IFC IN THE DAIRY SECTOR SPOTLIGHT ON NUTRITION

Dairy for Global Nutrition Conference
Boise, ID
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IFC: A MEMBER OF THE WORLD BANK GROUP



WORLD BANK GROUP-

IBRD

International
Bank for
Reconstruction
and
Development

IDA

International Development Association

IFC

International Finance Corporation

MIGA

Multilateral Investment Guarantee Agency

ICSID

International
Centre for
Settlement of
Investment
Disputes

Loans to middle-income and credit-worthy low-income country governments

Interest-free loans and grants to governments of poorest countries

Private
sector
development
solutions
in emerging
market countries

Guarantees of foreign direct investment's non-commercial risks

and arbitration of investment disputes



Six Sectoral Themes Drive Our Agribusiness Agenda



Water **Global Irrigation Program** Inputs (e.g. seeds)



Small Farmers Inclusive supply chains **Global Food Security** Program (GAFSP)



Land

Princ. of Resp. Agri Investment **Africa Hybrid Investments** Productive Land: Ukraine/Brazil



Urbanizatio

Safe food processing & efficient supply chains Food affordability



Animal Protein 💢



Mitigate impacts of full value chain (e.g., feed efficiency) Broad approach includes **Dairy and Seafood Environmental Impacts**



Nutrition & **Innovation**



Food ingredients Fortified foods and drink AgTech



Global Agriculture and Food Security Program Blended Finance Solutions (combine Commercial and Concessional funds in the poorest countries)

Funding Along the Value Chain



Public Sector Window

- US\$1.2 Billion
- Managed by: World Bank
- Supervised by: AfDB, AsDB, FAO, IDB, IFAD, WB, WFP
- Donors: 9 (Australia, Canada, the Bill & Melinda Gates Foundation, UK, US, Germany, Ireland, Korea, and Spain)
- Objective: Provides grant funding directly to sovereign governments aligned with overall investment strategies

 New Mis

Private Sector Window

- US\$356 Million
- Managed by: IFC
- Donors: 6 (Australia, Canada, Japan, Netherlands, UK, US)
- Objective: Provides investment and advisory services to eligible private sector companies in agribusiness, in conjunction with IFC's investments.
- Re-launched in 2012.

New Missing Middle Initiative:

targeted support to small-scale farmers as they advance from subsistence farming, to farmer organizations, and eventually full commercial viability



COUNTRIES ELIGIBLE FOR GAFSP FUNDING SUPPORT (FY17 LIST)

Delegated Investment Authority to IFC (IDA-only Countries)

Africa

Rwanda

Senegal

Tanzania

• Togo

• Uganda

• Zambia

Sao Tome & Pr.

• Sierra Leone

South Sudan

- Benin
- · Burkina Faso
- Burundi
- CAR
- Chad
- Comoros
- Cote d'Ivoire
- DRC
- Ethiopia
- Gambia
- Ghana

- Guinea
- Guinea-Bissau
- Kenya
- Lesotho
- Liberia
- Madagascar
- MalawiMali
- Mauritania
- Mozambique
- Niger

East Asia

- Cambodia
 - dia Samoa
- Kiribati
- Solomon Islands
- Laos PDR
- Tonga
- Micronesia, FS Vanuatu
- Myanmar

South Asia

- AfghanistanBangladesh
- MaldivesNepal
- Bhutan

ECA

- Kosovo
- Tajikistan
- Kyrgyz Rep.

