



**DAIRY.
EVERYDAY.
AROUND THE WORLD.**

2016

**GLOBAL DAIRY PLATFORM
ANNUAL REVIEW**



GLOBAL DAIRY PLATFORM



LETTER FROM THE EXECUTIVE DIRECTOR

2016 was a decisive year in the history of GDP and the dairy sector. The Board and Operational Committee sharpened GDP's core mandate, which resulted in a renewed focus on the dairy sector as a leader in addressing world nutrition and health issues.

Since its inception in 2006, GDP has successfully executed a strategy of building the evidence base needed to defend the goodness of dairy. It brought together a unifying story that provides the context for the whole story of dairy. Now as GDP moves into its next decade of operation, the strategy is about building partnerships to demonstrate dairy's relevance and building trust in that relevance with consumers.

While collaboration and partnership have always been core operational principles of GDP, it has clearly jumped to another level through GDP's engagement with organizations of the United Nations. Launched at the end of 2015, the Agenda 2030 and the Sustainable Development Goals provide ongoing opportunities to demonstrate how the dairy sector can help address key needs for the growing global population.

Likewise, building an international consortium of food industry sectors to support the Digestible Indispensable Amino Acid Score (DIAAS) protein quality methodology research demonstrates GDP's ability to bring the right people together to meet a global need. And the sector's continued collaboration to drive the future of dairy marketing has yielded a clear and relevant story, an understanding of the tools it needs to communicate it and the path to build dialogue and trust with consumers and influencers.

I am especially delighted that this 2016 Annual Review includes a large number of activities undertaken by GDP in partnership with members and other sector leadership organizations such as the Global Dairy Agenda for Action (GDAA), International Dairy Federation (IDF), International Farm Comparison Network (IFCN), International Milk Promotions Group (IMP) and Sustainable Agriculture Initiative Platform (SAI). The sector is strongest when it is fully aligned with a common goal—everyone in the same boat, facing the same direction and pulling the oars in perfect synchronization towards the goal.

GDP is proud of the achievements of the dairy sector this past year and thanks its members and governance groups for their continued direction and support.



Donald Moore
Executive Director, GDP



SIX BILLION PEOPLE REGULARLY CONSUME DAIRY FOODS NOT ONLY AS BASIC NUTRITION, BUT AS BETTER NUTRITION FOR HEALTHIER AND MORE PRODUCTIVE PEOPLE, FAMILIES AND COMMUNITIES. Dairy is the third largest provider of protein and fifth largest provider of energy for people. There is increasing evidence linking dairy products to improved nutritional status and the reduction of diseases related to poor quality diet such as stunting, heart disease, diabetes and obesity.

There is a pressing need to make better use of the food system—estimates are that only half of the world’s population consumes appropriate quantities of calories and nutrients, while billions consume too few or too many. Hidden hunger, also known as micronutrient deficiencies, afflicts more than two billion individuals, or one in three people, globally. With dairy being a key component of a nutritious and sustainable food system, GDP has been engaging thought leaders who are debating what is needed to deliver healthy and sustainable diets. A consistent theme throughout these interactions is the clear need for multi-sectoral collaborative action to define the evidence needed for an achievable system.

In 2016, GDP launched the development of a multi-disciplined research **Network for Sustainable Food Systems** to broaden the discussion towards a holistic approach to global food systems. The network is focused on identifying the key constraints that exist between agriculture and nutrition, as well as environment, social policy, economics, technology and culture. GDP has a crucial role as the conduit tying the independent work of the council to the outcome objectives of the **United Nation’s Sustainable Development Goals** and its **Agenda 2030**.

A critical component of food security is having adequate dietary intake and the ability to absorb and use nutrients in the body. Protein is vital to supporting a healthier population, but a data gap exists regarding accurate measurement of the body’s absorption of the amino acids that compose protein and a protein source’s contribution to dietary requirements. With dairy as a unique high-quality protein, GDP is partnering with an **international consortium of food industry sectors** and a research consortium led by the **Riddet Institute** to fill this evidence gap by supporting the dataset required for the Digestible Indispensable Amino Acid Score (DIAAS) protein quality methodology. By encouraging documentation of this evidence and advancing the agricultural-nutrition knowledge base, the sector will aid decision makers in evaluating a foods nutritional impact and value to a sustainable diet.

