Netafim, Shaping the future of Agriculture

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We are Farmers from the Israeli Negev Desert
Global food and water challenges

Netafim Impact
Global food security and water challenges

**Growing demand for food**

By 2050 there will be **10 billion** of us

We’d need **60%** more food

**Limited resources**

The world in 2050:

- **Less** Arable Land & Water per person
- **4 billion** living under severe water stress

**Inefficient use of water**

- **70% of the water** is used in Agriculture
- Irrigating only **20%** of the land
- Still, over **80%** is inefficient using Flood irrigation

Source: FAO – How to feed the world 2050; 2030 Water Resources Group, OECD outlook
We are not efficient in how we use our water and land

Global water withdrawal by sector

- Industrial: 19%
- Municipal: 12%
- Agricultural: 69%

69% of the world’s water use goes to agriculture

Irrigated area as % of arable land

- Only 20% of the land is irrigated
- ~80% not irrigated

This water is used to irrigate only 20% of the arable land. The rest pray for rain.

Global irrigated area by method

- Flood: 80%
- Sprinklers: 15%
- Micro-irrigation: 5%

Still, 77% of the irrigated land is done inefficiently, by flood irrigation

Source: ICID annual report 2016-17, The Environmental Food Crisis, UNEP
Global water withdrawal by sector:
- 35% Municipal
- 10% Industrial
- 50% Irrigation

Irrigated area as % of arable land:
- 55% of water goes to Agriculture
- 15% is not irrigated
- 85% irrigated

Global irrigated area by method:
- 15% Sprinklers
- 85% Micro Irrigation

> 50% of irrigation water is Residual Water!
## Water consumption in the supply chain

<table>
<thead>
<tr>
<th>Item</th>
<th>Water Consumption (l.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat</td>
<td>14,000</td>
</tr>
<tr>
<td>Jeans</td>
<td>4,100</td>
</tr>
<tr>
<td>Rice</td>
<td>3,500</td>
</tr>
<tr>
<td>Milk</td>
<td>1,000</td>
</tr>
<tr>
<td>Beer</td>
<td>75</td>
</tr>
</tbody>
</table>

Source: Blue Planet Run, R. Smolan, 2008
We need to find a way to:

- Grow more food
- Use less water
- On the land we already have

Enter precision irrigation
Drip is the most efficient Irrigation Method

Efficiency is defined as the maximum output per unit of area and input.

Source: Netafim Internal Research
The advantages of Drip Irrigation

✓ Higher and better-quality yield – typically 50%-100% more
✓ Average of 50% water saving
✓ Reduced cost of other inputs (crop protection, fertilizers, labor)
✓ Improved sustainability
Global food and water challenges

Netafim Impact
Netafim - 55 years of shaping the future of agriculture

Founded in 1965 by Farmers for Farmers
In the desert area of kibbutz Hatzerim, which suffered from a severe lack of water. Introduced Drip Irrigation to the world

The Largest Irrigation Company in the world
Continues to lead the Drip Irrigation revolution, offering end-to-end precision irrigation solutions
Precision Irrigation enables farmers to Grow More With Less

Out of necessity to develop agriculture in the desert

Drip is irrigating the plant and not the soil
Netafim – The global leader of precision irrigation

- Approximately 30% market share
- #1 irrigation company
- 17 manufacturing plants
- 29 subsidiaries
- Headquartered in Israel
- Over 110+ countries
- Over 5,000 employees
- Over 1 billion dollars in sales
Orbia highlights

- Over 22,000 employees
- $5.8b Consolidated Annual Revenues
- 137 Production Plants
- Operations in 41 Countries
- Commercial activities in more than 100 countries
- 18 R&D Facilities
Worldwide collaboration and recognition.

We work with growers, companies, governments and aid organizations all over the world to bring sustainability and profitability together.
Precision solutions for 3 key markets.
Supporting smallholders to large scale farmers

Brazil
Sugarcane

Mexico
Corn

Europe
Tomatoes

India
Community Irrigation
World's largest Drip project
We lead because we innovate.

As farmers for farmers, we don’t just innovate in labs and factories.

Our people gather insights straight from the field, understanding each grower’s needs.

So our engineers can design innovative, reliable, and relevant irrigation products.

Such that ease the work and maximize the results, for each and every one of them - everywhere in the world.

250 registered patents

150 pending patent applications
Constant innovation in irrigation

✓ **State-of-the-art drip technology**
  → Leading uniformity
  → No-clogging, self-cleaning
  → Unique low-flow capabilities

✓ **Comprehensive irrigation portfolio**
  - From water source to plant roots

✓ **Innovative Digital Farming solutions**

400 registered & pending patents
The world’s largest irrigation company that pioneered drip irrigation is now introducing...
NetBeat™
The First Irrigation System with a Brain
How NetBeat™ Works

Cloud-based analytics

External sources

Mobile or desktop interface

System components

RTU

RTU

Field sensors

MCU

fertigation
How NetBeat™ Works

Cloud-based analytics
External resources
Mobile or desktop interface

MCU
Field sensors
Fertigation system components
RTU
RTU

Ruční měření

Káknutím do mapy zadáte start měření.

Délka: 0 m
Plocha: 0 m²
Ramthal

Community Irrigation Project

A classic PPP
Ramthal community irrigation project.

This project was the first of its kind. And the largest fully-automated drip irrigation project in the world.

We provided: An end-to-end, turnkey project from the water source to the root zone, plus capacity building, agronomy support, marketing linkage to farm produce, and operational maintenance.

Ramthal's achieved: 2 x More Ha

2.5 times more farmers and villages

180% GDP Improve

India, Ramthal: 11,700 ha community irrigation involving 6,700 farmers 22 villages 77,000 km drip irrigation lines
Netafim – Grow More With Less in Cities
Netafim – Grow More With Less in Cities
Netafim – Grow More With Less

Started over 50 years ago at Hatzerim, making the Negev desert bloom

Helping millions of farmers around the world to Grow More With Less

Leading the next revolution in Agriculture with the first irrigation system with a brain

Supporting global challenges, addressing most of the UN SDGs

Doing Well by Doing Good
THANK YOU

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