



Nestlé factory: Peaceful co-existence of industry and the environment



Nestlé India  
Creating Shared Value



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Martial Rolland  
Chairman & Managing Director  
Nestlé India

“ Business is good for society. It creates growth, opportunities and prosperity. Nestlé's business objective is to create value that can be sustained over the long term for the economy and society.

It is in our interest to use natural resources in a sustainable manner, as the continued success of business and our ability to create shared value depends on the long term availability of high quality agricultural products and natural resources. ”



Dr. Raj Singh  
Executive Vice President  
Corporate Affairs and Strategic Planning



“ Nestlé India is a vast family and for almost a century we have been appreciated and acknowledged for our values and contributions.

With seven highly productive factories and the ability to create opportunities for people, we have a very close relationship with the community as 'Partners in Growth'. This relationship has endured because it is based on business ethics, social interest and long-term commitment to creating shared value.

Nestlé India does not operate in isolation but in a broader societal context. It recognises that its business is a part of the social fabric of the community in which it operates and shares responsibility for the sustainability and wellbeing of these communities.

While creating economic prosperity over the years, the company has followed a two-fold approach towards the environment and the use of resources. On the one hand the company has continuously increased efficiencies in areas within its control, and has been a forerunner in conserving water, saving energy, recycling waste and reducing pollution. On the other hand, as partners in growth, Nestlé India has enabled people in the community, its extended family, to be more aware and responsible towards the environment and its resources.

This brochure is designed to give you an overview of what the Company is doing to foster these values: increasing efficiencies; improving productivity; providing access to clean drinking water and sanitation facilities in village schools; enhancing awareness of scarce resources like water; and empowering village women. I hope it will further strengthen, with your support, our efforts to create shared value and sustain the natural resources. ”





"Good Food, Good Life" is the ultimate expression of what we believe and what we strive to bring to the world. "Good Food, Good Life" clearly expresses our role as the leading Nutrition, Health and wellness Company.

NESTLÉ, NESCAFÉ, NESVITA, NESTEA, MAGGI, MILO, KITKAT, MUNCH, EVERYDAY, MILKMAID are all household names. They can be found on dining tables, kitchen shelves, in the hearts and minds of the old and young because they are trusted for the high Quality and the Value that they provide.

This has been possible since the quality and safety of our products and the integrity of the ingredients from which they are made are paramount for Nestlé. While Nestlé India is not directly involved in agricultural raw material production and does not own or operate farms, the Company supports sustainable agricultural practices, including environmental protection as the best means to assure the high quality needed for its finished products. The Company adopts processing methods that minimize water and energy consumption while also reducing waste generation.

A case in point is Moga, in Punjab. When Nestlé India set up its first factory here there was hardly any milk being traded in the region. Agricultural

productivity was low and people subsisted on inadequate traditional cropping. Nestlé's efforts have had a multiplier effect on the development of the region and has transformed Moga into a prosperous and vibrant milk district.

The Moga Milk district Model has been highly appreciated and **Harvard Business Review** has developed a special case study on Nestlé's experience in setting up collection points, training farmers and introducing better technology in Moga.

Nestlé India has been bestowed the **UDYOG RATNA** award by the PHD chamber of Commerce and Industry in India to recognize its significant work with the farmers in Moga, providing them knowledge and best practices to help them improve the quality of milk.

The factory in Moga has also been conferred the Punjab Government's award for '**Environmental Excellence**' as a recognition of the efforts, amongst others, in the construction of clean drinking water facilities in village schools around the factory.







## Creating Wealth Sustaining Resources

“We believe that the true test of a business is whether it creates value for society over the long term.”

Peter Brabeck-Letmathe

## Maximizing production while minimizing consumption of natural resources

Our factories not only create world class products to deliver Nutrition, Health and Wellness but they also add value to farmers by processing agricultural products in a sustainable manner. Within our factories and in areas under our control there is a continuous effort to maximize production while minimizing consumption of natural resources and reducing waste and emissions.

