




Tetra Laval Food for Development

Increasing the World's Access to Safe Food

School Feeding Programmes Impact Studies



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About School Feeding Impact Summaries

- ▶ This presentation contains impact data from school feeding programmes using Tetra Pak packages.
- ▶ Both running and historic programmes included.
- ▶ Each programme is presented with one slide covering general information about the programme and one slide with selected impact data.
- ▶ Sources to the impact data are stated at each impact slide.
- ▶ For internal and external use.
- ▶ Tetra Laval Food for Development has gathered and compiled the data originated from the stated sources.
- ▶ For any questions, please contact Food for Development.

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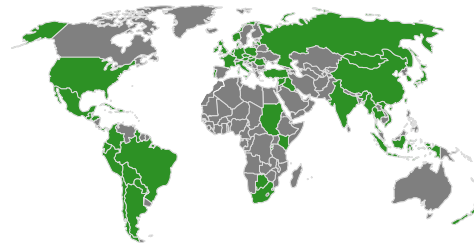
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Our History & Tradition in School Feeding

For more than 55 years, we have participated in the development of school feeding and nutrition programmes, which have provided value to children and society around the world. In 2018, 66 million children in 59 countries received milk or other nutritious beverages in Tetra Pak packages in their schools.

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Bangladesh

Year programme started:	2002
Beverage:	Flavoured Milk
Type of package:	Tetra Fino® Aseptic 200
Children reached by Tetra Pak packages:	262 900
Programme funder:	United States Department of Agriculture (USDA)
Programme implementer:	Land O'Lakes
Customer/s delivered:	BRAC



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Security level
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School Milk Programme Impact

Attendance	Total attendance in select schools increased to 95%. In the Jamalpur district the attendance rate went from 43% to 82%.
Enrolment	Increased by 34% on average.
Empowerment	Community involvement with the programme through parents' committees.
Dairy processors	3 dairy processors produced aseptically packed UHT milk to the school milk program, 0 UHT processors in Bangladesh prior to the program. 500 new jobs in milk processing and delivery created.
Academic	Students' concentration and learning ability increased. 85% of mothers perceive that their children's attention improved.

Sources: Land O'Lakes International Development: School Nutrition Program Report; Land O'Lakes International Development, August 2007; Lessons from Business: GAIN, Tetra Pak & Université de Genève Case Study.



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China

Year programme started:	2000
Beverage:	White and flavoured milk
Type of package:	Tetra Brik® Aseptic 125 Slim, Tetra Brik® Aseptic 200 Base, Tetra Classic® Aseptic 200, Tetra Fino® Aseptic 200
Children reached by Tetra Pak packages in 2018:	12 700 000
Programme funder:	Parents and Government
Programme implementer:	Dairy Association of China (since 2013)
Customer/s delivering:	97 Licensee Dairy Customers



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School Milk Programme Impact

Height and weight	Increase of at least 0.6% in height and 2.9% in weight during a 2 year period between targeted and control students.
Bone mineral content (size adjusted) and bone mineral density	Increase of at least 1.2% in bone mineral content and 3.2% in bone mineral density during a 2 year period between targeted and controls students.
UHT milk production	Increase in production from 200 million litres to 1 billion litres from 1999 to 2002. 27.5% of UHT milk production country-wide delivered to the school milk programme in 2002.
Milk production	Average growth rate of 19% from 2000 to 2002 as compared to an average growth rate of 5.5% between 1992 and 1999.
Dairy cattle	Increase from 4.6 million dairy cattle to 6.9 million from 1999 to 2002.
Number of Dairies	Increase from 700 dairies to 1,600 dairies from 1999 to 2002.
Dairy farmers income	Increase from \$2.15 billion US to \$3.24 billion US from 1999 to 2002.

Sources: British Journal of Nutrition July 2004; Beijing Prime Dairy Research Institute 2003.



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Dominican Republic

Year programme started:	1992
Beverage:	Flavoured and white milk, juices
Type of package:	Tetra Brik® Aseptic 200, Tetra Brik® Aseptic 200 Mid
Children reached by Tetra Pak packages in 2018:	1 090 000
Programme funder:	Government
Programme implementer:	Ministry of Education
Customer/s delivering:	Pasteurizadora Rica and Induveca



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School Milk Programme Impact

Anemia presence	Reduced from 43.4% to 16.7% for children 6-14 yrs old (1993-2012).
Chronic malnutrition presence	Reduced from 19.4% to 1% – i.e. anthropometric data (2002-2012).
Vitamin B12 presence	12.6% of the children demonstrated lower than normal Vitamin B12 presence (2012) in comparison to the 22% average of children in Latin America.
Vitamin A presence	Vitamin A deficiency among children between 6 and 14 years old has practically disappeared during the last two decades.