MENA

Djibouti

Yemen

Latin America

- Guyana
- Honduras
- Haiti •
- Nicaragua

By Approval of GAFSP Donor Committee (IDA-blend Countries)

Africa

- Cameroon
- Cape Verde
- Congo, Republic
- Nigeria

East Asia

• Mongolia

- Timor Leste
- Papua New Guinea
- Vietnam

South Asia

Pakistan

• Sri Lanka

ECA

Moldova

Uzbekistan

Latin America

- Bolivia
- Grenada
- St. Vincent
- Dominica St. Lucia



Nutrition/Fortified Food - AIFL (Rwanda)

Company

- Africa Improved Foods (AIF) is a special purpose company created by DSM, a leading global nutrition company with presence in Africa.
- A minority shareholding by the respective national governments is anticipated for the operating company.
- To complement this investment, IFC recently committed a previous project dealt with Farmer Financing to supply the plant
- The plant will sell to institutional clients as well as local and international markets.
- ➤ The plant will source raw material from local farmers, therefore providing additional income opportunities to rural communities in these countries.

IFC Role

- Catalytic/Demonstration Effect and Stamp of Approval: early IFC project working with global corporates to support local farmer sourcing programs in Africa. Mobilize support from private investors and other financiers
- Technical assistance: assist Sponsors in the development of its supply chain through access to finance and technical assistance to local farmers
- Leverage World Bank expertise and services in the region to support the plants' supply chain development

Transaction

- Total project cost estimated at US\$66 million
- IFC Investment: \$7 million loan & \$1m equity. Mobilization:
 \$10m from FMO; \$8m GAFSP (equity and debt)
- Supported by the Private Sector Window of the Global Agriculture and Food Security Program ("GAFSP").
- Commitment: July 2015
- IFC loan supports startup of new company including:
 - Construction of one processing plant to produce fortified blended food in Kigali area, Rwanda.
 - Associated Working Capital and other start-up costs

- Nutrition: More than 700,000 children will get access to fortified blended food annually, supporting the prevention and treatment of malnutrition among vulnerable populations. Also, increased access to nutritional products for urban and rural populations
- Farmer Benefits: Access to markets and technical advice for local farmer suppliers, at least 12,000 expected
- Higher food safety standards in Rwanda for complimentary foods industry for older infants and young children (above 6 months).
- **Employment**: more than 200 full-time employees.



IFC INVESTMENTS IN DAIRY SECTOR GLOBALLY

Animal Protein (incl. Dairy) Portfolio



Uruquay

Conaprole,

Milkaut

 AFISA (ARLA)

SanCor AUTCL

Mastellone



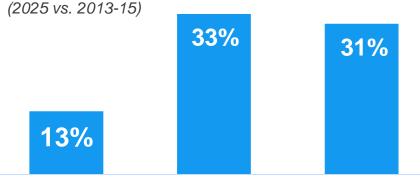
IFC works with clients globally to finance and promote investments and promote best practices along the whole supply chain



DAIRY SHIFTING TOWARDS THE EMERGING MARKETS: CHALLENGES AND OPPORTUNITIES

Key Opportunities

Projections of dairy consumption growth by regions (2025 vs. 2013-15)



Developed countries Developing countries Sub-Saharan Africa

OECD and FAO Agricultural Outlook, 2016-2025*

Sector Challenges

- Substantial GHG footprint from dairy livestock accounts for 18% of global man-made emissions
- Developing countries productivity lags behind the productivity of developed ones
- Dominance of smallholders in the supply chain
- Inefficient supply chains that increase business risk

Consumption of dairy products will grow in emerging countries over next decade:

- 5-8% Growth in Emerging Markets
- Immediate Growth: China, Brazil, India, Russia, Bangladesh, Argentina, South Africa
- Longer Term Growth: Ethiopia, Uganda, Ghana, Kenya, Nigeria, Tunisia, Tanzania, Cameroon
- Strong regional players are emerging