By providing nutrition to six billion consumers, dairy farmers and producers make the world a healthier place



Dairy farmers
produce and deliver
nutritious food in
environmentally
sound and
responsible ways



600 MILLION PEOPLE LIVE ON DAIRY FARMS AROUND THE WORLD, CARING RESPONSIBLY FOR ANIMALS AND MAKING THE LAND BETTER FOR THE NEXT GENERATION.

Dairy cows are a popular asset in rural areas, with about 133 million farms keeping dairy cows. The global dairy herd consumes about 2.5 billion tons of dry matter feed annually and about 77 percent of this is grass and straws, meaning that the global dairy herd is converting vast quantities of materials that are not edible to humans into high-quality protein and essential micronutrients.

The linkages between the dairy sector, the nutrition it provides and its effect on the environment are complex and multifaceted. It's important to consumers—and dairy farmers—that the consumption of milk and dairy products is not harming animals or the environment. This is not only because it is the right thing to do, but because good animal care and land management practices can increase productivity while reducing impacts. This is critical as global food systems are challenged to provide nutritious food efficiently and safely while staying mindful of the effective utilization of natural resources such as land, water and energy.

One of the challenges in the area of dairy sustainability has been establishing shared metrics to jointly support continuous improvement. Working with the **Global Dairy Agenda for Action (GDAA)**, GDP is helping to drive implementation of the **Dairy Sustainability Framework (DSF)** within the dairy sector. The DSF enables the sector to take a holistic approach to sustainability through a common language and alignment of international sustainability activity on eleven key criteria, covering environmental, economic and social sustainability factors. Some 27% of world milk production is now reporting its sustainability activity via the DSF, covering over 30 million cows, 658,000 farms and 3,700 processing plants worldwide.