- Energy and water management practices are being continuously upgraded
- Water usage in manufacturing has been reduced
- Focus on zero waste discharge ensures the absence of pollutants
- Waste water is treated and recycled within the factory
- The waste water is treated and used to develop green environment within the factories

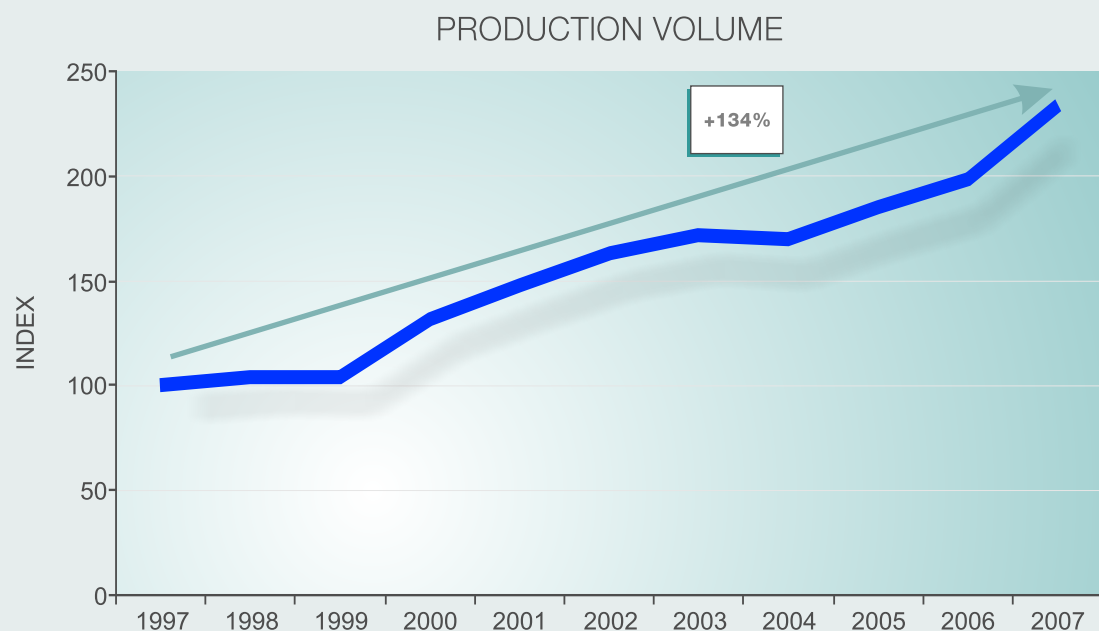
All processes follow the Nestlé Environmental Management System, and business practices comply with government policies, environmental laws and regulations.



Nestlé India developed a series of environmental performance indicators (EPIs) in 1997 to monitor its efforts for sustainable use of natural resources in the manufacturing operations.



During the period 1997-2007, even as production volume has been increasing, there has been significant reduction in usage of energy and water and reduction in emission of green house gases per tonne of production.



The focus in our factories is on efficient use of resources. This means that

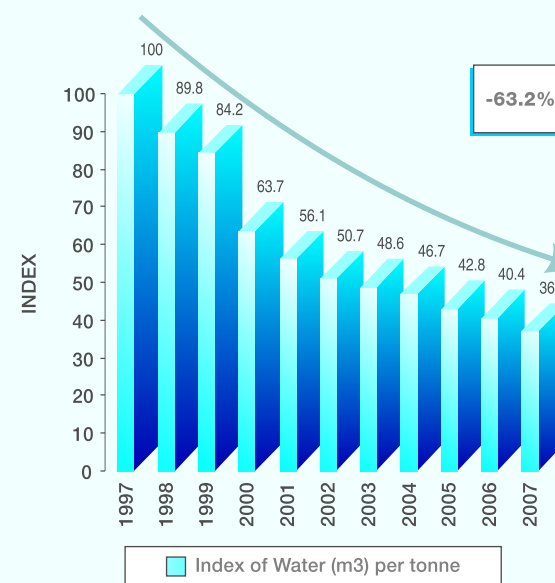
- We find ways to minimize need for the resource
- We ensure resources are used optimally
- We innovate to remove inefficiencies or leakages that could cause wastage

### Reducing Water Consumption / Tonne of Production

Water consumption per tonne of product has reduced substantially and water use efficiency has improved by 63.2%.



