its progress step by step to its successful completion. This project uniquely combines sustainable agriculture practices with Bedouin traditions, connecting their rich history and a sustainable future."

Dani Kolumbus, Water Supply and Irrigation Expert, Project Wadi Attir, Netafim

For more information about Wadi Attir, see:
www.sustainabilitylabs.org

Ecosystem restoration at Wadi Attir

After years of poor farming practices, the soil was infertile, and no crops could be cultivated. To reverse desertification, **5,000** trees of different species were planted and harvested rainwater was used for irrigation. This created a new landscape of biodiversity, now home for **55** species of birds, insects and other wild animals.

TRANSFORMING AGRICULTURE, INCREASING FOOD SECURITY IN NIGER

The Niger Irrigation Project is a 3-year (2016- 2019) collaboration between the International Finance Corporation (IFC) and Netafim. This project is one of the IFC's Climatic Resilience Program (PPCR) initiatives in Africa, aiming to implement sustainable and efficient agriculture to ensure food security and enhance climate resilience.

Funded by the IFC, Netafim's role is to design and install appropriate family drip irrigation systems for 250 m2 and 2,500 m2 parcels, provide expertise, training and support and engage with local partners to secure the provision of drip irrigation systems, solar pumping systems and micro-financing for farmers. Overall, the project aims to reach 120 hectares of drip irrigated plots, train 1,200 smallholder farmers, including at least 500 women and establish 800 microcredit schemes to assist farmers in adopting new irrigation technology. Still in its early stages, the initiative is progressing impressively.

In order to scale up activities, Netafim has recruited and trained six Community Field Assistants to train and assist farmers. The local NIP team is actively developing local partnerships with dealers and suppliers as well as credit facilities with the private sector to accelerate uptake. Early results are showing major advantages for the local farming population.

TRANSFORMING AGRICULTURE IN MALAWI WITH USAID

The Feed the Future Malawi Agriculture Diversification Activity (AgDiv) was successful in securing USAID funding to advance efforts to transform agriculture in Malawi. Feed the Future Malawi established AdDiv supported by USAID, to accelerate crop diversification and improve agricultural outputs for the benefit of the local economy and community AgDiv engaged with commercial farms which can can act as training hubs, where AgDiv partners implement, train and support farm staff and share best practice using demonstration plots. We in Netafim are committed to provide training and support for irrigation, providing the drip irrigation systems and kits, as well as know-how, and technical and agronomic support. In the initial phase, Netafim installed drip irrigation on 10-hectare pilot plots of paprika, groundnut and sweet potatoes at 5 farms.

One of the participating farms is Horizon Farming Limited, a commercial farm that works with a network of more than 2,000 farming households in 17 local communities, as well as 3,000 groundnut and paprika growers in 50 villages that farm roughly 1,000 or more hectares.

"The smart application of drip irrigation will allow farmers to grow much wider variety of crops throughout the year. This allows farmers to break free from being totally dependent on a single harvest for their yearly income and food."

Carl Larkins, Chief of Party of the USAID Feed the Future Malawi Agriculture Diversification Agriculture program

"The 10-hectare pilot had such a positive impact on the farmers that a big scale-up is now in process, with over 50 hectares planned for 2018, and many more in the following years!"

Shay Haxter, Head of Africa Project Unit, Netafim

Outcomes to date in Niger

- **10** hectares are drip irrigated with solar pumping, yielding tomatoes, peppers, melon, watermelon and other crops on 6 farms, replacing other irrigation systems.
- Farmers observed water savings ranging from 30% to 55%, with an **average water saving of 50%.**
- More than **50** farmers are trained, **40** of whom are women, to use Netafim drip irrigation solutions.

Outcomes to date in Malawi

- Increase in yield from **1.5 to 5 tons/hectare** for paprika
- Paprika and sweet potato cultivation during the dry season for the first time
- Drip irrigation water efficiency of **95%** (versus 40% previously)

A NEW TRANSFORMATIONAL ALLIANCE: BETTER LIFE FARMING

About 450 million smallholders around the world are vulnerable to multiple challenges - lack of finance, adverse climate impacts, water scarcity, pests and crop diseases, rural migration, fluctuating commodity prices, and regulatory barriers - and realize only a fraction of their potential productivity. Up to 2 billion people depend on smallholders for their livelihoods.

Better Life Farming collaborates with local partners to provide smallholders tailored solutions adapted to their needs and locality including seeds, precision irrigation, crop protection, finance and insurance.

Partners

Bayer / IFC International Finance Corporation WORLD BANK GROUP

NETAFIM™ / Swiss Re Corporate Solutions

The Better Life Farming approach:

- Agricultural education and technical know-how, entrepreneurship, access to resources and markets
- Customized agronomic solutions to deliver high quality seeds, crop protection products, and precision irrigation technologies
- Insurance and risk transfer solutions to help farmers manage risks, protect their income and ensure they have access to credit.
- Partnerships with public, private and local organizations to combine skills and knowledge for the benefit of smallholders.

For more information, see:
www.betterlifefarming.com

Ahead of the formal establishment of the Better Life Farming Alliance, the collaborative approach was tested in several countries in 2016 and 2017:

1 NO POVERTY

2 ZERO HUNGER

Kenya

22 farmers across15 hectares

Focus on potatoes, a critical crop for the region

Pilot farmers gained **50% higher** yields than neighboring farms

India

20 farmers

Focus on green chili, an important cash crop that provides consistent income

Pilot farmers **doubled** their yields and tripled their income

Philippines

40 farmers across 69 hectares of land (300 farmers by the end of 2017)

Focus on rice in areas where smallholder rice farmers significantly contribute to the local economy

Pilot farmers increased yields by **57%** and gained **2.7 times** increase in net income

