SHELTERBELTS, BEEF PRODUCERS & BEHAVIOURS: INVESTIGATING AN ALTERNATIVE APPROACH USING SOCIAL MARKETING

Great Plains Windbreak Renovation and Innovation Conference

International Peace Garden

July 26, 2012

Ryan Canart, Ian Shanghvi, William Ashton & Blair English
About the project

- April 1, 2011 – March 31, 2015
- Funded by AGGP/AAFC
- Major goal: GHGs
- Implemented by UARCD & RDI
- Two objectives:
  - Objective 1: Model SB
  - Objective 2: More SBs
Objective 1 – Model Shelterbelt

- Maintaining 2500 trees.
- Monitoring soil attributes.
- Tracking costs & benefits.
Objective 2 – More Shelterbelts

- Southern MB
- New & improve existing SBs
- 9000 BPs
- Understand BP attitudes towards SBs
- Involve opinion leaders
- How: social marketing approach

- A systematic application of commercial marketing concepts and techniques, along with other concepts and techniques, to achieve specific behavioural goals for a social good (Hawke, G., 1999; Christmas, S. et al, 2009).

- E.g. health, safety, environment, etc.
- E.g. Health Canada vs. smoking and obesity.
Our Approach

• 5 stage model:
  - Awareness
  - Assessment
  - Action
  - Appraisal
  - Acceptance

• Each stage takes time
Awareness

- Know about SBs.
  - Website
  - Partnership with MBP (e.g. Cattle Country)
  - Conservation Districts
  - Baseline survey
  - Field visits
• BPs assess willingness.
• Identifying barriers & opportunities.
  ➢ Costs & benefits.
  ➢ SB workshops (worksheets)
  ➢ Field visits
Acceptance

- Yes or no or maybe.
- Each answer is important.
  - Yes - accept SB (what’s needed to take action)
  - No - for now (re-work), for ever
  - Maybe – how to get BP to decision (yes)
Action

- Establishing & maintaining SBs
- Actively learning from others
  - SB experts
  - Fellow BPs e.g. field trips
Appraisal

- Measuring success.
- Justifies continuation and adjustments.
- Sharing knowledge and experiences.

<table>
<thead>
<tr>
<th>Appraisal by BPs</th>
<th>Appraisal by RDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Trees growing fine (e.g. time, healthy, etc.)</td>
<td>• Follow-up on the 40</td>
</tr>
<tr>
<td></td>
<td>(acceptance, action &amp; appraisal)</td>
</tr>
<tr>
<td>• Soil characteristics &amp; other env. factors (e.g. wind velocity, diseases, etc.)</td>
<td>• Feedback from field visits (all 5 stages)</td>
</tr>
<tr>
<td>• Field visits to learn</td>
<td>• Reports and discussions</td>
</tr>
<tr>
<td>• Inputs vs. outputs</td>
<td></td>
</tr>
<tr>
<td>• Timely response</td>
<td></td>
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</tbody>
</table>
## 5 Stage Model vs. Project Components

<table>
<thead>
<tr>
<th>Stage</th>
<th>Model site</th>
<th>Additional sites</th>
<th>Baseline survey</th>
<th>Workshops</th>
<th>Communications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>• Visit</td>
<td>• Visit</td>
<td>• Face-to-face</td>
<td>• Detailed info</td>
<td>• Cattle country</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Factsheets</td>
<td></td>
<td>• Website</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Media release</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Conferences</td>
</tr>
<tr>
<td>Assessment</td>
<td>• Visit</td>
<td>• Visit</td>
<td></td>
<td>• Worksheets</td>
<td>• Calling for clarifications</td>
</tr>
<tr>
<td>Acceptance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Follow-up</td>
</tr>
<tr>
<td>Action</td>
<td>• Visit</td>
<td>• Visit</td>
<td></td>
<td>• Follow-up</td>
<td>• Calling for help (e.g. trees, labour)</td>
</tr>
<tr>
<td>Appraisal</td>
<td>• Visit</td>
<td>• Visit</td>
<td></td>
<td>• Follow-up</td>
<td></td>
</tr>
</tbody>
</table>
• Model SB established.
• Videos (16) and pictures.
  ➢ Uploaded onto project website.
  ➢ BPs welcoming visitors to learn.
  ➢ Visitors to provide feedback.
Achievements in 2011/2012
Baseline survey

• Interest and awareness of SBs.
  ➢ Intercept & tel. interviews.
  ➢ 231 surveys completed (383 wanted).
Achievements in 2011/2012
Baseline survey - Interest in SBs