Using water gun on hoses to save water



#### Key initiatives

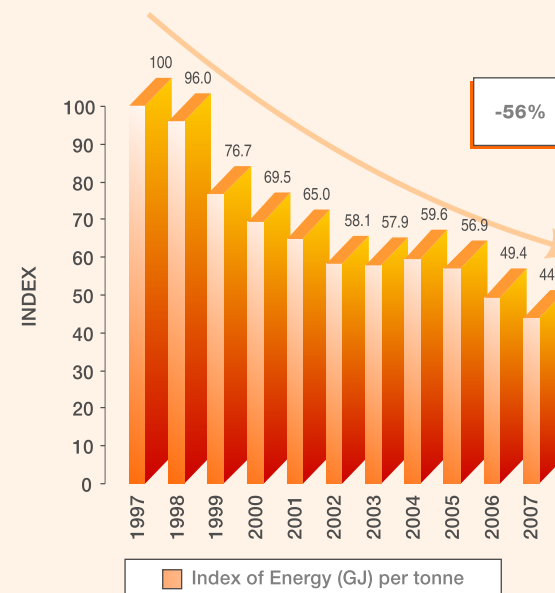
- Continuously tracking water usage to identify saving possibilities.
- Using water after RO Process to reduce 'Blow Down' losses in boilers.
- Recovering steam condensation to substitute fresh water.
- Adopting new cleaning-in-process technology to reduce water consumption.
- Using recycled or treated water where possible to replace fresh water.

### Reducing Energy Consumption / Tonne of Production

Energy consumption per tonne of product has reduced substantially and energy use efficiency improved by 56%.



Using waste heat for steam generation

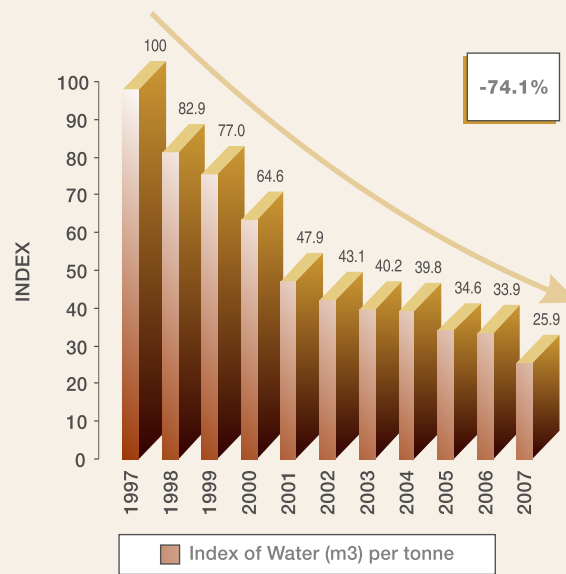


#### Key initiatives

- Continuous energy review to track and replace energy inefficient equipment.
- Investment in processes that reduce energy losses. For example, installation of Variable Frequency Drivers on high capacity motors, auto operations & controls.
- Process modification for reducing energy need. For example, installation of Wipe Film Evaporator.
- Innovatively using waste heat of one process as input for another. For example, exhaust heat of generator to produce steam for manufacturing.

## Reducing Waste Water Generation

Waste water discharge per tonne of product has reduced by 74.1%.