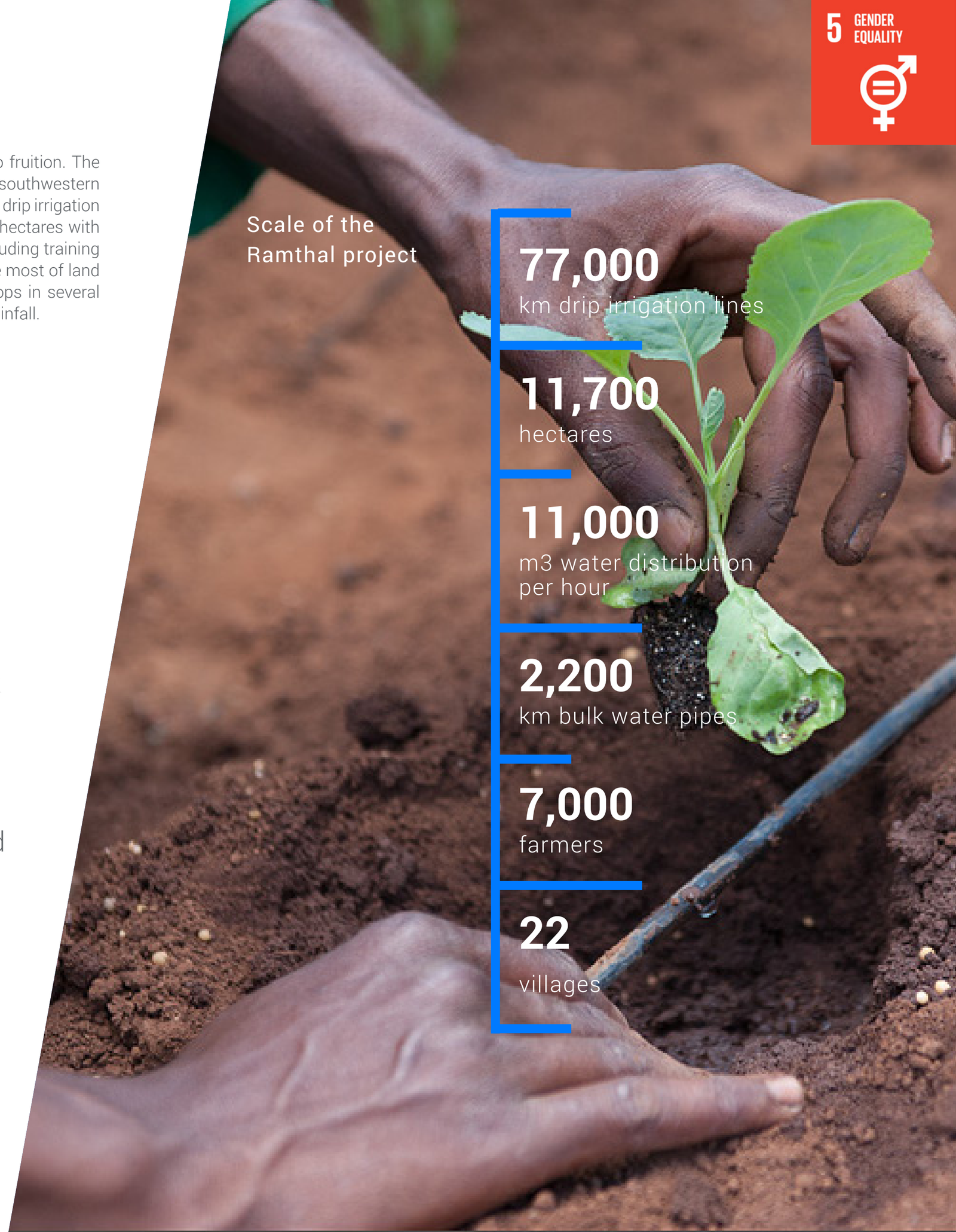
A FLAGSHIP COLLABORATION IN KARNATAKA

In 2016, a flagship project of which we are especially proud came to fruition. The Ramthal Community Drip irrigation Project in Karnataka, a state in the southwestern region of India, is the world's largest fully automated community-based drip irrigation project. Netafim India installed drip irrigation systems across 11,700 hectares with fully automated scheduling and a full crop management package, including training for cultivating the most commercially profitable crops and making the most of land and equipment. In October 2017, farmers saw the first monsoon crops in several years - thanks to drip irrigation that enables crop cultivation without rainfall.

CLICK TO WATCH

"Before drip irrigation we used to get good returns only if it rained well. When rain failed, we lost investment on seeds, fertilizer and labor costs. With no other option, we were forced to sell our land to repay our loans. Now, we have gained good farming skills and experience from Netafim."

Woman farmer from the Karnataka region



FROM CLOUD TO PLATE: PARTNERING FOR HI-TECH AG IN JAPAN

During 2016-2017, we supported the new Iwata Smart Agriculture Project, a pioneering initiative in Japan, transforming the way agriculture is managed. The initiative was launched in 2016 with three partners: ORIX Corporation, Masuda Seed Co., Ltd., and Fujitsu, each bringing different skills to co-create a new agriculture business model. The project established a factory consisting of several large greenhouses in the city of Iwata in Shizuoka Prefecture, Japan to grow vegetables, starting with tomatoes, bell peppers, and salad kale.

To deliver this visionary plan, Netafim installed a comprehensive greenhouse irrigation system, supported by sensors for measuring temperature, humidity, carbon dioxide levels and the concentration of hydroponic solutions in the greenhouses. The sensors provide remote real-time monitoring of the climate in the greenhouses and activation such as remote opening and closing of windows, starting and stopping of exhaust fans, air temperature control, and other features enable the most suitable environment for vegetable production to be consistently maintained. Data collected by the sensors is sent to Fujitsu's "Akisai" Food and Agriculture Cloud and provides full analytical data over time. In this way, not only are crops produced in a resource-efficient way to deliver best, uniform quality and high yield, but also a comprehensive database is established that predicts optimum greenhouse growing conditions for each crop variety.

Creating a holistic partnership, using technological innovation and deploying cutting-edge drip irrigation solutions is enabling the Iwata Smart Agriculture Project to transform local agricultural output. This, of course, leads to greater food security, regional revitalization and overall, a better quality of life while helping sustain the planet.

BACKBONE

As the third pillar in our sustainability strategy, BACKBONE is our enabler. It's the way we run our business and operate responsibly, aiming to be a good corporate citizen in all aspects of our business in all the markets where we have a presence.

Underpinning our backbone is our approach to ethical conduct and compliance. We aim to comply with all applicable laws and regulations in all markets and operate in line with our Code of Business Conduct.

The four core aspects of our backbone pillar are:

- **Employee engagement**: Developing our employees, improving their wellbeing, and ethical approach.

- **Community:** Supporting the communities in which we live and work, engaging in community projects and initiatives around the world.

- **Lean supply chain:** Reducing our direct environmental impacts and contributing to global efforts to mitigate climate change.

- **Product development for climate change:** Focusing product development priorities on smart irrigation solutions for crops that have the biggest impact on climate change.

→ Please read about what we are doing in each of these areas in the following pages in this report.

"By committing to sustainability, business can take shared responsibility for achieving a better world."

(UN Global Compact)

"Sustainability reporting enables organizations to consider their impacts of wide range of sustainability issues, enabling them to be more transparent about the risks and opportunities they face."

(GRI)

Ethical business practices

Operating ethically, legally and transparently are fundamental to maintaining strong relationships over time with all those connected to our business. Several Netafim policies guide our behavior and help our employees and stakeholders know what they can expect from each and every one of us at Netafim. In all cases, our conduct is founded upon strict compliance with all applicable laws and regulations governing our business everywhere we operate.

CODE OF BUSINESS CONDUCT

The Code of Conduct represents Netafim's business culture values and serves as a moral compass for our daily work. It was written to help employees and directors understand how we conduct our business and interact with each other. The Code creates an inclusive set of organizational principles inspired by the basic values of our company's founders: fairness, hard work, integrity and uncompromising commitment to quality. It applies to all Netafim directors and employees, including managers, without exception and covers all our business activities in all spheres.

New employees learn of our Code of Conduct as part of their induction plan though training and the Netafim portal. Relevant employees receive periodical refresher training from time to time. In 2017-2018 more than 90% of Netafim relevant employees completed an eLearning training module on the Code of Conduct, covering Anti-Bribery & Corruption, Safeguarding Proprietary and Confidential Information, Anti-Trust and Fair Competition and Mutual Respect, and Sexual Harassment prevention.

The Code of Conduct is available on our website:
business conduct policies

OUR APPROACH TO ANTI-CORRUPTION

Our commitment to fighting corruption and advancing anti-corruption practices is embedded in our Code of Conduct and is rooted in our values. We implement our anti-corruption and anti-bribery approach throughout our operations worldwide and observe anti-corruption and anti-bribery laws and regulations as applicable across the jurisdictions we operate business in. Relevant employees are updated and trained in their responsibilities to uphold anti-corruption and anti-bribery practices. Our Code of Conduct includes a prohibition regarding improper payments and guidelines regarding gifts.

In 2017 we adopted an Anti-Bribery and Anti-Corruption Compliance Policy, which reflects our zero tolerance for corruption and which supplements the Code of Conduct, covering our employees and business partners. It includes specific guidelines when dealing with governmental officials, on giving and receiving gifts, hosting, guidelines on provision of donations, and for projects approval. This policy was approved by Company's Board of Directors and implemented within our subsidiaries and their employees in all countries. Local compliance representatives in each subsidiary were or are to be appointed to oversee effective implementation.