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en Salud, Nutrición, Infantil y de la Mujer

INCAP
Instituto de Nutrición de
Centroamérica y el Caribe
Nutrition Center for Central America and the Caribbean



unicef



Source: UNDP. Retrieved from http://www.do.undp.org/content/dam/dominican_republic/docs/Pobreza/publicaciones/pnud_do_encuestamicronut2013.pdf

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Indonesia

Programme started:	2000
Beverage:	Chocolate milk
Type of package:	Tetra Brik® Aseptic 200 Tetra Wedge® Aseptic 200
Children reached by Tetra Pak packages:	423 000
Programme funder:	U.S. Department of Agriculture
Programme implementer:	Land O'Lakes
Customer/s delivering:	Ultra Jaya, Greenfields



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School Milk Programme Impact

Programme sustainability	25 of 75 districts participating in the school milk program used local government funding to continue implementation after the USDA funding ended.
Empowerment	The Parent/Teacher Associations of targeted schools assumed responsibility for program implementation in individual schools in 2001.
Product development	7 new nutritious fortified beverages developed.
Milk consumption	Per capita milk consumption tripled between 1998 and 2006 (estimated that 1/3 of market growth can be attributed to school milk programming).

Sources: Land O'Lakes International Development: School Nutrition Program Report; Land O'Lakes/USDA, Indonesia School Nutrition Program End of Project Evaluation March 2006.



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Myanmar

Year programme started:	2013
Beverage:	White milk
Type of package:	Tetra Brik® Aseptic 200 Slim Tetra Brik® Aseptic 200 Slim Leaf
Children reached by Tetra Pak packages in 2018:	29 732
Programme funder:	Tetra Laval Group
Programme implementer:	MK Group and Ministry of Education
Customer/s delivering:	Nong Pho and EABC



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School Milk Programme Impact

Weight	+ 146 grams increased improvement for targeted students as compared to the control group. (July 2015 – February 2017)
Body Mass Index (BMI)	+ 0.05 increased improvement for targeted students as compared to the control group. (July 2015 – February 2017)
Mid-Upper Arm Circumference (MUAC)	+ 0.13 cm increased improvement for targeted students as compared to the control group. (July 2015 – February 2017)
Milk Acceptability	96.6% acceptability of milk by 555 children surveyed in Mon State. (2017)
Enrollment Rate	+ 2.5% enrollment rate for targeted schools as compared to + 0.1% for control schools in Yangon Region. (2017)
Drop Out Rate	+ 0.9% drop out rate for targeted schools as compared to + 5.1% for control schools in Yangon Region. (2017)

Sources: School Milk Program in Myanmar: Impact on Physical Development and Cognitive Performances of Children in Schools in Hwambi District. Institute de Recherche pour le Développement France. Report 12/05/2017. IRD – UMR Nutripass. Shwe Parami Foundation, MoE Naungkalar & Zaymathe Schools, MK Group, and Food for Development. Yangon Department of Education – School Reports

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Ministry of Education



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Pakistan

Year programme started:	2003
Beverage:	Fortified Milk
Type of package:	Tetra Brik® Aseptic 200
Children reached by Tetra Pak packages in 2005:	187 000
Programme funder:	United States Department of Agriculture
Programme implementer:	Ministry of Education and Training
Customer delivering:	Haleeb Foods



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School Milk Programme Impact

Height	6 cm gain by targeted students as compared to 5.1 cm for control students.
Weight	2.8 kg gain by targeted students as compared to 1.9 kg for control students.
Wasting	Reduction in the prevalence of wasting from 10.2% to 7% among targeted students.
Stunting	Decrease in the number of children classified as stunted from 11.4% to 9%.
Enrolment	42% increase in enrollment at targeted schools as compared to 7% at other schools in the province from 2003 to 2004.
Sustainability	Government initiated a school feeding program in 6 additional districts in 2009 after USDA funding for the Pakistan Nutrition Program ended.