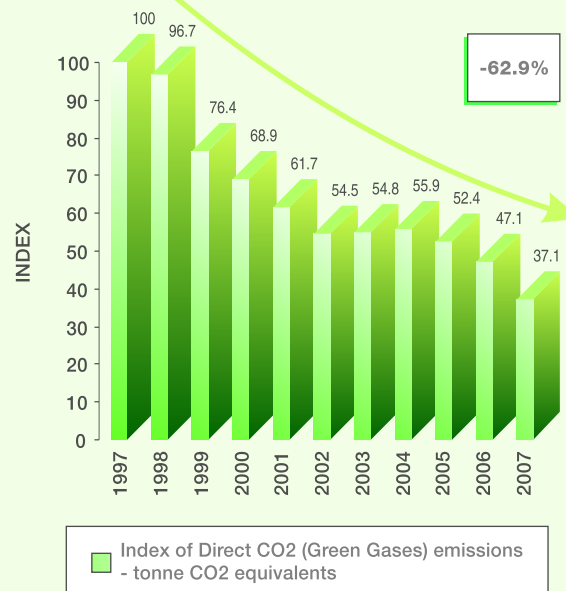
Treating waste water for reuse

### Key initiatives

- Using more efficient cleaning processes to reduce water need.
- Reusing water after Reverse Osmosis treatment.
- Recovering steam condensation for reuse in process.

## Reducing Green House Gases

CO2 emission per tonne of product has been significantly reduced, while also reducing air acidification potential.



Spent coffee grounds being used as fuel

### Key initiatives

- Utilizing coconut shells and process waste (spent coffee grounds, spent tea leaves), to replace fuels with high sulphur content.
- Replacing R12 / R22 with environment friendly refrigerants.
- Using appropriate technologies to improve combustion of fuels.



## Creating Shared Value Celebrating Relationships

“ We have always held the conviction that you cannot expect to create long term value for the shareholder if the company does not simultaneously create long term value for the societies in which it operates. ”

Peter Brabeck-Letmathe



## Identifying community needs



### Pioneering work in Moga

The pioneering work with the communities of Moga has helped to develop a vibrant milk economy, increased all round prosperity and brought smiles to faces, creating and providing economic opportunities for different generations.

The Company has been continuously working to increase investments in cooling tanks and insulated tankers for efficient collection of fresh milk, providing technical assistance to improve farm productivity and helping farmers to develop expertise in herd management and farm economics.



Milk collection agencies in the areas	: 2,400
Farm coolers & chillers installed	: 730
Farmers benefiting directly	: 100,000

### Spreading smiles and happiness

Our relationships are based on the understanding that our investments must result in long term sustainable growth and economic and social progress for the community as well.

The factory in Moga in 1961 was just the beginning. Over the years Nestlé India operations have grown manifold. Today it has seven factories across the country and the journey is continuing.

Villages covered	: 550
Women covered	: 30,000
Men Participants	: 14,000

### Empowered women, happier homes

Education and training are the foundation for a good life. Recognising the role that women can play in the community, Nestlé India runs special training programmes for village women on good dairy farming practices to help them play a more active role. The village women's dairy development initiative also spreads awareness about personal health, hygiene, water conservation and economic independence. Already this programme has empowered over 30,000 village women and is gaining momentum.



**Clean Drinking Water:** Climate change and water issues are here to stay. As a responsible industrialist, Nestlé is serious about the careful management of this fragile resource, and is implementing various initiatives to provide children in village schools with clean drinking water and educating them on the need to conserve water.