Whistleblower Policy

We are committed to high ethical standards and strict compliance with applicable law in all our operation. We require our employees to report on illegal activity or activities not in compliance with our policies through our Whistleblower Policy, which is also embedded in our Code of Conduct. Reports are directed to Netafim's Compliance Officer and Internal Auditor. All reports are thoroughly investigated, and action is taken as appropriate. Anonymous reports can be submitted online via the Netafim's portal and by calling a "hotline". We do not permit nor tolerate retaliation of any kind against employees for complaints submitted under the Whistleblower Policy which are made in good faith, and we take all appropriate steps to ensure that complainants shall not suffer retaliation or retribution of any kind as a result thereof.all reports which are thoroughly investigated. In 2017, we improved ease of reporting by adding an online submission option, in addition to phone, email or post.

In 2017, **90% of employees** completed ethics and compliance training.

Employee engagement

Our strategic goal is to develop our employees, improve their wellbeing, and engage them in our sustainability goals and ethical approach.

More than 4,300 employees spread across 110 countries contribute to advancing Netafim's mission to help the world grow more with less. They drive our spirit of innovation and our business success. We aim to provide a stable, safe and sustainable workplace and encourage the inclusion of women and men from diverse backgrounds.

We encourage employee engagement, commitment and performance by rewarding employees fairly and in line with their experience, capabilities and contribution and offer personal and professional growth opportunities through structured training and development programs. We provide frameworks for employees to participate in voluntary activities that support local communities.

As part of the digital transformation that leads our innovation activities in product development, we have been developing digital platforms to communicate, share knowledge, evaluate employees and enhance our data collection capabilities to better identify Human Resources trends in the company. In 2016, we launched several new digital tools. In addition, we developed an online training program for employees, a leadership program for 400 managers, and mentoring programs for senior managers.

EMPLOYEE DEVELOPMENT AND LEARNING

Our core leadership development program is called our Leadership Compass and it defines expectations for management capabilities and qualities. Each year, we advance different leadership initiatives under the Leadership Compass framework. In 2016-2017, 401 managers participated in a leadership compass development programs, for example:

- 3 - 5 day courses were conducted in several countries including Australia, China, India, Israel, South Africa, and countries of South America.
- Online (live) webinars were conducted for smaller offices including Morocco, Ukraine and Japan.

Additional training programs were conducted throughout our operations as needed.

"Our leadership compass creates not only a shared understanding of what's expected of our managers all around the world, it creates a common language that helps us articulate our expectations."

Shahar Keidar, Global OD Processes Manager

Mentoring managers

In 2018, we started a pilot mentorship program directed at middle managers, focusing on a core Leadership Compass element of leading by example. The program includes Netafim executives who engage in a six-month mentoring program with managers starting new roles. Our initial rollout is in Israel, where mentors will first participate in training to build their own capabilities and mentorship skills.

ONLINE MAKES LEARNING EASY

In 2017, we launched the iLearn, a digital platform for all employees offering learning modules on different subjects. It currently includes 10 modules about Netafim core knowledge and products. It is accessible using smartphones in several languages, making learning as easy as possible for all our people around the world. iLearn also includes core modules such as our Code of Conduct, sexual harassment training and new employee orientation.

In 2017, 1,851 employees from Netafim completed different training modules, investing 2,423 hours in online learning, in addition to classroom training that is conducted around Netafim throughout the year.

Employee engagement highlights in 2017:

2,599
employees trained

11
average training hours per employee

1,851
employees used our iLearn platform

87%
of employees received performance reviews

80%
of eligible employees joined Netafim's Yammer network, of whom 65.5% are active users

DIGITAL PLATFORMS TO SUPPORT EMPLOYEE ENGAGEMENT

As part of the digital transformation that leads our innovation activities in product development, we have been developing digital platforms to communicate, share knowledge, evaluate performance and enhance our data collection capabilities to better identify Human Resources trends in the company. In 2016, we launched Netafim's social network, Yammer, and our knowledge sharing platforms under the Inet name.

"Our digital platforms serve as a set of professional tools for the exchange of information and ideas. They also connect people. Netafim is now a global company, but many Netafim people remember the early days when we were a small business where everyone knew each other personally. We are finding that our digital platforms bring the global workplace closer together, allowing employees from different corners of the world to get to know each other and share professional and personal experiences."

Maya Perry, Global OD Director

Our new digital platforms
making work easier for our employees

Yammer

- Launched in 2016
- Internal Facebook-style social network for connecting employees around the world
- Possibility to form different interest groups - 206 groups created by users to date
- Used by more than 80% of employees
- More than 5,600 posts to Yammer since launch - more than 15 per day
- More than 4 responses per conversation thread

iNet

- Launched in 2016
- Professional knowledge sharing repository and platform
- Operates globally and locally - each local company can create its own community portal on Inet
- Includes more than 900 articles on different professional subjects
- Integrated with Yammer for sharing of knowledge items
- First Microsoft customized Knowledge sharing portal implemented in Israel
- Used by more than 80% of PC-enabled employees

iNet Knowledge Center

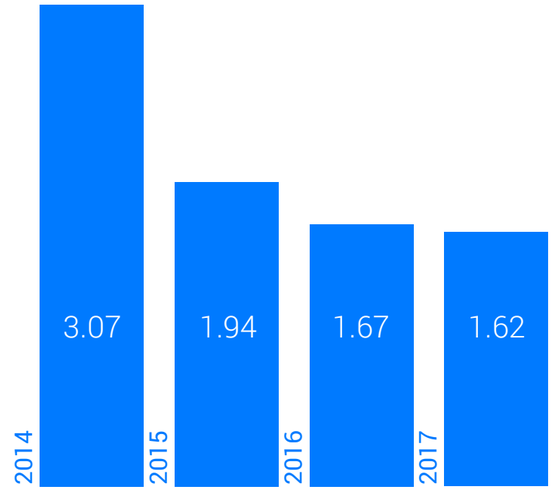
- Launched in 2017
- Educational center for employees to access Netafim proprietary knowledge about products, crops, projects and other core topics
- Includes a professional library of articles and videos on all crops and geographic region
- Represents the first time all Netafim knowledge is available with one click - previously employees needed to ask for specific information from different managers within the company

All our digital platforms can be translated online into different languages and used with smartphones, making them accessible for all Netafim employees everywhere.

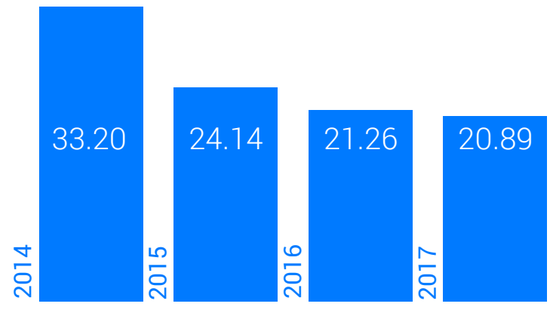
SAFETY FIRST IN ALL OUR OPERATIONS

We remain committed to maintaining a safe and healthy work environment that is compliant with occupational health and safety regulations and applicable standards across all our operations. We offer comprehensive training in safety procedures for employees when they join the company and throughout their employment. All Netafim factories track safety performance, review safety incidents and implement corrective action as required, sharing learnings and insights. Overall, our safety rates are modest by industry standards, and in 2017, we recorded 43 injuries globally throughout the year. These were minor injuries such as cuts and falls, but we continued our efforts to instill a culture of safe working, with a range of targeted initiatives in different countries.