• BPs highly value SBs
  – 87% own SBs
  – 99% keep (n=199)
  – 50% enlarge and improve (n=100)
• 13% not have SBs (most never had)
• BPs generally use SBs as windbreaks for BP
• 3 groups: Small (≤100), Medium (101-300), Large (≥301)
Achievements in 2011/2012
Baseline survey - Interest in SBs

- Reconsideration is chiefly for BP
  - 57% had SB / 73% never had
- Factors for reconsideration

<table>
<thead>
<tr>
<th>Factor</th>
<th>Number of beef producers reporting</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific studies</td>
<td>3</td>
<td>3%</td>
</tr>
<tr>
<td>More information</td>
<td>8</td>
<td>8%</td>
</tr>
<tr>
<td>Field visit</td>
<td>11</td>
<td>11%</td>
</tr>
<tr>
<td>Workshop</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>See neighbours use them</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Help with labour</td>
<td>4</td>
<td>4%</td>
</tr>
<tr>
<td>Government funding</td>
<td>10</td>
<td>10%</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>11%</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>29%</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>2%</td>
</tr>
</tbody>
</table>
Achievements in 2011/2012
Baseline survey – Awareness of SBs

• Strong perception of multiple uses
  – Having SBs (87% / n = 201)

<table>
<thead>
<tr>
<th>Role of SB</th>
<th>Agree (%)</th>
<th>Neutral (%)</th>
<th>Disagree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livestock protection</td>
<td>95</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Wildlife habitat</td>
<td>94</td>
<td>4.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Drifting snow</td>
<td>94</td>
<td>2.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Soil erosion</td>
<td>90</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Animals vs. crops</td>
<td>32</td>
<td>35</td>
<td>33</td>
</tr>
<tr>
<td>Soil nutrients</td>
<td>20</td>
<td>32</td>
<td>48</td>
</tr>
<tr>
<td>Trouble to maintain</td>
<td>11</td>
<td>18</td>
<td>71</td>
</tr>
</tbody>
</table>
Achievements in 2011/2012
Baseline survey – Awareness of SBs

– Not having SBs (13% / n = 29)

<table>
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<th>Disagree (%)</th>
</tr>
</thead>
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<tr>
<td>Livestock protection</td>
<td>90</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Wildlife habitat</td>
<td>92</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Drifting snow</td>
<td>83</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Soil erosion</td>
<td>76</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>Animals vs. crops</td>
<td>43</td>
<td>25</td>
<td>32</td>
</tr>
<tr>
<td>Soil nutrients</td>
<td>14</td>
<td>27</td>
<td>59</td>
</tr>
<tr>
<td>Trouble to maintain</td>
<td>13</td>
<td>28</td>
<td>59</td>
</tr>
</tbody>
</table>
Achievements in 2011/2012 Website

- Website designed & developed.
- A designated tool for:
  - Tours & feedback surveys.
  - Interaction btn BPs.
  - Info sharing.
  - Linking BPs to relevant orgs.
- To be launched in Fall 2012.
- 136 visits in May & June 2012.

http://prairieshelterbelts.ca/
Achievements in 2011/2012
Adaptation & attitudinal change (workshops)

• Unable to deliver (wrong timing)
• Collaborated with AESB for 2012/2013
• Continuing to work with MBP & MCDs
Achievements in 2011/2012
Knowledge transfer/sharing

• Lit. review & draft paper on RDI’s 5 Stage SM Model
• Presentations
  ➢ AGGP TIC Workshop in Saskatoon, Mar. 2012
  ➢ At announcement of the project funding, Feb. 2012
  ➢ CRRF, Feb. 2012
  ➢ Rural Team in Winnipeg, Sept. 2011
  ➢ Rural Research Network in Ottawa, May 2011
Achievements in 2011/2012
Knowledge transfer/sharing

• Over 230 project factsheets delivered
  ➢ Provincial Exhibition of MB, Nov. 2011
  ➢ MCDA's Annual Conservation Conference, Dec. 2011
  ➢ MB Ag Days, Jan. 2012
  ➢ BPs Meeting in Holland (MB), Jan. 2012

• News articles in media
  ➢ Manitoba Co-operator, Feb. 2012
  ➢ Virden Empire-Advance, Feb. 2012
Next steps (2012/2013)

- Project continues (2012/2013)
- Model SB
- 25 additional SBs
- Baseline surveys (target 383 BPs)
- Workshops (40 BPs this year)
- Knowledge transfer/sharing
  - SM model / campaign paper
  - Presentations
    - GPWRIC (today)
    - MB Livestock Expo
    - SM Global Conference etc.


Thank you.