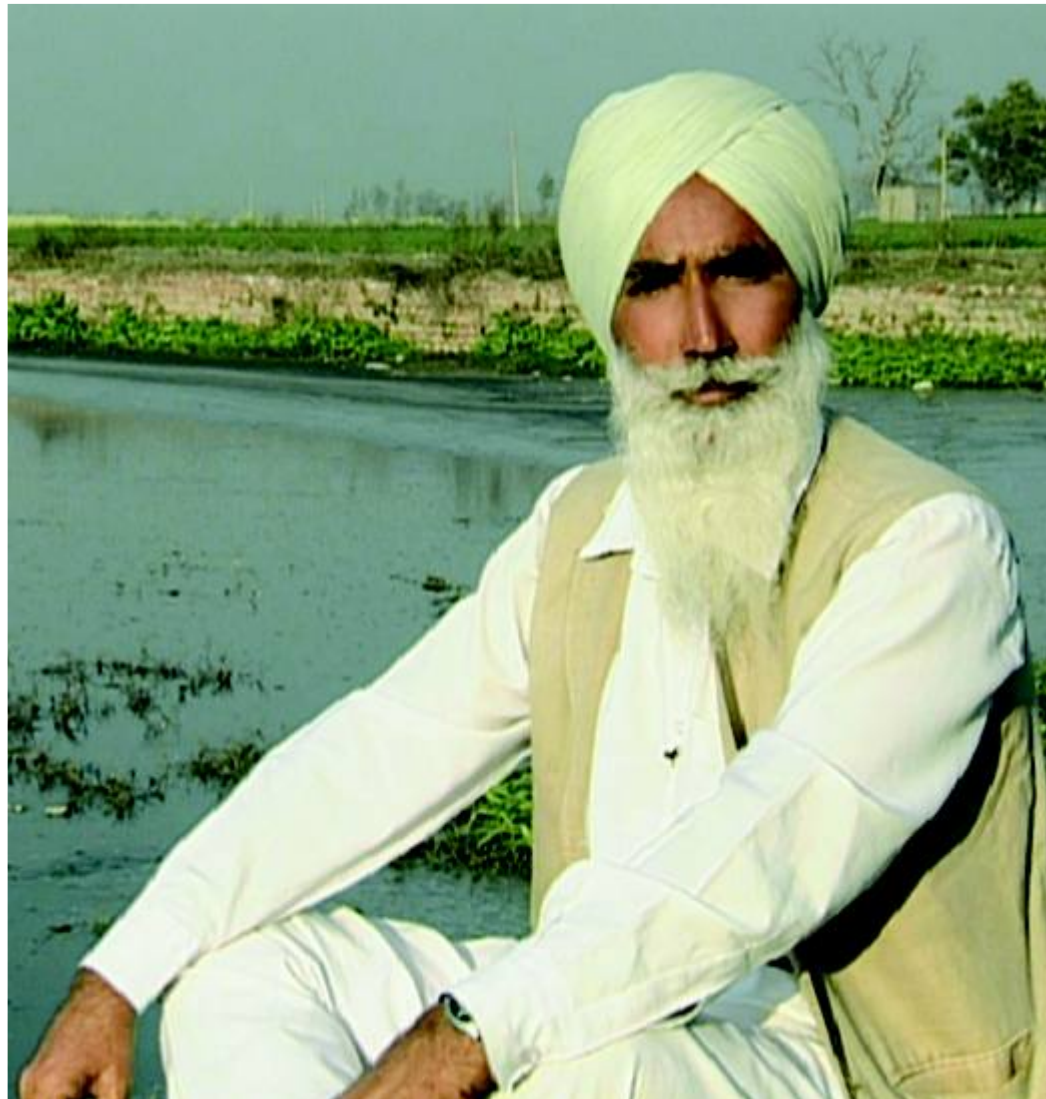
Water Projects completed	: 96
Children benefiting directly	: 33,000



## Conserving water

“ Our ponds and hand pump waters are very polluted. And hand pump water is drawn only from a depth of 25-30 feet and this is not of good quality. As we cannot afford deep wells we seek help from outside agencies. ”

Mr. Shaminder Singh  
a village elder, Moga



**Water is a scarce resource** and in India large sections of the community do not have access to clean drinking water. Nestlé India considers it important to improve awareness in the communities about the importance of water for a good and healthy life and that we need to conserve this resource. Our efforts, we hope will spread like the ripples of a wave, so that we can conserve this resource, drop by drop!



While water conservation programmes in the Nestlé factories are ongoing, the company has also initiated serious activity in the communities around its factories. In 1999, Nestlé India initiated a project, around its factory in the state of Punjab, to provide clean drinking water facilities in village schools, create awareness amongst the community and involve them in improving the situation in a sustainable manner. The 'Clean Drinking Water' project is a joint initiative where Nestlé India and the local communities work together. The Nestlé milk route officers and the village milk agents help the village custodians to ensure that the water storage tanks are always clean and well maintained and the water is regularly tested for its quality.





**The Nestlé water management programme reaches out to three influential segments of the community.**

**School children:** Nestlé converts children into 'water ambassadors'. Through them, the conservation message reaches their wider circle of family and friends.

**Farmers:** Dairy farmers are heavy users of water. Nestlé has made them aware of water depletion and has introduced them to rainwater harvesting techniques..