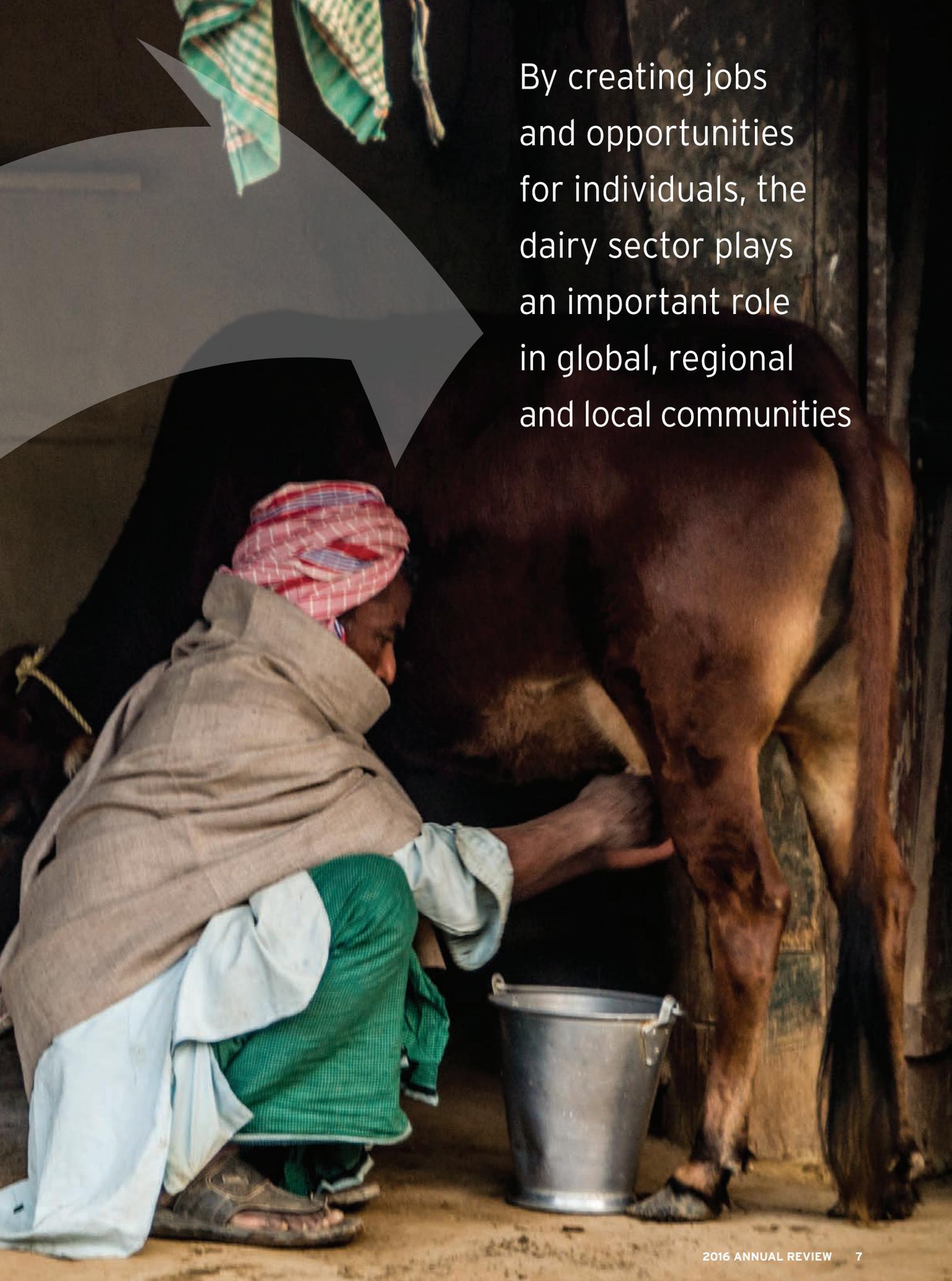
There is a need to expand and enhance the DSF's engagement with emerging dairy nations. One partner working with the DSF in this endeavour, **Dairy Asia**, is a multi-stakeholder group initiated by the FAO, consisting of 15 Asian countries committed to visioning and building a sustainable dairy sector in the Asia/Pacific region. As Chair of the DSF, GDP also met with a Chilean committee of farmer groups, processors, other private companies and the government, which led to a letter of support from the GDAA that was utilized in the committee's successful application to the Chilean government for funding to implement the DSF across the value chain. These partnerships will complement the sector's overall efforts to improve sustainability outcomes for farm families and communities as a whole.

ONE BILLION PEOPLE RELY ON THE DAIRY SECTOR TO SUPPORT THEIR LIVELIHOODS AND TO SUSTAIN COMMUNITIES IN ALL CORNERS OF THE WORLD. 600 million people living on 133 million dairy farms support a long tradition of milk production for both processors and selling milk directly to consumers. 400 million additional people are supported by the full time jobs that are created in support of dairy farming such as feed and fertilizer companies, milk collection, processing and retail. The income they generate feeds their families, sends their children to school, provides for their families' health and is reinvested in their farms and communities. This makes their communities stronger and more stable.

It is estimated that up to 60-65 percent of the income of marginal and small-scale farmers now comes from dairying. Small-scale farmers produce much of the developing world's food. Yet they are generally much poorer than the rest of the population in these countries and are less food secure than even the urban poor. Rising costs, aging farmers, changing government policies and rising land values continue to add pressures, particularly to traditionally disadvantaged segments of society—small landholders, landless laborers and women.

In May of 2016 GDP joined the **United Nation's Global Agenda for Sustainable Livestock (GASL)** to explore the role dairy plays in poverty alleviation in developing countries. What makes the dairy sector really relevant is that its diverse farming systems support a local approach to transforming livelihoods that breaks the cycle of need. Dairy animals are a regular source of food and cash for farmers, who either consume or sell milk and dairy products every day. This provides farmers the ability to access a stable source of nutrition and year-round cash flow, making affordable the basic necessities of life—food, water, shelter and clothing. In this context, dairy farming drives the self-reliant, inclusive economies that are at the heart of a stable and more resilient world. That's a powerful kind of positive change.