INJURY RATE
All manufacturing employees



LOST DAY RATE
All manufacturing employees



Note: For detailed safety performance charts, see our GRI Content Index

In Israel, Netafim is certified to the international **Occupational Health and Safety Standard ISO 18001** at all three manufacturing sites.

In 2017, 8 factories (of our total 17 facilities) reported **zero lost-time injuries**

SAFETY FIRST IN FRESNO (U.S.)

In Fresno, where more than 300 people are employed, we continue our program to drive safety initiatives. Our Safety Steering Team and monthly meeting with over 25 managers and supervisors across the organization continue to identify safety risks and implement corrective actions. We also review near misses and share learnings so that future incidents can be prevented. In 2017, at Fresno, we achieved record performance of just one injury causing one lost day. We continue to aspire to zero injuries.

SAFETY FIRST IN VALENCIA (SPAIN)

Our operation in Valencia started in 2013 and instituted safe working practices from day one, using external health and safety experts. Initial safety risk assessments were conducted throughout the site and improvements implemented based on our consultant's recommendations. All employees are trained each year in a 4-hour mandatory safety program and new employees are trained upon starting their roles. All employees and managers are engaged in safety practices based on risk prevention, and a key tool in the plant is our F-TAG Safety Board where any employee can post alerts regarding safety risks they identified. All issues posted are immediately reviewed and addressed as appropriate.

"We were delighted to achieve zero injury performance in 2017. We are a small facility with less than 30 employees but operating safely is no less critical that at larger sites. Zero is a great result and a testimony to all the efforts we made in the past year to ensure we anticipate and protect against safety risk."

Juan Luis Zapico, Plant Manager Valencia, Spain

SAFETY FIRST IN PERU

In 2017, at our plant in Peru, we started a new safety initiative called Idea Generation to engage the whole team - production, quality, administration and management - in identifying safety risks and offering suggestions to improve safety. A fun reward is provided to the employee who raises the most ideas each quarter. All progress and results are posted on a Safety Board for all to see and to remind all employees that safety comes first. In 2017, 153 ideas for safety improvements were raised and 103 changes implemented. Also, we conduct safety training every quarter on different topics and all employees are required to participate.

"I believe we have found the right formula to maintain employee awareness and engagement in working safely. In 2017 we achieved our goal of zero lost-time injuries after steady improvement each year over the past few years. Our challenge now is to maintain this strong performance."

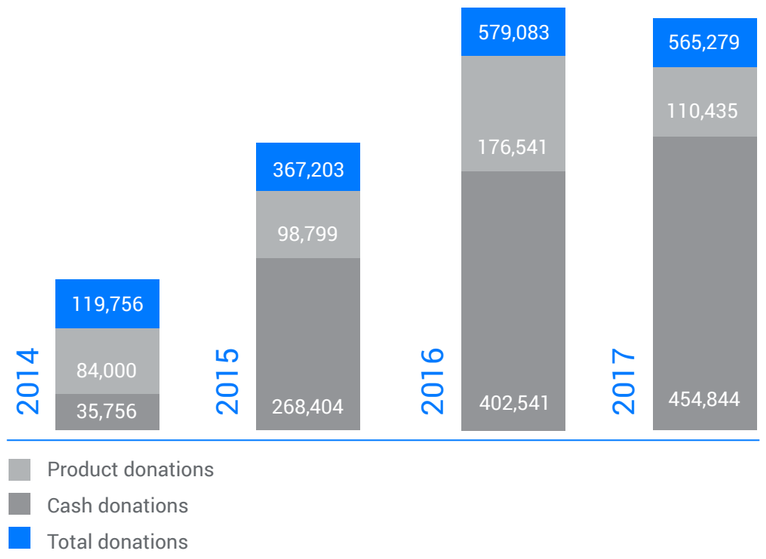
Tulio Galvez, Operations Manager Perú, Ecuador & Colombia

Community

We support the communities in which we live and work, engaging in community projects and initiatives around the world.

We provide monetary donations and equipment to support local community causes in different countries and collaborate with community partners to make a positive impact in our communities. We mostly focus on activities that reflect our core skills, utilizing the knowledge and experience of our employees to advance sustainability and agriculture education, construct community gardens, and promote industry and technology for young people. In addition to our cash and equipment donations, in 2017, 845 employees volunteered almost 5,000 hours in our communities. We maintain ongoing programs in several countries, such as our Learn2Live program in South Africa which in 2017 involved 40 preschools in installation of drip irrigation for small vegetable gardens, and in the U.S., where we collaborate with common vision to plant fruit trees at schools in California and Nevada. In addition, in 2016-2017, we engaged in some new initiatives.

Community investment ($)



SUPPORTING COMMUNITY FARMING IN THE U.S.

Starting in 2016, Netafim USA teamed up with the Leichtag Foundation to support Coastal Roots Farm by providing smart irrigation solutions and support. Coastal Roots Farm is a community farm with a vision to preserve the locality of agriculture – grow the food where people live. The farm spreads over 8 hectares of land and includes a food forest, vegetable gardens, compost, a plant nursery, a vineyard, and animal pastures. Since its inception in 2014, the farm has donated more than 50% of its harvest - nearly 90,000 pounds - to community members who lack access to fresh food. Drip irrigation is used on all crops cultivated, using equipment donated by Netafim. Employees also get involved to help the farm grow more with less.

"Through our partnership with Netafim we have been able to increase crop production significantly, reduce water use and sustain and grow our communities as a whole."

Daron "Farmer D" Joffe, Director of Agricultural Innovation and Development for the Leichtag Foundation

TRAINING YOUTH IN DRIP IRRIGATION

The Rural Youth Skill Development Program (RYSDP) in India is a training and certification program for installation and maintenance of drip irrigation systems. The concept for this program was proposed by Mr. Randhir Chauhan, Managing Director of Netafim India, to the government of Andhra Pradesh. The program is maintained in a partnership comprising the Andhra Pradesh Micro Irrigation Project (APMIP), Netafim India, and other micro irrigation companies. RYSDP trains and certifies high school or junior college graduates in installation and maintenance of drip irrigation systems so they can develop a career in this growing industry. Graduates of the program can be hired by Netafim or other drip irrigation companies, or even start their own business. The program consists of 5 days of classroom training provided by Netafim and 20 days of field training provided by Netafim and other companies. During 2017, the program ran nine times across 5 districts of Andhra Pradesh, training more than 300 participants. Seven experts from Netafim volunteered more than 1,500 hours in classroom training. In addition, Netafim offered a small daily stipend for selected participants through the training cycle.

"This program benefits both the economy and the industry. Graduates gain a new set of skills that help them improve their economic status, while the industry benefits from a new generation of drip irrigation professionals that can support the growing demand for installation and maintenance of drip irrigation. In addition, local communities significantly benefit from the fact that young people stay in their rural homes rather than moving to urban areas."

Sanket Belgudri, Sales and Marketing Manager, Netafim India

GREEN WALLS IN ISRAEL

In 2017, we undertook a project to build “green walls” in schools throughout Israel. Netafim employees visited schools to set up vertical gardens: vegetables, herbs and flowers planted inside plastic bottles, and irrigated by drip irrigation. Each wall comprises three levels of “bottle planters”, irrigated with water from the top level trickling down to the second and third levels. Students and Netafim employees created the green walls together, and Netafim employees trained students to maintain the walls and care for the plants. Each participating student is responsible for one ‘bottle planter’ and cares for it over time.

This activity represents a model for sustainability education that can be applied in different educational frameworks in any country, in rural and urban areas. So far, we have established green walls in 18 schools in Israel, donated automated drip systems for each. 16 Netafim employees were involved in supporting this fun initiative.

“This project not only helps in making the school environment more aesthetic, while isolating noise and heat, it also educates schoolchildren in sustainability, water efficiency, recycling, and caring for nature.”