**Women:** Nestlé has educated over 30,000 village women in dairy farming practices and water management, helping them improve productivity and augment earnings.

**Involving the community:** Nestlé believes in the principles of 'shared value'. Its efforts have been supplemented by members of the community, making possible a 'joint ownership' model, unique in the annals of corporate/people collaboration.

The concept of joint ownership has been valued from the very first project. Since then each collaboration has been forged in the spirit of 'shared value'.

## Clean Drinking Water Programme



At each school, clean drinking water is sourced from deep bore wells and stored in special tanks. The water is tested at regular intervals. Maintenance of the system is the responsibility of the water custodians from the village community.

The programme is a joint venture between Nestlé and the community. While Nestlé sources, tests and stores the water in special tanks, the community takes responsibility for the maintenance of each system.

Having tested the model for sustainability, Nestlé is now rolling it out to the communities around all its seven factories in India. Today, 96 such projects directly benefit over 33,000 children in village schools across the country. The 'Village Panchayat', schools, farmers and clubs have borne 10% of project costs in some form or the other. Maintenance of hardware has always been in the hands of the community. This unique joint ownership model has been replicated by Nestlé in Sri Lanka and Bangladesh.



**Water Education Programme:** The programme creates awareness and educates students on the importance of clean, hygienic water; the need to check depletion of water resources; and methods of conservation.

**Creating water ambassadors:** Most children (like adults) take water for granted, treating it as an endless resource.

This is why Nestlé has launched a water education programme specifically for school children. Through illustrated posters, trainers explain basic water concepts, followed by live demonstrations of rainwater harvesting and water purification, quizzes, slogan and painting competitions and the planting of saplings. This unique programme helps children understand issues: water cycles, water scarcities, water usage, ground water depletion, and the importance of water for hygiene and water conservation. Children carry these messages home, widening the impact of the programme.



“ We are thankful to Nestlé who has helped our remotely located small village by providing clean drinking water for our small children and this has helped prevent the coming generations of children from water related ailments. ”

Captain (retired) Joginder Singh  
Farmer and village spokesperson, village Aaliwal, Punjab



