

The Council on Dairy Cattle Breeding

Business Plan Summary for Data Flow and Genetic Evaluations

Prepared on behalf of and reviewed by the Council on Dairy Cattle Breeding and
the Business Plan Working Group
June 15, 2012

Objective: *Assuring that high quality genetic evaluations and management tools will be available in the future for the U.S. dairy industry.*

Over the past 26 months there has been a dairy industry effort facilitated by the Council on Dairy Cattle Breeding (CDCB) and the Agricultural Research Service of the United States Department of Agriculture (ARS-USDA) to review and gain agreement relating to the data flow of dairy cattle genetic evaluations and management benchmarks.

The effort focused on developing an industry governed and operated dairy cattle genetic evaluation system that assumes responsibility for regular genetic evaluations currently conducted by USDA-ARS. USDA-ARS has stated that the industry service activity of providing genetic evaluations along with some areas of handling and editing is no longer within the scope of USDA-ARS's responsibility. The CDCB and USDA-ARS are working together to provide a smooth operational transition critical to the success of the effort. USDA-ARS will continue to provide research in the area of dairy cattle genetics and to provide important guidance to the CDCB as it assumes responsibility for the genetic evaluations.

- The Cooperative Agreement (CA) between USDA Agricultural Research Service (USDA-ARS) and the CDCB was made public on May 5, 2012. The industry had until June 4, 2012 to make comments on this agreement. The comments are being reviewed and will be taken into consideration before the Cooperative Agreement is in final form for signing.

- The CDCB-BPWG established a *consensus on the proposal of governance* to include:
 - A Board of Directors with four (4) sectors composed of:
 - PDCA (Purebred Dairy Cattle Association)
 - Dairy Records Providers (DHI)
 - Dairy Record Processing Centers (DRPCs)
 - NAAB (National Association of Animal Breeders)
 - Each sector would have three (3) board members with no more than three board members from a parent-subsidiary entity. Up to Two (2) allied industry positions (non-voting) will be available for service on the board. There will be a provision in place for the allied industry non-voting board seats to become voting board seats when allied industry gets organized as a sector and has data to contribute that cannot be contributed through the four other sectors on the CDCB. These data must be quality certified through an independent quality certification program that is approved by the CDCB and the data must be in the scope of the CDCB activities. When these allied industry seats are converted to voting board seats the capitalization amounts will need to be reviewed and it may be determined if it is appropriate to have capitalization from this allied industry sector.

- The *CDCB Bylaws* will be revised to reflect the changes in governance and business areas the Council on Dairy Cattle Breeding will need for the structure and operations.
- A review of genetic evaluation options will be conducted. If the CDCB decides to seek outside services for the genetic evaluation calculations, there will be a Request For a Proposal (RFP). Those organizations interested in providing the genetic evaluation calculations would submit proposals to be evaluated by the Board of Directors and staff of the CDCB through a reviewed bid process.
- Material License Agreements (MLA) will be implemented between each data provider and the CDCB. The CDCB will have MLA(s) with any outside contractor(s) of services to the CDCB about the specific release and use of data.
- A capitalization plan has been prepared now that there has been a determination of operational scope and resources required. The revenue generated by operations will be lagging from the start-up. The BPWG's plan is that twelve (12) month's operational expenses (capitalization) will be paid through quarterly installment payments split equally among the four CDCB sectors (DHIA, DRPC's, NAAB and PDCA). The first 12 months of operational expenses (capitalization) is estimated to be \$1,153,000.00. Based upon the financial projections it is unlikely that the third or fourth quarterly capitalization amounts will need to be provided.
- The capitalization contributions have some options with two being considered:
 - The capitalization contributions provided will become and remain assets of the CDCB.
 - The capitalization would be provided as low interest loans and the principle and interest would be paid back on agreed terms.
- The second year operational expenses are estimated to be \$1,585,000.00 and third year the operational expenses are estimated to be \$1,840,000.00.
- The estimated income and expenses can handle the short and long term operational expenses for financial viability. There is recognition in these figures that in the future as additional traits are added, additional financial resources will be needed to keep the system sustainable. The operational budget can handle this need in the short and long term.
- There is a need to have reasonable reserves (determined by the Board of Directors of the CDCB) to make sure the system is financially sustainable; the budget will provide the reasonable reserves needed for financial security.
- As for operational income, it is anticipated that fees from the genomic testing of individual animals and AI service fees will provide the majority of income. The ratio of fees raised by males vs. females is expected to be in the range of 75-80% males/25-20% females (see proposed fee schedule). This ratio will be monitored. A flexible fee schedule provides the mechanism to adjust fees if needed.
 - A nominal onetime fee will be charged for genomic tests for females. Based upon the amount of data contributed to the system fees for females are expected to be in the range of \$0-\$5 for domestic females. North American (US and Canada) genomic

consortium collaborators would have a negotiated rate lower than non-US rate. Based upon the number of females actually genotyped Jan –April 2012, it is projected that 122,700 females will be genomic tested in the next 12 months. These fees will be collected by the nominator on behalf of the CDCB at the time of genomic nomination.

