



# ***Pakistan Dairy Development Company & Dairy Development Programmes***

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# Outline

1. The Opportunity and the Challenges
2. Introduction to Pakistan Dairy Development Company
3. Horizon One Activities and Achievements
  - Cooling Tank Programme
  - Model Farm Programme

# Outline

## 4. New Activities - Horizon Two Programmes

Community Farms

Milk Pocket Development

Bulk Vending

Human Resource Development

PDDC Breeding Programme

Military Farm Upgrades

Rural Service Providers

Link to Finance

Biogas

## 5. Recommendations for potential investors in dairy farms

## 6. Conclusion

# 1.The Opportunity

- New Zealand has one of the most efficient dairy industries in the world
- In NZ, good dairy pasture will produce around 12-17 tonnes of dry matter per ha per year
- In Pakistan, fodder crops can produce around 40 – 50 tonnes

# The Challenges

- Traditional farming practices are not productive
- Huge shortage of the human capital needed to introduce more modern and productive farm management techniques
- Supply chain challenges

## 2. Introduction to PDDC

- A Non-profit Company incorporated under Companies Ordinance, 1984 (Section 42)
- BOD has representatives from Government, processors, farmers, academia and the CEO.
- Reporting through Ministry of Industries, Production & Special Initiatives
- Articles of Association do not allow us to process milk
- Funded by Government, but private sector in approach

# Introduction to PDDC

- Our philosophy:
  - **Integrated** dairy development
  - **Integrated** farm management
  - Focused on **low cost dairying**
  - A **farm management** approach to dairy development and productivity, rather than just animal health



# 3.Horizon OneActivities

- Horizon One
  - Programmes for which we have received funding to date
    - Cooling Tank and Model Farm Programmes

# CoolingTank Programme

- Programme operates through a 90% soft loan on which PDDC meets the mark-up.
- No collateral is required.
- 748 tanks have now been installed under this scheme
  - This compares favourably with the total installed in the sector before our programme – 1,500
- Tanks have nearly all gone to processors
  - Quality
- Addressing some of the supply chain challenges



# ModelFarm Programme

- Technology transfer programme for existing dairy farmers
- Programme involves bank credit, no guarantee from PDDC/GOP. No cash provided to farmers
- Soft loan on which PDDC meets mark-up; 50% grant after three years of sound performance
  - “sound performance” means making payments to the bank on time, and taking and implementing our advice

# ModelFarm Programme

- On-farm results extremely encouraging
- Within a week or two of implementation, milk production increases by 25-35%, and sometimes over 100%
- Lower cost of production
- Profitability is improved

# Management changes

- Free access to water
- Crop rotation to allow for constant supply of green feed
- Cooling system
- Preventive health management-mastitis
- Farm/animal recording
- Calf rearing





# ModelFarm Programme

- Importantly, the Model Farm Programme is allowing PDDC to learn about how to adapt our knowledge of dairying to Pakistani conditions, and also of the difficulties faced in trying to introduce new practices and techniques into a traditional society.

# 4. Horizon Two

- **Horizon Two**
  - The challenges faced by the dairy sector are broad, and it is logical that a range of programmes are needed to address these
  - PDDC Horizon One Programmes are sound, and important to assist the development of the sector, but by themselves they will not drive that development
  - Through its White Paper, PDDC has identified programmes which it considers necessary to drive dairy development
  - Horizon Two Programmes are those which PDDC considers need to be undertaken immediately if broad sector development is to be achieved.
  - Funding approved by GOP but not yet received

# HorizonTwo

- Community Farms
  - Expensive to reach the millions of smallholders farmers, and difficult if not impossible to implement PDDC recommended farm management practices
  - Social mobilisation to create Community Based Organisations
  - Important poverty alleviation programme
  - Combination of grant, bank loan and soft loan
  - Includes the purchase of land
  - Enables the poorer sections of the dairy farming community to build assets and with these assets, a stake in society.

# HorizonTwo

- Milk Pocket Development
  - Encourage private sector or co-operative investment in processing equipment, in areas where present processors are not active; this will provide a reliable market mechanism
  - Needs to be linked with other programmes for best effect
  - Combination of grant, soft loan, private equity, and commercial loans, along with technical assistance
  - Two parts to the programme – larger scale, “fully commercial” plants, plus smaller scale most likely community operated batch plants

# HorizonTwo

- Bulk Vending
  - Production & sale by private sector of pasteurised milk in bulk, liquid form (not packaged, but sold “loose” at specially equipped shops)
  - Enhanced quality at moderate price

# HorizonTwo

- Training
  - Human Resource Development is critical factor if the potential of the sector is to be realised
    - Training of professional staff in modern farm management – employees of provincial government, processors, PDDC, RSP's etc.
    - Extension services will be provided by these master trainers
    - Employees of mid-scale farmers welcomed
- Breeding
  - PDDC to upgrade and manage 4 farms
  - Across the farms, establish a herd large enough to produce around 2,000 animals per year for sale to Pakistani dairy farmers
- Both master training and breeding activities to occur on these farms

# HorizonTwo

- **Military Farm Upgrades**
  - Boosting the productivity of the largest dairy farming institution in the country is important
  - Provides opportunity for PDDC to develop a model for profitable corporate dairy farming
  - 4 farms to be upgraded
- **Rural Service Providers**
  - Development of a business model in which farm equipment and skills are spread over a number of farms, rather than having each farmer own all equipment
  - This approach lowers costs, as per developed dairy industries

# HorizonTwo

- **Link to Finance**
  - Introduce more formal credit to the sector, by linking credit to milk supply to processors
  - Replacement of informal credit will significantly reduce interest costs for smaller farmers, and hence assist poverty alleviation
- **Biogas**
  - Using PDDC's links to farmers to implement and monitor biogas production

## 5. Recommendations for Potential Investors in Dairy Farms

- Regrettably, there are very few people able to establish & manage a productive and profitable dairy farm in Pakistan today
- PDDC is addressing this issue through its activities, but it will take years to build models for profitability and especially to develop the necessary human capital
- Need ex-patriate management
  - This infers a minimum scale is required
  - This introduces the difficulty of finding numbers of productive animals

## 6. Conclusion

- The dairy sector is complex, and its challenges many and varied.
  - Reflecting this, our approach is unique
- PDDC recognises the challenge involved in implementing our programmes, but success will be of huge benefit to the dairy farmers of Pakistan, and the whole economy