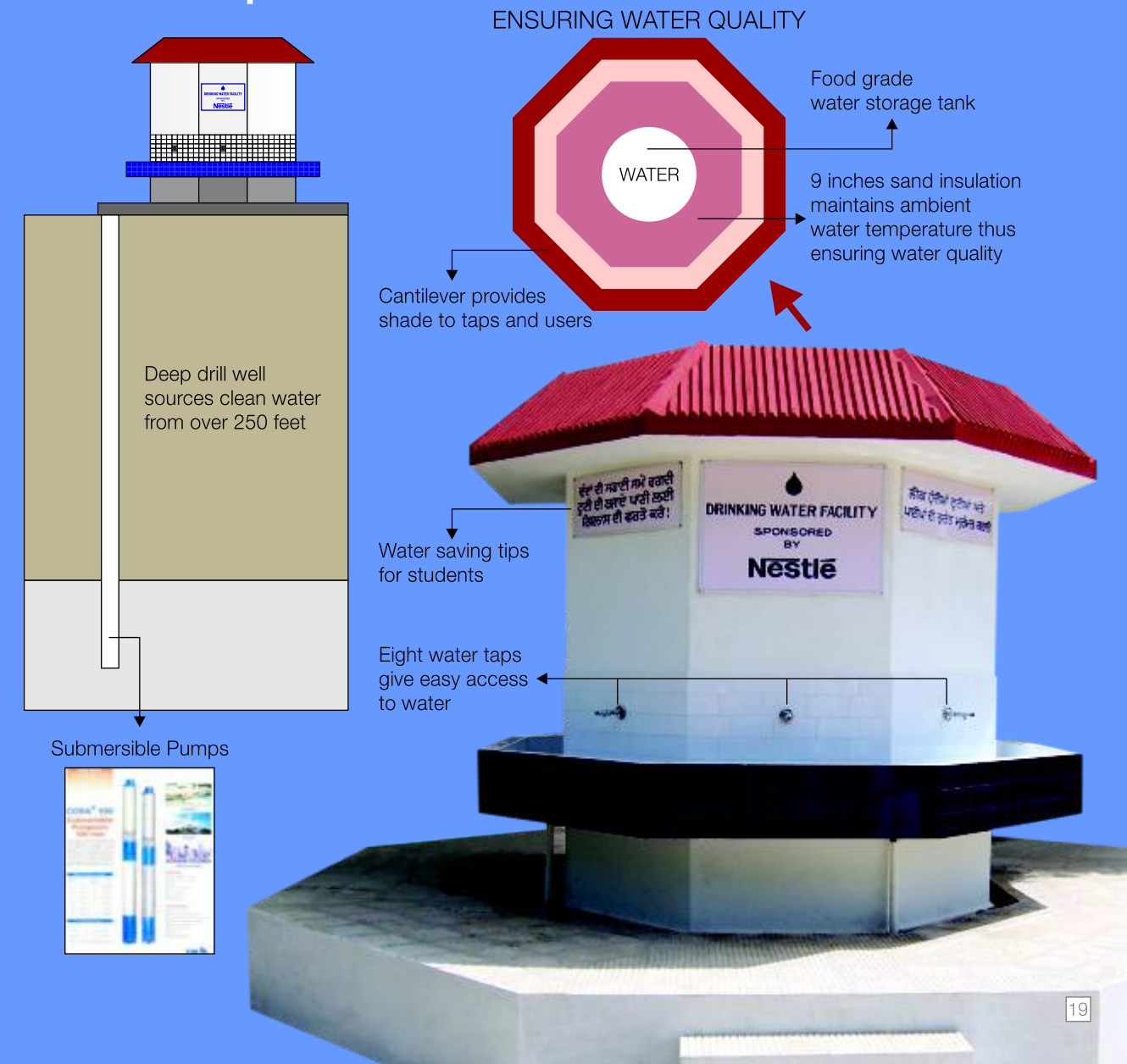
**A special facility for girl children:** Nestlé promotes hygiene through the use of water. Special toilets have been provided in 25 locations to serve 3,500 girl students for their sanitation needs. As a result, attendance has risen substantially and now girls are less reluctant to go to school.

The access to clean drinking water in village schools has had happy side effects. Schools have reported a rise in attendance since the programme was introduced. And villages have had a dramatic reduction in water-borne diseases.

## How it works

- Nestlé organizes deep bore wells ( 150ft/300ft.) and sources clean water
- Constructs storage tanks
- Test water regularly to ensure quality
- The community ensures regular maintenance and upkeep of the facility
- Costs are shared for joint ownership:
  - Nestlé bears 90% of the cost
  - Community contributes 10%
- Special modules on WATER EDUCATION to help the children understand the importance of water, water pollution and the danger of fast depleting ground water levels. This awareness makes the 'Tips on saving water' more relevant

## The Concept





## Involving the community

- Children in local schools are the key beneficiaries because they are the most affected
- Teachers, village youth, farmer parents and village elders support the move that benefits their children and the trust between Nestlé India and the community gets stronger
- The key message of conservation, hygiene, health & wellness is progressively built into the community and farmers who are our suppliers



“ With clean drinking water in the school, less children are falling sick. They also go home and help their families to save water. ”

Mrs. Dalbir Kaur  
Central Head Teacher  
Government Primary School  
Fatehgarh Korotana



“ Nestlé has taught me how to keep our cattle healthy and the milk clean, and how I can help my family live a better life. ”

Mrs. Daljit Kaur  
Village Walipur Khurd



## Nestlé India and the UN Millennium Development Goals

The Nestlé India clean drinking water programme is aligned with the United Nations Millennium Development Goals and its objective

to halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.

In line with Goal 8 of the UN Millennium Development Goals, Nestlé SA has a relationship with the International Federation of Red Cross and Red Crescent Societies, with collaborations in 13 countries. Nestlé India and the Indian Red Cross Society have forged a partnership and are collaborating on clean drinking water projects.