Key Investment Barriers

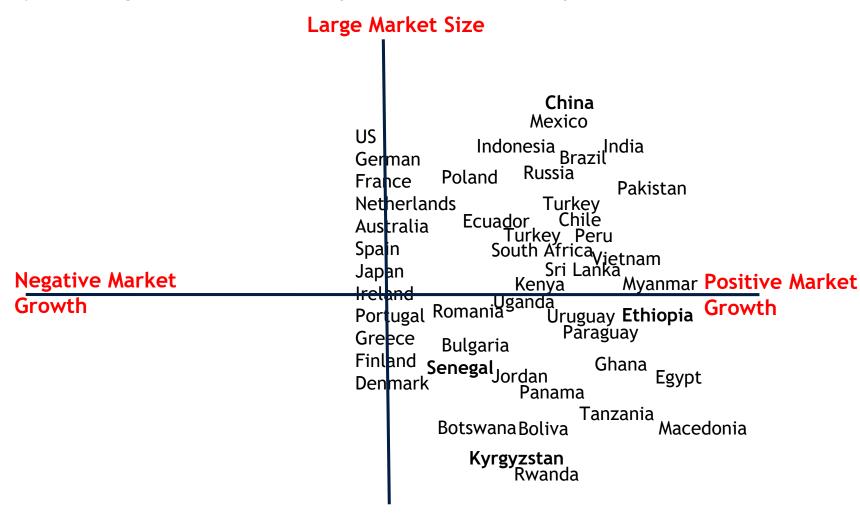
- Limited access to capital and technologies (chilling, testing and food safety...)
- Lack of technical support at farm level
- Lack of management skills at farm level
- Diversified ownership of farms
- Lack of market driven anchor dairy processor

^{*}http://www.oecd-ilibrary.org/docserver/download/5116021e.pdf?expires=1479318309&id=id&accname=quest&checksum=FE5AD4482125D2A39009C80DCB866649



Dairy GROWTH Opportunities

Large Opportunities exist for further dairy industry development in BRICs over the coming 5 to 10 years. Longer term Africa will expand market size as disposable incomes increase.



Small Market Size



DAIRY COMPANIES TYPICAL CHALLENGES



Insufficient supply from farmers

Cows are producing bellow their genetic potential due to

- Weak husbandry practices
- Lack of proper housing and ventilation
- · Lack of proper feeding



Poor quality and safety of the milk collected

- High bacteria count
- Antibiotic residues
- Milk adulteration

Such milk has limited use and creates significant reputational risks



Unstable supply

Underutilized processing capacities due to:

- Price fluctuation (high competition among dairy companies)
- Lack of loyalty from farmer suppliers



Processing facilities

- Need for strengthening food safety (especially when customers are making this as condition of procurement)
- Overuse of water and energy



IFC DEAL CRITERIA IN DAIRY PROJECTS

- Company has processing capacity of 100,000 liters/day of raw milk (value add) to 1 million per day (powder)
- Focus on the domestic market first
- Revenues are a multiple of 2.0 to 3.0 of raw milk cost
- Gross margins at 20% and above
- Preferably no dependence on exports subsidies, tariff protection, imported milk powder,
 or where the cost of milk is too high and cannot compete at parity with imports
- Location of plant to milk production area is key to delivering fresh, safe, quality milk to consumers. Depending on outside ambient temperature rule is: in 4 hours from time of milking to time processing, milk should be chilled to 4 degrees Celsius
- Milk loss is generally between 0.5% (developed markets) to 2.5% (less developed markets)



WHY DO PROJECTS NOT WORK?

- Milk Collection Not Controlled By Processor
- Government Interference in the Sector (Argentina and Russia)
- Weak brand and marketing does not allow for passing on the cost when milk prices increases
- Commodity Product in Non-Competitive Country (UHT)
- Wrong Product for the Wrong Market (UHT vs Fresh Pasteurized)
- Vertical Integration/Too Much Investment in Dairy Production (BRIC perhaps)
- Raw Milk Price Too High (Lack of Feed, Conducive Climate and Adequate Pastureland)
- Cooperative with Poor Corporate Governance (Owned and Managed By Member Farmer)
- Second Hand/Poor Quality Equipment Leading to Downtime and Poor Operating Efficiency
- Financial Wizards Leading the Investment Rather than Technical Dairy Specialist
- No Skin in the Game/No Previous Experience in Dairy (Politically Driven Projects rather than Commercially Driven)