- A nominal fee will be charged for genomic tests for males. For this fee the males will get monthly genomic evaluations up until they are 15 months of age. Based upon the amount of data contributed to the system, fees for males are expected to be in the range of \$20-\$200 for domestic males. North American genomic consortium collaborators would have a negotiated rate lower than non-US rate. Based upon the number of males actually genotyped Jan –April 2012, it is projected that 20,626 males will be genomic tested in the next 12 months. These fees will be collected by the nominator at the time of genomic nomination on behalf of the CDCB.
- A fee for males in AI service will be charged for bulls used in A.I. service. Based upon the amount of data contributed to the system fees for males are expected to be in the range of \$800-\$1,400 for domestic males. North American genomic consortium collaborators would have a negotiated rate lower than non-US rate. It is projected that 1,150 males will enter AI service in the next 12 months. All bulls must be enrolled in the NAAB AI cross-reference program and the AI service fee must be paid in order for the bull to get genomic evaluations beyond 15 months of age. This fee will be collected by the CDCB.

The ratio of male to female income from fees came out to 19.63% from female fees and 80.37% from male fees. There will also be other service fees generated to contribute to operational income.

- Currently there are a limited number of organizations that can nominate an animal to be genomic tested. CDCB will develop a validation and certification process to expand the number of organizations that can be nominators of animals.
- Individual breed associations will determine who is going to do the official linear data collection and genetic evaluation for type for that respective breed association.
 - Material License Agreements (MLA's) regarding the use and release of the data will be signed between the organizations participating in the linear data collection programs and the breed association.
 - All type data will be subject to an independent quality certification program approved by the CDCB.
- A system of annual membership fees for anyone that meets the criteria and pays the voluntary dues/fee may be considered by the new CDCB board of directors.

Status and Schedule

Following is the current status and proposed schedule of key efforts going forward.

- On May 5, 2012, the final draft of the Cooperative Agreement was sent to the public for review. Comments were sent to the list of people indicated in the release until June 4, 2012. The comments received are being reviewed and will be taken into consideration before the Nonfunded Cooperative Agreement is in final form for signing.
- The Business Plan Working Group has developed a capitalization plan and a framework of business options for genetic evaluations, management benchmarks, data flow and research access for the dairy industry and ARS. Input from the industry and sub-groups of experts to help prepare and validate assumptions was a key element in this process.
- The document containing the capitalization plan, operational plan and the governance plan was presented to the CDCB Board of Directors on June 13, 2012.
- The BPWG recommended Business Plan was forwarded to the CDCB board after which the Business Plan details were reviewed and the Business Plan Summary was unanimously recommended for release to groups and the public for input. Comments and input can be sent to the CDCB email address, one of the CDCB member organizations, or the CDCB board of directors or officers listed below before the July 16, 2012 4:00 PM Central deadline.
- Conference calls and a meeting of the CDCB board of directors will be scheduled during and after the review and input periods to consider input on both the Nonfunded Cooperative Agreement and the Business Plan to prepare an implementation plan. This is expected to be completed no later than the end of July 2012.

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Purebred Dairy Cattle Association (PDCA) Sector

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Proposed Fee Schedule

	One Time Female Fee ¹	Initial Male Fee ²	Fee for Males in AI Service ³
Total Program ⁴	\$0.00	\$20.00	\$800
Member ⁵	\$2.00	\$20.00	\$800
Non-Member ⁶	\$5.00	\$200.00	\$1,400
Non-US ⁷	\$15.00 ⁸	\$400.00 ⁸	\$1800 ⁸

Notes:

¹ Females will receive continuous evaluations. The fee will be collected by nominator at time of genomic nomination.

² For this fee, males will get monthly genomic evaluations until they are 15 months of age. The fee will be collected by nominator at time of nomination.

³ The fee for males in AI service will require the bull to be enrolled in the NAAB AI Cross Reference Program. The fee for males in AI service must be paid in order for a bull to get genomic evaluations beyond 15 months of age. This fee will be collected by the CDCB.

⁴ Total Program examples are Brown Swiss BEST, Holstein COMPLETE or Jersey REAP.

⁵ Member include individuals/companies that participate in DHIA or are data providers such as Breed Associations, NAAB members etc.

⁶ Non-Member would be herds whose production data is not included in genetic evaluations.

⁷ Non- US would be individuals/companies that do not pay US taxes.

⁸ North American genomic consortium collaborators would have a negotiated rate different than the Non-US rate.