Ofer Rimon, CSR Manager, Netafim Israel

Lean supply chain

Our strategic goal is to reduce our direct environmental impacts and contribute to global efforts to mitigate climate change.

We aim for proactive, sustained improvement in our environmental performance so that we can minimize the impact of our operations on the planet. Overall, we know that Netafim contributes to environmental stewardship and climate change mitigation very significantly through the solutions we provide for our customers. Around the globe, millions of kilometers of Netafim's dripperline are helping farmers to save water and energy and emit lower quantities of greenhouse gases (GHG). Our drip irrigation systems positively impact the environment in many ways, including optimization of arable land use, reduction of energy consumption, GHG emissions and soil and water contamination, water conservation, and lower agrochemical consumption. Helping farmers grow more with less is our core contribution to achieving many of the UN Sustainable Development Goals.

The small amounts of energy and water we consume and emissions we generate to produce and deliver our solutions are miniscule in comparison to these global benefits. Nonetheless, as a responsible business, we exercise strict controls over our resource consumption and aim to reduce the environmental impacts we create through considered use of energy, water and minimizing or recycling waste.

We comply with environmental legislation and applicable regulations in every country in which we operate. Our EHS (Environment, Health and Safety) teams maintain our ISO14001 and ISO18001 certifications in Israel. We engage external auditors to conduct annual EHS audits. A strong emphasis is placed on quality and 16 Netafim sites are certified to ISO90001 and will recertify to ISO9001:2015 in 2018. In 2017, we completed our 'Netafim Quality Management System' following a multi-year quality transformation across all sites to assure consistent quality practices throughout our operations.

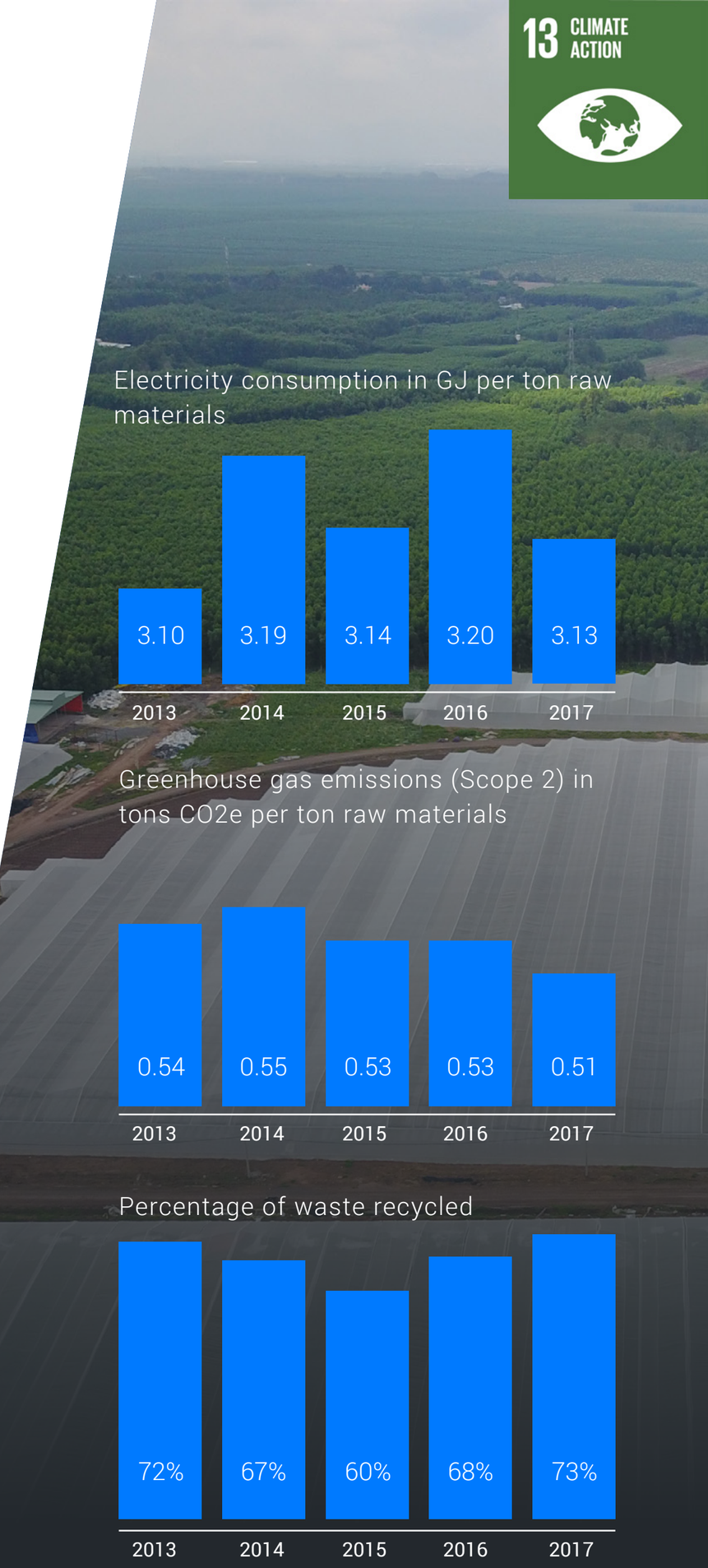
"In the past 5 years, we have invested in an ongoing program of implementing tools, processes and a new culture of Lean Manufacturing and Operational Excellence around the world. We have achieved improved efficiencies across our sites while improving quality. With collaborative teamwork, we can achieve even more!"

Elad Shmulevich, Operations Excellence and Global Quality Director

Since 2013, we have reduced our global greenhouse emissions gas per ton of raw materials by **7%**

In 2017, we achieved a record waste recycling rate of **73%**

13 CLIMATE ACTION



DELIVERING ENERGY EFFICIENCIES AT OUR MANUFACTURING SITES

We do our best to make our operations more efficient through conversion to LED lighting in our manufacturing operations, replacing fluorescent tubing, and through ongoing maintenance and replacement of air compressors for production.

Some initiatives we completed in 2016-2017 include:

- Full conversion to LED lighting in Hatzerim Plant in Israel, one of our largest manufacturing facilities, saving 65% of lighting energy cost.
- Connecting adjacent compressors at our Baroda Plant in India that support production to work in synchronization, enabling compressors to activate automatically depending on the demand, resulting in an overall reduction in energy consumption of 12%.
- Improving chiller water pumping rates at Baroda to improve chiller efficiencies, saving 7% in energy consumption.
- Installation of acrylic sheets on the roof of our Baroda plant to enable more natural light, avoiding use of electric lighting, as well as sensors for automatic control of air conditioning units, generating a further 18% reduction in electricity used for lighting.

"Reducing electricity consumption is the result of three things: investment in new, energy efficient equipment, changes in production processes to enable more efficient working and, no less importantly, the awareness and engagement of all our operators in the plant. In 2017, as a result of several initiatives, we were able to reduce our electricity consumption by close to 5% overall versus 2016."

Govind Tapadia, General Manager Baroda plant

MORE SUN FOR FRESNO

In October 2016, we went live with our new 680-kilowatt solar array, delivering up to 1,000 MWH per year. The solar array is located on the roof or our manufacturing site and distribution center and picks up close to 5.5 hours of sunshine each day on average. In 2017, 7% of electricity requirements of our Fresno plant were delivered through renewable solar energy.