## Water. How long will it last?



- Today, one-fourth of the world's population already lives with a severe water shortage. By 2025, global household water needs are predicted to rise by 61%, agricultural use by 26% to 145%. If the present trend continues, two-thirds of the world's population will live in water stressed areas by 2025.
- In parts of India (Gujarat), for example, the water table is dropping up to 6 meters per year (20 feet). This is partly due to the existence of over 20 million motorised water pumps in operation in India today, compared with 100,000 in 1955. Increasing amounts of groundwater used is from fossil aquifers and is non-renewable.
- 1.2 billion people in the world have no access to clean drinking water. This is in spite of a significant improvement over the last 25 years. The number of people with access to safe water has increased, from 1.14bn in 1975-80 to 3.95bn in 2002.
- 2.4bn do not have access to sanitation. A human being needs about 5 litres of water/day for basic hydration, and 20-45 litres/day for basic sanitation.
- Less than 10 countries share 60% of fresh water reserves. Brazil, Russia, China and Canada are the top four. (Source: Aquastat, FAO) 70% of fresh water withdrawn is for agricultural use, 20% for industry, 10% for households. If you eliminate water that passes unchanged through industrial facilities (e.g., hydroelectric plants on rivers), the portion for agriculture is closer to 93%.
- Every single day we eat between 2,000 and 6,000 litres of water through the food we consume. For instance, potatoes use 500-1,500 litres per kilo, rice about 2,200 litres per kilo. Meat requires 5-10 times more water per calorie than vegetables, i.e., chicken 3,500-5,700 litres per kilo, beef 15,000-70,000 litres per kilo.



## Make use of every drop

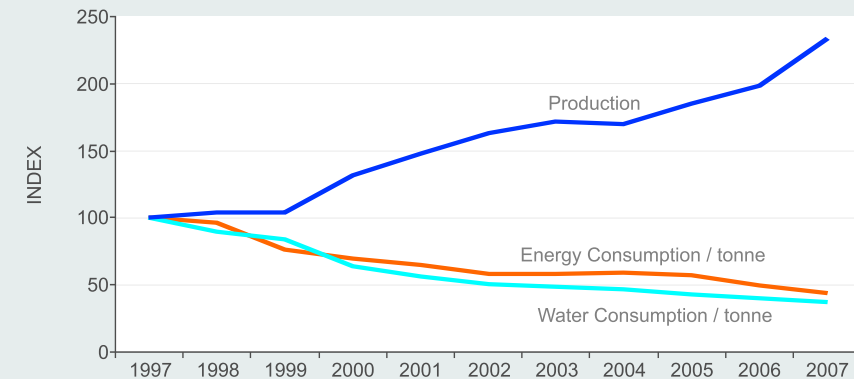
At your home, average water usage works out to about 450 litres per person each day. Little things can help reduce consumption.

- Water your plants early morning or late night to avoid evaporation. Save 15%
- Mulch around plants hold water for longer periods
- Turn off water while brushing teeth or soaping hands. Save 20 litres each time
- Take short showers, not longer than five minutes. Save 20 litres a minute
- Turn off sink faucet while scrubbing pots and pans. Save 30 litres a minute
- Be quick to repair dripping taps
- Install a toilet that uses less than 8 litres per flush



## Creating value that can be sustained for the economy and society

### EFFICIENT USE OF RESOURCES



### DAIRY DEVELOPMENT

Milk collection agencies in the area	:	2,400
Farm coolers & chillers installed	:	730
Farmers benefiting directly	:	100,000

### VILLAGE WOMEN DAIRY DEVELOPMENT PROGRAMME

Villages covered	:	550
Women covered	:	30,000
Men Participants	:	14,000

### CLEAN DRINKING WATER IN VILLAGE SCHOOLS

Water Projects completed	:	96
Children benefiting directly	:	33,000

"Creating Shared Value is a very different approach to corporate social responsibility (CSR), because it is not focused on meeting a set of standard external criteria, or on philanthropy. The idea of winners and losers doesn't fit this model of CSR."

*Mark Kramer, Harvard University*

Read more about Nestlé's approach to corporate social responsibility on [www.nestle.com](http://www.nestle.com)