OTHER LESSONS LEARNED

- Dairy is a sensitive sector subject to political interference;
- Low milk cost is not necessarily directly correlated with higher margins, government protection can distort margins
- Currency mismatch => carefully analyze external environment;
- Need to analyze farmers economics & alternative use of land;
- Coops are prone to Corporate Governance issues (+ difficult at time of crisis);
- Farmers loyalty to processor even to coops -- is very limited (especially at a time of crisis);
- Marketing expenses are difficult to reduce => maintenance capex is (it depends on state of plant);
- Pledge on brand could be more important than fixed assets

Difficult to find solutions to nutrition – especially for base of pyramid consumers



IFC ADVISORY SERVICES ALONG DAIRY SUPPLY CHAIN



Advisory Services Scope

Works with client extension to improve farmers' access to forage, animal health services, and better genetics

Targeted Results

Increase efficiency of client extension workforce
Improve farmers' response through practical training







Works with client extension to improve farmers' herd management, housing, milking & hygiene

Increase farmers' yields to genetic potential

Collect better quality





Strengthen technical capacity of intermediaries & farmer organizations

Leverage supply chain players to improve technical assistance to farmers





Advise clients on energy & water efficiency Implement food safety management systems

Reduce client energy and water consumption
Improve food safety control, create market opportunities





Dairy (Cow, Camel & Goat) - Tiviski (Mauritania)



Company

- Tiviski S.A.R.L ("Tiviski" or "The Company"), a dairy company incorporated in Mauritania. Products include camel, goat and cow milk and cheeses, UHT cow milk, yogurt, and milk/juice blend beverages.
- Tiviski is a family-owned enterprise; shareholders include the CEO Mr. Nagi Ould Ichidou, (87.5% of shareholding) and his spouse, the COO/CFO Mrs. Maryam Abeiderrahmane (12.5%).
- Tiviski's processing plant is located in Mauritania's capital city of Nouakchott.
- The dairy has two main collection centers supplied by herders in Rosso (200 km from Nouakchott) and in Boghé (320 km from Nouakchott).

IFC Role

- Long-term Financing: with terms not available in local market
- Industry Expertise: sharing of best practices from IFC extensive client base and experience
- Governance: support to further professionalize the company
- Stamp of Approval and demonstration effect in Mauritania

Transaction

- IFC Investment:
 - ➤ EUR 3.5 million IFC C Loan (US\$4.76m equivalent)
 - ➤ EUR 3.5 million GAFSP
- Commitment: December 2016
- Objective: support the modernization, expansion and diversification of the Company





- Food Safety: improve product quality and safety standards
- Farmer Reach: Support to over 2,000 livestock herders, most of whom are pastoral herders
- Nutrition: Providing fresh protein.
- Employment creation, including Gender promotion



Al Safi Danone Iraq (FCS)



Company

 Al Safi Danone Iraq ("ASDI") is a greenfield project to locally manufacture Danone and Al Safi branded dairy products in Iraq; operations started in April 2014;









- The Company was established as a JV between Al Faisaliah Group Holding, a leading Saudi conglomerate, Group Danone de France and Al Yasra Distribution, the exclusive distributor of ASDI in Iraq;
- ASDI is building a competitive advantage being a first mover to Iraq, in addition to eliminating large portion of their transportation cost and other import inefficiencies.

IFC Role

- Long term financing, otherwise not available in Iraq;
- Promoting South-South investment & catalytic demonstration effect aimed to re-energize investments in a conflict-affected country;
- E&S practices and standards leveraging IFC's performance standards and E&S expertise.

Transaction

- First IFC Agribusiness Investment in Iraq, which came at a time when the country is undergoing a significant stress on the back the armed conflict;
- Unique Structure: Islamic Finance Facility, to accommodate unique needs of various stakeholders;
- **IFC Investment**: US\$18 million, disbursed in tranches;
- Financing Objective, provide long-term financing to:
 - refinance shareholder's loan that was used to complete the greenfield project of US\$12 million; and
 - (ii) finance ASDI's expansion, including additional production capacity and distribution infrastructure – e.g. purchase nearly 5,000 refrigerators to be placed at "mom & pop" stores.