DOING MORE TO RECYCLE MORE IN ISRAEL

While our overall waste generation is modest, just over 3,300 tons in 2017 across our global operations, we strive to minimize the impact of this waste through increased recycling and diversion from landfill. At our manufacturing plants Magal and Hatzerim in Israel in 2017, we were able to make sound progress through a series of actions:

- Improved waste separation ensuring all waste is correctly routed to appropriate recycling channels
- Reduction in oil waste due to a move from oil-based injection molding to electricity-based equipment
- Increase in volumes of waste routed to recycling as refuse-derived fuel
- Employing a contractor for cardboard compression to enable higher quantities of cardboard for recycling
- Improved monitoring and management of recyclable waste including plastics, cardboard, wood, glass and iron, to enable higher levels of recycling through the National Recycling Corporation (Tamir)

Zero waste

to landfill achieved by Magal Plant by mid-2017 following waste recycle and diversion initiatives

Since 2010, we have recycled more than

25,000 tons

of used plastic dripperline from more than 3,000 customer requests for takeback.

Recycling dripperlines in California

In California, regulation demands that at least 50% of waste is diverted from landfill which is a clear driver for our customers to send dripperlines at end-of-life back to us at Netafim for recycling. We operate a large recycling plant in California with a capacity to recycle around 5,000 metric tons of plastic per year. We incent our customers to take advantage of our free collection service for their dripperlines when they have reached the end of their useful life, as well as receive a discount for new dripperlines. During the past three years we have more than doubled the amount of dripperlines we collect for recycling and have expanded our recycling facility to cope with the increasing demand.

Our recycled materials are mainly used for irrigation solutions for mining and landscaping. In the landscaping sector, for example, this is a major advantage as companies wishing to comply with the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) requirements must source materials containing at least 20% recycled content.

"We are working hard to keep up with the demand for takeback and recycling of our Netafim dripperlines. We have expanded our recycling plant and we are also examining new ways to use recycled material. Recycling is good all round: it's a way to avoid the high environmental and operational costs of sourcing new raw materials - for Netafim, our customers and the industries that benefit from our recycled volumes."

Luke Hoekstra, Field Recycling Program Manager, Netafim USA

Product development for climate change

Our strategic goal is to focus product development priorities on smart irrigation solutions for crops that have the biggest impact on climate change.

With a global population of 7.5 billion, global food systems are challenged to deliver enough food and nutrition security to meet the growing demand. Agriculture remains one of the highest greenhouse gas emitting sectors, accounting for more than a quarter of global emissions, according to the U.S. Environmental Protection Agency. The issue is compounded by the vast amounts of food waste in global food systems, much of which is due to poor agricultural practices.

At Netafim, all our product development is designed to help farmers grow more with less, thereby helping achieve long-term global goals of food security and climate change mitigation. Drip irrigation has very positive impacts on greenhouse gas reduction in several ways:

- Reducing soil erosion and fertigation reduces contamination of the soil and groundwater with nitrates.
- Increasing yields and enhancing productivity per unit of soil and water.
- Offering alternatives to land use such as raised cultivation beds, reducing the need for arable land and preventing deforestation
- Combating desertification by making irrigation available in areas of low or no rainfall.
- Reducing release of gases to the air caused by overuse of fertilizers.

As part of our sustainability strategy, we seek to help reduce the sustainability impacts of the crops that place the greatest burden on climate change, because they are staple commodity crops grown in large quantities around the world, or because their cultivation profile is especially greenhouse gas intensive.

ADAPTING RICE CULTIVATION TO MITIGATE CLIMATE CHANGE

Rice is the main source of nutrition in many regions and the majority of rice is grown by smallholders. 160 million hectares of rice are cultivated each year. Traditionally, rice is irrigated with flood irrigation, consuming an average of 2,500 liters of water to produce 1 kg of rough rice according to the International Rice Research Institute. In addition, the traditional method of rice cultivation requires intensive labor, high fertilization rates and vast land areas. Drip irrigation helps reduce water use by as much as 50% while doubling the yield of rice. Labor requirements are also significantly lowered with drip.

The process of growing rice generates relatively high volumes of methane (CH4), nitrous oxide (N2O), and carbon dioxide (CO2).

By converting rice cultivation to drip irrigation, we can help farmers achieve positive impact on climate change. We continue to invest in research, perform trials and engage in partnerships to develop ways to reduce the effects of rice cultivation on the planet. In 2016, for example, we partnered with the Institute of Rice of the National Academy of Agrarian Sciences of Ukraine (NAAS) to hold The International Workshop on Modern Technologies of Rice Cultivation, Global Food and Environmental Safety in Ukraine. Sharing knowledge and creating partnerships is a way of life at Netafim. The Workshop builds on our collaboration with the National Institute of Rice in the Ukraine and our joint development of three experimental plots of 79 hectares each for cultivation using drip irrigation.

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 a small number of companies that form the LEAD initiative. Accordingly, our Communication on Progress includes reference to all 21 UNGC LEAD criteria in the following table.

Criterion	Detail	GRI Standards	Our disclosures
1	Mainstreaming GC principles into corporate functions and business units.	General disclosures: Strategy General disclosures: Governance	Welcome from our CEO, page 3 Our 2020 Sustainability Strategy, page 5
2	Value chain implementation of GC principles.	General disclosures: Social Supplier social Assessment	Value chain, page 43
3	Robust commitments, strategies and policies in the area of human rights.	Human Rights Standards	Ethical practices, page 30
4	Effective management systems to integrate human-rights principles.	General disclosures: Ethics and integrity	Ethical practices, page 30
5	Effective monitoring and evaluation mechanisms of human-rights integration.	Anti-corruption	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. See also page 30
6	Robust commitments, strategies and policies in the area of labor.	Employment Freedom of Association Child Labor Forced or Compulsory Labor Diversity and Equal Opportunity Training and Education Labor-management Relations Occupational Health and Safety	Backbone section, pages 30-34
7	Effective management systems to integrate labor principles.		
8	Effective monitoring and evaluation mechanisms of labor-principle integration		
9	Commitments, strategies and policies in the area of environmental stewardship.	Environmental Standards	Backbone section, pages 37-40
10	Effective management systems to integrate environmental principles.	Environmental Standards	Backbone section, pages 37-40
11	Effective monitoring and evaluation mechanisms for environmental stewardship.	Environmental Standards	Backbone section, pages 37-40
12	Commitments, strategies and policies in the area of anti-corruption.	Anti-corruption Socio-economic 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.		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.		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	Indirect Economic Impacts Environmental Standards Human Rights Standards Local Communities Standards Anti-corruption	The UN 2030 Sustainable Development Goals (SDGs), page 5
16	Strategic social investments and philanthropy.	Local Communities Standards	page 35
17	Advocacy and public engagement.	Public Policy	page 21
18	Partnerships and collective action.	Indirect Economic Impacts	pages 21-23
19	CEO commitment and leadership.	General disclosures: Strategy	page 3
20	Board adoption and oversight.	General disclosures: Governance	The Netafim Board is advised of sustainability performance and impacts on sustainable productivity periodically.
21	Stakeholder engagement.	General disclosures: Stakeholder Engagement	page 43

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 irrigation dripperlines each year. Our manufacturing facilities are located in local markets where they supply irrigation equipment, helping us maintain a cost-efficient distribution infrastructure, and preventing additional transportation-related carbon emissions.

Logistics and distribution: Our local manufacturing and assembly capabilities are complemented by a network of 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 provide our customers with ongoing technical assistance and support. We work with professional, knowledgeable dealers, and invest many hours in training them in the use and application of our systems, while providing 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.

Criterion 21: Stakeholder engagement

Stakeholders are individuals or groups who are affected by and influence our business operations. Our stakeholder consultations have influenced the development of our Sustainability Strategy and our priority sustainability issues.

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.