GDP is also partnering with the **IFCN—The Global Dairy Research Network** in 2017 to act as host for the 18th IFCN Dairy Conference. The IFCN is a network of dairy researchers and economists from over 90 countries. The key topic for the conference will be Dairy Development. It's aim is to explore what is currently being done globally and locally in terms of driving dairy development, what are the success stories and the recommended focus for key priorities.

A photograph of a man in traditional Indian attire, including a red and white striped turban and a grey shawl, kneeling to milk a brown cow. A silver bucket is placed on the ground to collect the milk. The scene is set in a rustic, dark environment, possibly a barn or a stable. A large, semi-transparent grey arrow graphic points from the left towards the text on the right.

By creating jobs
and opportunities
for individuals, the
dairy sector plays
an important role
in global, regional
and local communities



Milk and dairy products help people do what's
best for them and their family

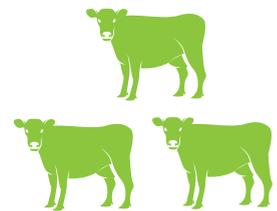
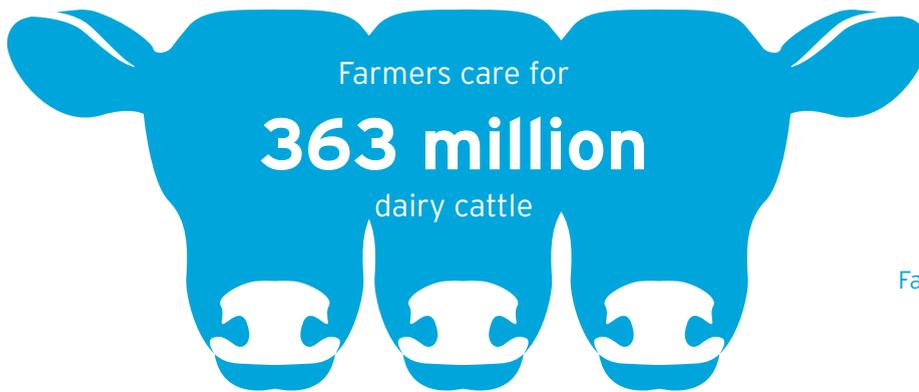
MILK AND DAIRY PRODUCTS ARE PRODUCED AND CONSUMED IN BASICALLY ALL COUNTRIES IN THE WORLD. Most countries with dietary guidelines recommend dairy as a component of a balanced diet. Its prevalence means that dairy products are often found in the moments of everyday life—the ones that are shared with those closest to us. Around the table where families share in the delight of eating good food. In schools where children are learning and achieving their potential. In places where friends meet to share coffee or wine and cheese.

Empowering those moments where people come together is important. In emerging markets, dairy farming often helps women in creating a better place for their family by providing additional income to buy food items, health care, clothing and send their children to school. In many developed communities, basic nutritional knowledge such as which foods contain good nutrition or how a food contributes to overall health is lacking. This contributes to rising rates of non-communicable diseases related to poor quality diet such as heart disease, diabetes and obesity.

GDP is focused on engaging a number of United Nations organizations—including the **Economic and Social Council, FAO, Global Agenda for Sustainable Livestock** and the **Committee on World Food Security**—on these issues. These organizations are looking for partners that can help achieve positive outcomes to deliver on the Sustainable Development Goals. These 17 goals include areas such as climate change, economic inequality, innovation and sustainable consumption, among other priorities. The goals are interconnected—often the key to success on one will involve tackling issues more commonly associated with another. The sector's overall goal is to work with these and other organizations to understand how dairy can be a part of the solution to world nutrition and health issues.

