

KEY FINDINGS

BOW RIVER IRRIGATION DISTRICT- PRECISION AGRICULTURE SURVEY

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- **Number of survey participants: 101 or 15.5% of district irrigators**
- **Percentage who have adopted precision agriculture technologies – 82%**
- **Average number of technologies adopted – 4.7**
- **Satisfaction rating of technologies ('somewhat positive' or 'extremely positive') – 87%**
- **Top five technologies adopted (percentage of adopters):**
 - **Using auto-steer (92%)**
 - **Establishing field boundaries, low spots, unfarmable land (49%)**
 - **Studying/analysing yield data (49%)**
 - **Using satellite imagery (42%)**
 - **Yield mapping (42%)**
- **Effects (annual averages):**
 - **Reduction in irrigation water (21%)**
 - **Increase in crop quality (20%)**
 - **Increase in crop yield (18%)**
 - **Reduction in fertilizer (15%)**
 - **Reduction in herbicides (15%)**
 - **Reduction in pesticides (13%)**
- **Top motivators for adopting:**
 - **To reduce energy costs (67%)**
 - **To reduce labour hours (67%)**
 - **To reduce machine time (64%)**
 - **To increase annual crop yield (60%)**
 - **To increase annual crop quality (56%)**
 - **To reduce annual irrigation water (51%)**
- **Future adoption intentions: 82% plan further adoption in the next five years**
- **Type of land precision agriculture applied to - irrigated 70%, dry-land 30%**
- **Crop most benefitting from precision agriculture (percentage of adopters):**
 - **Speciality Crops (48%)**
 - **Cereals (7%)**
 - **Oil Seeds (43%)**
 - **Forages (2%)**
- **Non-adopters - main reasons for not adopting:**
 - **Operation is too small (31%)**
 - **High investment costs (23%)**
- **Non-adopters who plan to adopt in the next five years – 19%**
