**Figure 3**. Comparison of genomic and traditional selection approaches

200 heifers chosen for study at each of 6 dairies
All heifers genotyped to determine 100 Genomic Selection heifers

| 100 heifers chosen through genomic selection (based on genotypic test) | 100 heifers chosen through traditional selection (*not* based on genotypic test) |
|---|---|
| **Genomic Selection heifers** | **Traditional Selection heifers** |

1. Evaluate profitability after first lactation on per heifer basis for heifers chosen based on genomic selection compared to traditionally selected heifers
2. Determine return on investment for cost of genotyping on a per heifer, per dairy and across dairies basis for Genomic Selection heifers
3. Determine the reduction of financial risk for Genomic Selection heifers on a per dairy and across all dairies basis
4. Determine the sustainability of Genomic Selection using a ten-year model