More and more consumers are relying on crowd-sourced advice rather than official experts to choose everything from the restaurants they eat at to the products they buy. Instead of going to traditional information sources, consumers are increasingly going directly to social media channels to search for content. Armed with extraordinary information access, consumers are forming opinions and drawing conclusions well before they even interact with the product. GDP's partnership with the **International Milk Promotion Group (IMP)** jointly aspires to build awareness and trust in the dairy sector with consumers across various marketing channels. This shared goal is the objective of the new Affinity Group Engagement project, which was created during the collaboration's annual Global Dairy Marketing Meeting. The aim is to create content and contextual moments at every touchpoint.

THE GLOBAL DAIRY SECTOR



Farmers in developing countries usually keeping them in herds of

2 or 3 cows

Milk is one of most produced and valuable agricultural commodities worldwide

Milk ranks **third** by production tonnage

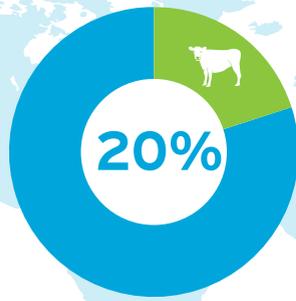
Milk is the **top** agricultural commodity in value terms the world over



133 million
Dairy Farms

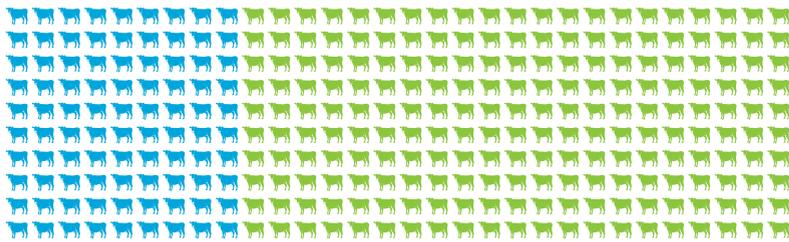
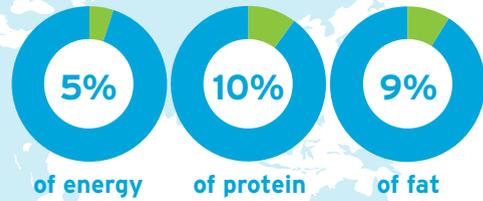
600 million
people live on Dairy Farms





of the worlds agriculture lands are cared for by the dairy sector

At the global level, milk contributes an average of



In industrialized economies herds are often larger: the average dairy farms in the UK and the US manage

90 and 300 dairy cows respectively

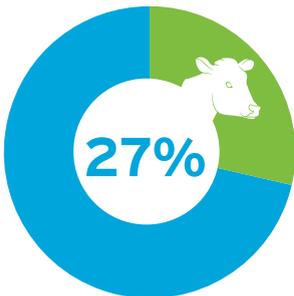


However, farms with more than 100 cows represent less than

0.3%

of all dairy farms globally

Contributes



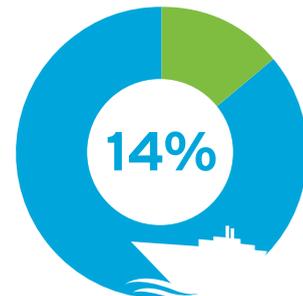
to the global value added from livestock

Contributes



to the global value added of agriculture

Milk and dairy products account for about



of global agricultural trade

400 million

additional people are supported by the full time jobs that are created in support of dairy farming



37 million

farms are female-headed with

80 million

women engaged in dairy farming to some extent



THE DAIRY SECTOR: READY TO HELP ACHIEVE THE AGENDA 2030 AND DELIVER THE SUSTAINABLE DEVELOPMENT GOALS. THE SUSTAINABLE DEVELOPMENT GOALS (SDGs) ARE A UNIVERSAL CALL TO ACTION TO END POVERTY, PROTECT THE PLANET AND ENSURE THAT ALL PEOPLE ENJOY PEACE AND PROSPERITY. THE LINKAGES BETWEEN THE DAIRY SECTOR AND THE SDGs ARE MULTIPLE AND ALL-ENCOMPASSING, MEANING THAT THE DAIRY SECTOR HAS A KEY ROLE IN ACHIEVING POSITIVE OUTCOMES.