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 influence agricultural policy play a big role in advancing agricultural sustainability.
How	Our ongoing dialogue includes custome meetings, conferences, workshops, training and education programs, and many field trials.	We engage through meetings, performance discussions, and internal communications processes.	Our interaction with our distributors, suppliers and partners takes place daily in the course of our global business.	We engage with policy makers and diverse associations to positively support sustainable agriculture policy decisions.
What	Our customers' key interests include: resource efficiency, crop yield and quality, excellent service, recycling, and sustainable productivity.	Our employees seek professional development, fair compensation and benefits, 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 and influential organizations seek reliable information to support informed decision making, as well as transparent and ethical standards.

CEO Water Mandate Report

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. 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, and will continue to disclose transparently the company's water management performance.

To the right is a table showing Netafim's progress against the six elements of the CEO Water Mandate, cross-referenced to the GRI Standards.

Water Mandate Principles		GRI Standard	Our progress
Element 1:	Direct operations	303-1 303-2 303-3 Water	Environmental section, pages 37-40 and indicators, page 48
Element 2:	Supply chain and watershed management	308-1 308-2 Supplier environmental assessment	Whenever possible, we encourage our suppliers to adopt sustainable water management practices.
Element 3:	Collective action	102-13 General disclosures: Organizational profile	page 21
Element 4:	Public policy	415-1 Public policy	page 21
Element 5:	Community engagement	413-1 Local communities	pages 35-36
Element 6:	Transparency	102-50 – 102-56, 102-46, 102-48, General disclosures: reporting practice	About this Report, page 2 and GRI Content Index page 45

GRI Content Index

GRI 102: General Disclosures 2016

Disclosure		Page/ URL	Omission
102-1	Name of the organization	4	
102-2	Activities, brands, products, and services	4	
102-3	Location of headquarters	4	
102-4	Location of operations	4	
102-5	Ownership and legal form	4	
102-6	Markets served	4	
102-7	Scale of the organization	4	
102-8	Information on employees and other workers	47	
102-9	Supply chain	43	
102-10	Significant changes to the organization and its supply chain	none	
102-11	Precautionary Principle or approach	37	
102-12	External initiatives	21	
102-13	Membership of associations	21	
102-14	Statement from senior decision-maker	3	
102-16	Values, principles, standards, and norms of behavior	4	
102-18	Governance structure	4	
102-40	List of stakeholder groups	43	
102-41	Collective bargaining agreements	48	
102-42	Identifying and selecting stakeholders	43	
102-43	Approach to stakeholder engagement	43	
102-44	Key topics and concerns raised	43	
102-45	Entities included in the consolidated financial statements	2	
102-46	Defining report content and topic Boundaries	2	
102-47	List of material topics	5	
102-48	Restatements of information	none	
102-49	Changes in reporting	none	
102-50	Reporting period	2	
102-51	Date of most recent report	2	
102-52	Reporting cycle	2	
102-53	Contact point for questions regarding the report	2	
102-54	Claims of reporting in accordance with the GRI Standards	2	
102-55	GRI content index	45	
102-56	External assurance	2	

GRI Content Index continued

Material priority	GRI Standards (2016)	Management Approach: Page	Specific GRI Disclosures	Page	Omissions
Mass Adoption of Drip Irrigation	GRI 203: Indirect economic impacts	103-1-3: page 9	203-2: Significant indirect economic impacts	10-16	
Sustainable Productivity				24-28	
Enhancing Customer Capabilities				16-18	
Supporting Sustainable Agriculture Policy	GRI 203: Indirect economic impacts	103-1-3: page 19	203-2: Significant indirect economic impacts	22-23	
	GRI 415: Public policy	103-1-3: page 19	415-1: Political contributions	Netafim does not make any political contributions in any country.	
Lean Supply Chain	GRI 302: Energy	103-1-3: page 38	302-3: Energy intensity	48	
			302-4: Reduction of energy consumption	38	
	GRI 305: Emissions	103-1-3: page 19	305-4: GHG emissions intensity	48	
	GRI 306: Effluents and Waste	103-1-3: page 19	306-2: Waste by type and disposal method	48	
Water Conservation	GRI 303: Water	103-1-3: page 19	303-1: Water withdrawal by source	48	
Employee Performance	GRI 401: Employment	103-1-3: page 31	401-1: New employee hires and turnover	49	
	GRI 403: Occupational Health & Safety	103-1-3: page 32	403-2: Types of injury and rates of injury	49	Rates by gender and absenteeism are not available.
	GRI 404: Training and Education	103-1-3: page 31	404-1: Average hours of training	50	
			404-3: Employees receiving performance reviews	50	

EMPLOYEE DATA

102-8: Information on employees and other workers

by region

	2010	2011	2012	2013	2014	2015	2016	2017
India	999	1,106	1,212	1,209	1,392	1,281	1,202	1,177
Israel	774	831	822	977	981	761	1,029	1,123
Americas	546	567	592	683	766	820	954	984
Rest of the world	352	366	368	410	590	642	716	788
All employees	2,671	2,870	2,994	3,279	3,729	3,504	3,902	4,072

102-8 A: Total number of employees by employment contract (permanent and temporary), by gender

by contract /gender

	2014			2015			2016			2017		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Permanent	2612	541	3,153	2520	459	2,979	2,878	567	3,446	2,973	591	3,564
Temporary	476	100	576	465	60	525	420	36	456	465	43	508
All employees	3,088	641	3,729	2,985	519	3,504	3,298	604	3,902	3,438	634	4,072
% permanent	85%	84%	85%	84%	88%	85%	87%	94%	88%	86%	93%	88%
% temporary	15%	16%	15%	16%	12%	15%	13%	6%	12%	14%	7%	12%

102-8 B: Total number of employees by employment contract (permanent and temporary), by region.

by contract /region

	2014			2015			2016			2017		
	Permanent	Temporary	Total	Permanent	Temporary	Total	Permanent	Temporary	Total	Permanent	Temporary	Total
Indiaw	917	475	1,392	869	412	1,281	917	285	1,202	920	257	1,177
Israel	902	79	981	680	81	761	923	106	1,029	946	177	1,123
Americas	749	17	766	800	20	820	906	49	954	937	47	984
Rest of the world	585	5	590	630	12	642	700	17	716	761	27	788

102-8 C: Total number of employees by employment type (full-time and part-time), by gender.

by type

	2014			2015			2016			2017		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Full time	3058	595	3,653	2976	497	3,473	3278	572	3,850	3396	589	3,985
Part time	30	46	76	9	22	31	20	32	52	42	45	87
All employees	3,088	641	3,729	2,985	519	3,504	3,298	604	3,902	3,438	634	4,072

102-8 D: Whether a significant portion of the organization's activities are performed by workers who are not employees.

Supervised employees

	2014	2015	2016	2017
Male	188	167	739	810
Female	13	76	15	22
All supervised employees	201	243	754	832

Notes: Supervised employees include seasonal workers in manufacturing, and replacement employees for leave of absence (i.e. maternity leave). Data in 2014-2015 includes only skilled temporary workers. From 2016, we include seasonal employees.There are no significant variations in employee data versus prior years. Data was compiled by Netafim team members from an online HR platform covering Netafim's operations worldwide.