- Import Substitution: Locally Manufactured products are expected to reach 27,440 Tons per year in 2019;
- Fresh nutrition in tough climate: 28,300 people fed;
- Employment and Local Business Growth: targeting almost 600 new FTEs (incl. at distributor), and nearly 20,000 Points of Sale served (nearly all SMEs);
- Food Safety: strengthening food quality and cold chain.



Dairy - Anagram SPV (Pakistan)





Company

- FrieslandCampina (FC), a leading global dairy processors both in its home-base of Europe and the rapidly growing Asian market, intends to acquire a controlling stake in Engro Foods (the Company), one of the largest dairy processors in Pakistan.
- Based in the Netherlands, FC is a dairy cooperative 100% owned by its cooperative members. FC intends to invest in the Company through a special purpose vehicle, in which IFC intends to co-invest.
- The Company, which is listed on Pakistan stock exchange, is controlled by Engro Corporation, which in turn is controlled by Dawood Hercules Corporation Limited, a prominent and well respected business group in Pakistan.

IFC Role

- Tailored Financing Package: to meet FC needs in Pakistan
- Political Risk Cover
- IFC Stamp of Approval

- IFC Investments:
 - > €40 million equity (June 2016)
 - > €100 million loan (November 2016)
- Objective: the Project finances the acquisition of Engro Foods, one of the largest dairy processors in Pakistan.
- FC plans to implement an extensive technical assistance program to improve milk productivity and quality, recognizing an opportunity in the domestic dairy sector.

- Food Safety: improve product quality and safety standards
- Farmer Benefits: Increased benefits to small-holder dairy farmers
- Job Creation and Inclusive Growth
- Improved Competitiveness: Enhanced supply-chain efficiencies in milk collection
- Promote FDI to Pakistan



Dairy/Whey - Arla AFISA (Argentina)



Company

- Arla Food Ingredients SA ("AFISA") is a 50/50 joint venture of Arla (a Denmark-based dairy company) and SanCor,;
- AFISA purchases and processes whey, a byproduct of cheese production, into various dried products
- Whey Protein Concentrate (WPC) is a protein additive for functional foods (infant formulas, clinical & sports nutrtition, etc.)
- Whey Powder Permeate (WPP) is a byproduct typically used as a bulking agent in bakery, confection and dairy products, as well as in animal feed
- Functional Milk Proteins (FMP) are customized products with high protein content.
- Permeate drying is required to make functional product, and keep from disposal of liquid permeate

IFC Role

- Long term partnership and mobilization, exploring other emerging markets and mobilizing third parties;
- Promoting foreign investment & catalytic demonstration effect aimed to re-energize investments in a difficult economic environment country;
- E&S practices and standards leveraging IFC's performance standards and E&S expertise.

Transaction

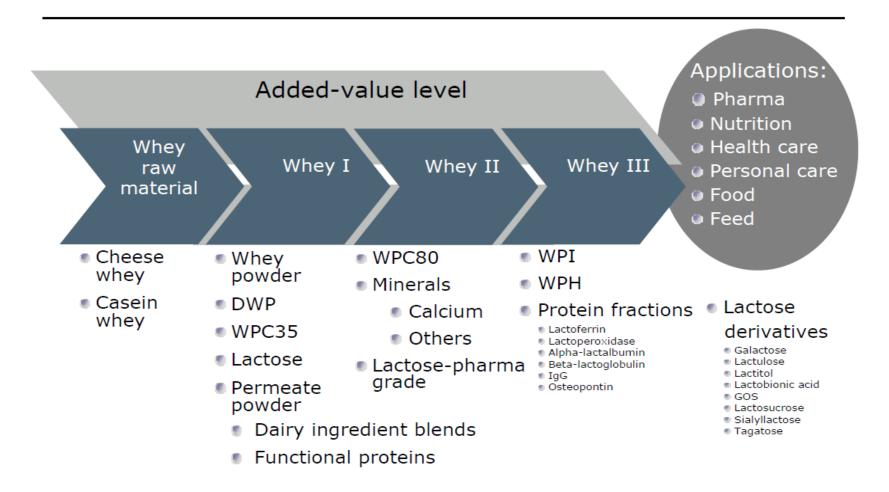
- First IFC Agribusiness Investment in Argentina since reopening of World Bank Group operations in 2014;
- IFC Investment: US\$56 million, as A Loan & B Loans;
- Financing Objective, provide long-term financing to:
 - (i) refinance existing loan US\$11 million; and
 - (ii) Installation and expansion of drying facilities to increase whey processing capacity from 900,000 T/year to 120,000 T/yr and permeate drying capacity from 24,000 T/yr to 45,000 T/yr

