Datassist Case Study:

**Pictures of Impact:**
**Using Infographics to Optimize and Promote**
**CARE’s work with rural poverty in Bangladesh**

*High quality infographics raise the profile of a dairy project in rural Bangladesh*

**The Project:**

The Strengthening of the Dairy Value Chain (SDVC) project is a partnership between CARE USA, CARE Bangladesh and the Bill and Melinda Gates Foundation. The focus of the project is on improving the livelihoods of 35,000 small-holding and landless households by enhancing their participation in and profit from the dairy value chain.


**The Situation:**

The datasets being collected for the monitoring and evaluation (M&E) purposes of the project were extremely large and complex. The CARE staff wanted to maximize the potential of this data and came to Datassist for support.

**The Datassist Solution:**

With Datassist’s assistance, project workers were able to store, merge and analyze the complex data. These complex results were then successfully communicated to a diverse set of stakeholders.

Datassist delivered some in-depth results, which were transcribed into a 150-page donor report. These results included some particularly interesting trends that were important for guiding the project as well as for partner projects and public interest. Datassist presented the data in a way that could be understood easily and then acted upon. Datassist integrated their expertise with the needs of the client to providing publication quality insightful and impactful infographics for the SDVC team.

It was due to the infographics that there were invitations to conferences, invitations to write articles, and more exposure, which led to more donor contributions, and greater overall success with the project. This
bottom line provided measurable and tangible results. As a result, the project was renewed, after receiving an additional round of funding.

**The Process:**

The initial presentation of findings in the donor report included statistical graphics such as:

**How does farm leader sex and family support affect PPT success?**

- In general, female MFL are doing better than male MFL.
- And MFL with family support are doing better than those without.
- The groups that are doing the best are the female led groups with family support for the leader. And the groups that are doing the worst are those with male leaders without any family support.

This type of visual appeals to a very limited and technical audience. The SDVC team wanted to get results out to a wider audience – including those who could use the information to design similar programs.

Datassist works every day with nonprofit organizations, journalists and social marketers to design and publish visualizations that show exactly what they’re trying to say. Based on years of technical and artistic training in how to visualize the results of complex analysis, Datassist took the statistical graphics and created more user-friendly data visuals:
Does the gender of the main farmer leader affect the total PPT score?

The PPT scores of each group do depend on the gender of the main farmer leader. The extent to which gender affects the PPT scores changes depending on how long the group has been in the project. Groups with female farmer leaders do even better over time.

This Linear Regression Model controls for the gender of the main farm leader, time and phase. It includes no random effects as there are none that significantly affect variance of the dependent variable. The significance level of this model is 0.05. There is a strongly significant moderating effect of phase on gender when predicting the PPT Score outcome. This model predicts 38% of the variance.

...and tables that were easier to read than traditional statistical tables:

How does main farmer leader gender and family support affect PPT scores?

- In general, female main farmer leaders (MFLs) are doing better than male MFLs.
- All MFLs with family support are doing better than those without.
- The groups that are doing the best are the female led groups with family support.
- The groups that are doing the worst are those with male leaders without family support.

<table>
<thead>
<tr>
<th></th>
<th>Estimated PPT score</th>
<th>Lower Bound PPT score</th>
<th>Upper Bound PPT score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male MFL - no family support</td>
<td>60</td>
<td>58</td>
<td>62</td>
</tr>
<tr>
<td>Male MFL - family support</td>
<td>72</td>
<td>70</td>
<td>73</td>
</tr>
<tr>
<td>Female MFL - no family support</td>
<td>74</td>
<td>73</td>
<td>76</td>
</tr>
<tr>
<td>Female MFL - family support</td>
<td>77</td>
<td>76</td>
<td>78</td>
</tr>
</tbody>
</table>

This is a Linear regression model controlling for the main farmer leader gender at the group level, a binary predictor of family support and phase. It includes no random effects as there are none that significantly affect variance of the dependent variable. The significance level of this model is 0.05. This model has an overall p-value of <0. The moderating effect of MFL sex significantly affects the impact of family support on PPT success. The lower and upper bound show the range of the 95% confidence interval.
Datassist had a session with the SDVC M&E team in Bangladesh to uncover the most important questions related to the project, as well as the target audience. Datassist’s next session was with the field teams, during which Datassist enquired how they manage to stay up to date with information if data was not readily available. Additional meetings with the producers gave Datassist insight into the ground realities. The producers were asked by Datassist what they wanted “us to tell them from us”.

The solution that Datassist came up with to make the data easy to understand was in the form of images. The images would have to relay a story, complete with a relevant use of color and soft pixels. This led to the idea of creating infographics, which proved very popular with the donors.

As a result of dissemination of these infographics, there were invitations to conferences, invitations to write articles, and more exposure, which led to more donor contributions, and greater overall success with the project. This bottom line provided measurable and tangible results, so that both the client and Datassist knew the visualization idea had clicked. As a result, the project was renewed, after receiving an additional round of funding.

The successful project visualizations helped in the realization that, if images could work in static form, they would be more effective if made dynamic. As a follow-up, Datassist created the wireframes for a series of data dashboards. Again, Datassist held a series of meetings with the field staff, management and key stakeholders, asking them relevant questions, most important of which involved the questions the SDVC team stakeholders wanted to be able to answer by glancing at the data.
After the meetings, Datassist built a new series of data dashboards, using real-time data and also data collected periodically. The results were even more positive with donors, workers, policymakers and researchers all giving glowing feedback.

Datassist experimented with the design and color schemes, and created a series of different dashboards. The completed work was then shared online with the entire team involved in the SDVC project, through regular Skype meetings.