102-41: Collective bargaining agreements

Employees covered by collective bargaining agreements

	2016			2017		
	Men	Women	Total	Men	Women	Total
India	124	6	130	123	6	129
Israel	0	0	0	0	0	0
Americas	128	29	157	125	24	149
Rest of the world	151	21	171	157	24	181
All employees	**403**	**56**	**458**	**405**	**54**	**459**
% of employees covered			**12%**			**11%**

302-3: Energy intensity

305-4: GHG emissions intensity

306-2: Waste by type and disposal method

303-1: Water withdrawal by source

Notes to environmental data:

- Electricity use is our main form of energy in our global operations, representing 90% or more of total energy consumption.
- GHG factors use local electricity company conversions in Israel and IEA values (2018 edition) for global operations. Greenhouse gases include CO2, CH4 and N2O. Prior year factors are updated as published.
- Water data covers all facilities worldwide in 2016/2017. Prior years exclude Brazil. 2014 excludes Peru.
- All water is sourced from municipal supplies except Ribeirão Preto, Brazil, where water is drawn from an onsite well.
- Waste data for 2014-2015 data does not include Brazil and 2013-2014 data does not include Australia.
- We also incinerate small amounts of waste which are not recorded as part of our total waste.

Environmental performance 2013-2017

	2013	2014	2015	2016	2017
Electricity consumption (GJ / ton raw material)	3.10	3.19	3.14	3.20	3.13
Greenhouse gas emissions (Scope 2) (tons CO2e / ton raw material)	0.54	0.55	0.53	0.53	0.51
Water withdrawal (m3)	144,528	120,107	124,535	130,270	152,047
Total waste (tons)	2,007	1,920	2,313	2,859	3,400
Waste recycled (%)	72%	67%	60%	68%	73%

403-2: Types of injury and rates of injury

Notes to safety data:

- Injury and lost day rates are calculated per 100 employees and based on production employees only.
- Injuries are those which incur lost workdays. Minor injuries are not noted.
- Starting in 2016, injury rates are calculated on the basis of actual work hours, rather than standard average work hours per employee.
- Injuries and injury rates for 2016-2017 include payroll and non-payroll employees. Lost days and lost day rates for 2016-2017 include payroll employees only.
- As of 2016, ROW includes the factory in China, which began operations in 2015.
- No fatalities occurred between 2014 -2017
- We do not report safety performance information by gender and employment type.
- Absenteeism days are not recorded in all locations, and therefore not reported
- Data on occupational diseases is not available401-1: New employee hires and employee turnover

Payroll + Non payroll employees

	2014	2015	2016	2017	2014	2015	2016	2017
	Injuries				Injury Rate			
Israel	23	19	18	23	4.32	3.23	3.59	4.29
India	6	0	0	2	2.97	0.00	0.00	0.30
Americas	4	11	18	7	0.96	1.88	3.07	1.09
Rest of world	6	3	5	11	5.04	1.17	0.69	1.39
Total	**39**	**33**	**41**	**43**	**3.07**	**1.94**	**1.67**	**1.62**
	Lost days				Lost day rate			
Israel	333	166	236	369	62.59	28.23	47.07	68.79
India	16	0	0	32	7.92	0.00	0.00	4.74
Americas	36	191	258	14	8.61	32.68	44.04	2.18
Rest of world	37	53	27	138	31.09	20.62	3.68	17.40
Total	**422**	**410**	**521**	**553**	**33.20**	**24.14**	**21.26**	**20.89**

401-1: New employee hires and employee turnover

New hires by age

	2014		2015		2016		2017		Rate of men new hires out of total new hires in 2017	Rate of women new hires out of total new hires in 2017	Total new hire rate in 2017 (%)	Rate of men new hires out of total new hires in 2016	Rate of women new hires out of total new hires in 2016	Total new hire rate in 2016 (%)
	Men	Women	Men	Women	Men	Women	Men	Women						
Below age 30	336	41	436	65	393	62	589	73	89%	11%	16%	86.46%	13.54%	11.64%
Age 30 - 50	183	46	272	62	345	78	302	56	84%	16%	9%	81.59%	18.41%	10.85%
Over age 50	18	1	19	6	30	8	25	5	83%	17%	1%	80.00%	20.00%	0.96%
All employees	**537**	**88**	**727**	**133**	**768**	**147**	**916**	**134**	**87%**	**13%**	**26%**	**83.94%**	**16.06%**	**23.45%**

New hires by region

	2014		2015		2016		2017		Rate of men new hires out of total new hires in 2017	Rate of women new hires out of total new hires in 2017	Total new hire rate in 2017 (%)	Rate of men new hires out of total new hires in 2016	Rate of women new hires out of total new hires in 2016	Total new hire rate in 2016 (%)
	Men	Women	Men	Women	Men	Women	Men	Women						
India	215	6	182	2	262	7	400	10	98%	2%	10%	97.40%	2.60%	6.90%
Israel	146	14	261	34	185	36	210	45	82%	18%	6%	83.68%	16.32%	5.65%
Americas	119	55	147	55	224	62	191	53	78%	22%	6%	78.30%	21.70%	7.32%
Rest of world	57	13	137	42	98	42	115	26	82%	18%	3%	69.92%	30.08%	3.57%
All employees	**537**	**88**	**727**	**133**	**768**	**147**	**916**	**134**	**87%**	**13%**	**26%**	**83.94%**	**16.06%**	**23.45%**

Turnover by age

	2015		2016		2017		Rate of men turnover out of total turnover in 2017	Rate of women turnover out of total turnover in 2017	Total turnover rate in 2017 (%)	Rate of men turnover out of total turnover in 2016	Rate of women turnover out of total turnover in 2016	Total turnover rate in 2016 (%)
	Men	Women	Men	Women	Men	Women						
Below age 30	353	45	350	35	425	46	90%	10%	12%	90.86%	9.14%	9.87%
Age 30 - 50	344	72	267	72	339	68	83%	17%	10%≠	78.73%	21.27%	8.68%
Over age 50	34	11	36	9	38	19	67%	33%	1%	79.82%	20.18%	1.17%
All employees	**731**	**128**	**653**	**116**	**802**	**133**	**86%**	**14%**	**23%**	**84.86%**	**15.14%**	**19.72%**

Turnover by region

	2015		2016		2017		Rate of men turnover out of total turnover in 2017	Rate of women turnover out of total turnover in 2017	Total turnover rate in 2017 (%)	Rate of men turnover out of total turnover in 2016	Rate of women turnover out of total turnover in 2016	Total turnover rate in 2016 (%)
	Men	Women	Men	Women	Men	Women						
India	300	12	229	7	53	1	98%	2%	1%	97.04%	2.96%	6.06%
Israel	235	36	200	26	260	39	87%	13%	7%	88.39%	11.61%	5.79%
Americas	111	48	154	62	194	53	79%	21%	6%	71.14%	28.86%	5.53%
Rest of world	85	32	71	21	295	40	88%	12%	8%	77.09%	22.91%	2.35%
All employees	**731**	**128**	**653**	**116**	**802**	**133**	**86%**	**14%**	**23%**	**84.86%**	**15.14%**	**19.72%**

Note:
Due to a change in our systems we are unable to provide data on leavers for 2014.

404-1: Average hours of training per year per employee, by gender and employee category

Employee training	2017					
	Men		Women		Total	
	Managers	Non-Managers	Managers	Non-Managers	Managers	Non-Managers
Employees trained	606	2,134	107	465	713	2,599
Training hours	10,445	28,680	1,375	3,162	11,819	31,843
Average training hours per employee	15	10	11	6	15	10

*Data on employee training is not available prior to 2017

404-3: Percentage of employees receiving regular performance and career development reviews

Employees participating in performance reviews	2017					
	Men		Women		Total	
	Managers	Non-Managers	Managers	Non-Managers	Managers	Non-Managers
India	223	669	5	17	228	686
Israel	149	600	40	171	189	771
Americas	155	604	53	138	208	742
Rest of the world	141	435	27	132	168	567
All employees	668	2,308	125	458	793	2,766
Percentage	98%	84%	98%	17%	98%	85%
Total	87%		92%		87%	

*Data is not available prior to 2017.