- Farmer Benefits: AFISA indirectly reaches 1,550 farmers and expects to reach an additional 350 more;
- Food and nutrition security: 28,300 people fed;
- Environmental & Social practices: reduce environmental pollution of a byproduct by creating saleable product from whey permeate
- Tax Revenues: export tax revenues and hard currency



Whey Powders: The New Long Term Growth Story in Dairy

Whey products universe



NESTLE PAKISTAN: SUPPLY CHAIN IMPROVEMENT

Client Need

Client strategy is to grow mid-sized suppliers (100-1000 liters per day) in Pakistan, improving their milk productivity and quality







IFC AS client since 2015

IFC Solution

Training program for 200 selected dairy farms on

- Dairy farming practices
- Milking hygiene & milk quality

Continuous improvement program for Nestle extension officers and technical staff on

- Dairy farming practices
- Food safety practices

Preliminary Results

- 90 Nestle staff and 200 farms trained and implementing recommended practices
- Improvements in safety and quality (five times less bacteria)
- Practical tools for milking hygiene & milk quality developed



"We are grateful to IFC for the technical expertise... The knowledge we received has been very useful. We hope that the value additions will prove beneficial for the farmers who will receive the knowledge and insights"

-- Adeel Aali, Head of Milk Collection and Dairy Development at Nestlé Pakistan.



TUROV CHEESE: SALES GROWTH AND EXPORT MARKETS DUE TO BETTER FOOD SAFETY

Client Need

One of leading cheese producers in **Belarus** needs to

- expand market share, access new markets
- ensure steady supply of high quality raw milk











IFC AS client since 2012

IFC Solution

- In-depth assessments and action plan to improve food safety
- On-site advisory support for food safety management system and GLOBALG.A.P. implementation
- Training programs for 200 staff
 - Food safety management system
 - GLOBALG.A.P. standard

Results

- 20x sales increase (by \$21m in 2015 vs 2013)
- 40% export growth (CIS, Central Asia, Caucuses, UAE; China and EU-planned)
- New clients multinationals (McDonald's, Papa John's, Pizza Hut, Domino's Pizza)
- Implementation of ISO 9001:2015, certification on FSSC 22000 scheme



"We found a client in China quickly. The UAE have become the new market for us as well. They got interested in us only because we use natural ingredients and we've got this wonderful certificate"

- Anastasia Bazarevskaya, Quality Manager, Turov Cheese, Belarus

IFC AGRIBUSINESS: DAIRY SECTOR CONTACTS

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ANNEX: LIVESTOCK & HOUSEHOLD NUTRITION WEBINAR SERIES

Livestock and Household Nutrition Learning Series

4 part learning series (Oct 2016 - May 2017) presented by

Land O' Lakes International Development & International Livestock Research Institute (ILRI) - part of CGIAR (chaired by World Bank)

Selected themes include:

- 1. Tools and metrics for monitoring impact of market programs on household nutrition;
- 2.Unpacking the Tension Between Nutritional and Economic Benefits of Livestock;
- 3. Food Safety and Quality to Support Nutrition for diverse consumers,
- 4.On the ground realities in implementing inclusive livestock programs that benefit nutrition in vulnerable households.