1 NO POVERTY



4 QUALITY EDUCATION



7 AFFORDABLE AND CLEAN ENERGY



8 DECENT WORK AND ECONOMIC GROWTH



11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Dairy cows increase the value of grass, straw and crop by-products by converting these inedible plant materials and inferior plant proteins into higher quality proteins with greater biological value.

15 LIFE ON LAND



Scenic open working landscapes, environmental stewardship and the strong work ethic of farming contributes to stronger communities.

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



Dairying has an active role in alleviating poverty and unemployment and is of particular importance to traditionally disadvantaged segments of society—small landholders, landless laborers and women.

2 ZERO HUNGER



Milk production and consumption are important stable sources of nutritional intake and year-round cash flow that can provide affordability for the basic necessities—food, water, shelter and clothing—of life.

3 GOOD HEALTH AND WELL-BEING



Every day, billions of people receive important nutritional benefits that come from the milk and dairy products they consume—which means a healthier population.

5 GENDER EQUALITY



Smallholder dairy is a powerful vehicle for women empowerment in poor countries. 37 million farms are female-headed with 80 million women engaged in dairy farming to some extent.

6 CLEAN WATER AND SANITATION



Approximately 240 million people are directly or indirectly employed in the dairy sector, generating year-round, inclusive and productive employment.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Dairy farmers are proactive in reducing climate-related impacts by addressing sustainability in its full economic, environmental and social complexity.

10 REDUCED INEQUALITIES



Smallholder dairy is pro-poor and generates employment opportunities along the value chain, which represents a major pathway out of poverty.

13 CLIMATE ACTION



14 LIFE BELOW WATER



17 PARTNERSHIPS FOR THE GOALS



Collaboration is a key driver within the entire dairy value chain, as well as for creating a future in which every person has access to the food they need for an active and healthy life.



GOVERNANCE GROUPS

Global Dairy Platform's Board of Directors and Operational Committee provide strategic oversight of GDP's activities.

Rick Smith
Chair of the GDP Board
President and Chief Executive Officer
Dairy Farmers of America, Inc.

Roelof Joosten
Chief Executive Officer
Royal FrieslandCampina

Theo Spierings
Chief Executive Officer
Fonterra Co-operative Group Limited

Peder Tuborgh
Chief Executive Officer
Arla Foods amba

Jacqueline Chow
Deputy Chair of the GDP Board
Chair of the Operational Committee
Chief Operating Officer
Global Consumer Foodservice
Fonterra Co-operative Group Limited

Dr. Jeremy Hill
President
International Dairy Federation

Jerry Kaminski
Executive Vice President
Chief Operating Officer, International
Land O'Lakes, Inc.

Hanne Sondergaard
EVP and CMO
Marketing & Innovation
Arla Foods amba

Frank van Ooijen
Director Communications and Sustainability
Royal FrieslandCampina

Jay Waldvogel
Senior Vice President of Strategy and
International Development
Dairy Farmers of America, Inc.

Global Dairy Platform Leadership Team

Donald Moore
Executive Director

Jerreau Beaudoin
Communications Director

Dr. Cindy Schweitzer
Technical Director

Nata Wier
Office Manager

Kathy Laning
Meetings and Conferences

Global Dairy Platform Sector Leads

GDP Sector Leads drive forward specific work plans and projects that connect dairy to its ability to positively impact Nutritional Security, Sustainability and Dairy Development issues.