Sources: Land O'Lakes International Development: School Nutrition Program Report; Land O'Lakes 2008.



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Sudan

Year programme started:	2011
Beverage:	White milk
Type of package:	Tetra Fino® Aseptic 180
Children reached by Tetra Pak packages in 2018:	22 528
Programme funder:	DAL Group
Programme implementer:	DAL Dairy Factory and participating schools
Customer/s delivering:	DAL Dairy Factory



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School Milk Programme Impact

Stunting	Decrease in the number of children classified as stunted from 11% to 5%.
Weight	Number of students underweight decreased from 17% to 8%.
Wasting	Reduction in the prevalence of wasting from 16% to 13%.
Anemia presence	Reduced from 19% to 17%.

Sources: Khartoum, Sudan Embassy of the United States press release – 1 June 2015; "Assessment of the impact of UHT milk on school children" Dr Khalifa Elmusharaf.



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Thailand

Year programme started:	1992
Beverage:	White milk
Type of package:	Tetra Brik® Aseptic 200 Slim, Tetra Brik® Aseptic 200 Slim Leaf, Tetra Brik® Aseptic 200 Base
Children reached by Tetra Pak packages in 2018:	7 450 000
Programme funder:	Government support
Programme implementer:	School Milk Board, under Livestock Department, Ministry of Agriculture and Cooperatives
Customer/s delivering:	Top 5 customers: Chiangmai Freshmilk, Nongpho Cooperatives, Country Fresh, Wang Nam Yen, Dairy Farming Promotion Organisation



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School Milk Programme Impact

Malnutrition presence	Reduced from 19% in 1990 to 10% in 1996-1997 and 5% in 2006.
Height	Children in the programme grew an additional 3 cm per year, in comparison to before programme implementation.
Per capita milk consumption	Increase from 2 litres in 1984 to as high as 29 litres in 2009. 6% increase annually between 1996 to 2006.
Dairy market	290 million litres in the early 1990s to 1 146 million litres in 2003.
Number of dairy cooperatives	62 in 1996 and 117 in 2009.
Milk production	The school milk programme uses 37% of the milk produced in Thailand.

Sources: School Milk Program in Thailand, Dr. Issara Suwanabo; FAO; Dairy Council of Thailand.



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Vietnam

Programme started:	2001
Beverage:	Fortified Milk
Type of package:	Tetra Fino® Aseptic 200ml.
Children reached by Tetra Pak packages:	330 000
Programme funder:	United States Department of Agriculture
Programme implementer:	Ministry of Education and Training
Customer/s delivering:	Vinamilk



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School Milk Programme Impact

Height	Targeted students increased 3.4% more than control students.
Weight	Targeted students increased 8.1% more than control students.
Academic	Increase from 16.3% to 25.7% of grade 3 students that received a "good" grade from school year 2003 - 2004 to school year 2004 - 2005.
Parents' perception	95% approval rating by mothers. 84% of mothers believe that their children are growing faster. 87% claim that children are healthier and stronger.
Net enrollment	0.5% decrease from 2003 to 2005 at targeted schools as compared to - 6% at control schools.

Sources: Land O'Lakes International Development; School Nutrition Program Report; Vietnam School Nutrition Assistance Program (VSNAP): Overview, Impact and Lessons Learned.



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Zambia

Year programme started:	2011
Beverage:	UHT White Milk
Type of package:	Tetra Brik® Aseptic 250
Children reached by Tetra Pak packages:	17 000
Programme funder:	Swedish International Development Agency (Sida)
Programme implementer:	World Food Programme Ministry of Education
Customer/s delivering:	Parmalat



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School Milk Programme Impact

Acceptability survey	91.8% of students surveyed "really like" or "like" the milk.
Body Mass Index (BMI)	Increased by 11.2% for girls and 5.2 for boys.
Attendance	Increased by 7.6% after programme started.
Enrolment	Increased by 7.4% (Note: The enrolment at all 13 school visited by FfDO during the mid-term evaluation mission in 2011 increased).
Children leaving school before "knock-off time"	Decreased from 35% to 1.8%.
Pass grade	Increased by 16.3%.
Sustainability	9 schools visited during the 2012 FfDO mission presented proposed sustainability strategies to continue program implementation after external funding ended in 2013.

Sources: WFP, Evaluation for the Pilot Milk for Schools Programme, August 2013.



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