Dr. Greg Miller
Nutritional Security

Brian Lindsay
Sustainability

Ernesto Reyes
Dairy Development

GLOBAL DAIRY PLATFORM COMMERCIAL AND ASSOCIATE MEMBERS

Commercial Members

Arla Foods amba, Denmark
California Dairies, Inc., United States
China Mengniu Dairy Company, China
Dairy Farmers of America, United States
Dairy Partners Americas, Brazil
DMK Deutsches Milchkontor, Germany
Fonterra Co-operative Group Limited, New Zealand
Glanbia Nutritionals, United States
Land O' Lakes, Inc., United States
Leprino Foods Company, United States
Maryland & Virginia Milk Producers Coop,
United States
Megmilk Snow Brand Co., Ltd, Japan
Meiji Company Limited, Japan
Morinaga Milk Industry Co., Ltd, Japan
Murray Goulburn Co-Operative Co. Limited, Australia
Ornua Co-operative Limited, Ireland
Royal FrieslandCampina N.V., The Netherlands
Saputo Inc., Canada
Sodiaal Union, France
St. Albans Cooperative Creamery Inc., United States
Swiss Valley Farms, United States
TINE SA, Norway
United Dairymen of Arizona, United States

Associate Members

CoBank, United States
Elanco, United States
NIZO food research, The Netherlands
Royal DSM N.V, The Netherlands
Tetra Laval International S.A., Switzerland

GLOBAL DAIRY PLATFORM NON-PROFIT MEMBERS

Non-Profit Members

American Dairy Products Institute, United States
Australian Dairy Products Federation, Australia
Belgian Dairy Federation, Belgium
British Cheese Board/Dairy UK, United Kingdom
California Dairy Research Foundation, United States
Czech and Moravian Dairy Association,
Czech Republic
Consortio Lechero, La Cadena Lactea de Chile, Chile
Dairy Australia, Australia
Dairy Company Associations of New Zealand,
New Zealand
Dairy Connect, Australia
Dairy Council of California, United States
Dairy Council Northern Ireland, United Kingdom
Dairy Farmers of Canada, Canada
Dairy Industry Association of Australia, Australia
Dairy Innovation Australia, Australia
Dairy Management Inc., United States
Dairy Nutrition Council, Finland
Dairy Processors Association of Canada, Canada
Dairy Research Institute, United States
Dairy UK, United Kingdom
DairyCo, United Kingdom
Danish Agriculture & Food Council, Denmark
Danish Dairy Board, Denmark
Dutch Dairy Association, The Netherlands
Eastern and Southern Africa Dairy Association,
Kenya
Embrapa Dairy Cattle, Brazil
European Dairy Association, Belgium
Food and Dairy Applied Research Centre,
VHL University of Applied Sciences,
The Netherlands
La Federación Nacional de Industrias Lácteas, Spain
Gardiner Foundation, Australia
Icelandic Dairies Association, Iceland
International Dairy Federation, Belgium
International Dairy Foods Association, United States
International Farm Comparison Network, Germany
Irish Co-operative Organisation Society, Ireland
Israel Dairy Board, Israel
Japanese Dairy Industry Association, Japan
J-Milk (Japan Dairy Association), Japan
Korea Dairy Committee, South Korea
Korea Dairy Industries Association, South Korea
Korean Society of Dairy Science and Technology,
South Korea
Lactea Brasil, Brasil
Milchindustrie-Verband e.V., Germany
Milk Marketing (NSW) Pty. Ltd., Australia
Milk Producers Organisation, South Africa
MilkPEP, United States
National Dairy Council, Ireland
National Milk Producers Federation, United States
Norwegian Dairy Council, Norway
Pan-American Dairy Federation, Uruguay
Polish Chamber of Milk, Poland
South African Milk Processors Organisation,
South Africa
Swedish Dairy Association, Sweden
Swiss Milk Producers, Switzerland
The Dairy Council, United Kingdom
UK Yogurt Council, United Kingdom
US Dairy Export Council, United States

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Global Dairy Platform leads the development of a collaborative, unified approach on common industry issues and innovative research on dairy's vital contribution towards nutritional security and a more sustainable global food system. Our membership of CEOs, executives and researchers from corporations, communication and scientific bodies work in partnership to align and support the dairy industry in the promotion of sustainable dairy nutrition.



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