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

Great Plains Windbreak Renovation and Innovation Conference

International Peace Garden

July 26, 2012

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Decisions of a producer to plant a shelterbelt or improve one are shaped by one’s attitudes and experiences. This research is aimed at understanding the producers’ attitudes in order to influence decisions about shelterbelt. Such a focus on behaviour change is made possible with the innovative use of interactive change management approach based on social marketing. The same approach employed by Health Canada over multiple years to address the problems of smoking and obesity. The project featured in this presentation employs a baseline surveys to investigate current and prevailing interest in shelterbelts held by beef producers in Manitoba, along with workshop sessions to design their own shelterbelts that fit their operations, and a website with a growing number of virtual tours. Preliminary results show 63% of beef producers use shelterbelts for production and 49% want to keep their shelterbelts with nearly a third more wanting to enlarge or improve them. Such information will shape upcoming project initiatives to inform beef producers about implementing shelterbelts.

Key words: shelterbelt, beef production, social marketing, Manitoba
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

- Plant new & rejuvenate old SBs
- Understand BP attitudes towards SBs
- Southern MB
- 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
  - Acceptance
  - Action
  - Appraisal
• Know about SBs
  ➢ Website
  ➢ Partnership with MBP (e.g. Cattle Country)
  ➢ Conservation Districts
  ➢ Other media e.g. MB Cooperator etc.
  ➢ Baseline survey i.e. intercept, factsheets
  ➢ Field visits
  ➢ Workshops (detailed info)
Assessment

- BPs assess willingness
  - Negotiations
  - Costs & benefits
  - Identifying barriers & opportunities
  - 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)
• 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</td>
<td>• Feedback from field visits (all</td>
</tr>
<tr>
<td>velocity, diseases, etc.)</td>
<td>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>
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<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, Factsheets</td>
<td>Detailed info</td>
<td>Cattle country, Website, Media release, Conferences, Calling for clarifications</td>
</tr>
<tr>
<td>Assessment</td>
<td>Visit</td>
<td>Visit</td>
<td></td>
<td>Worksheets</td>
<td>Calling for clarifications</td>
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<td>Visit</td>
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<td>Action</td>
<td>Visit</td>
<td>Visit</td>
<td></td>
<td>Follow-up</td>
<td>Calling for help (e.g. trees, labour)</td>
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<td>Appraisal</td>
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<td></td>
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- Visit
- Factsheets
Achievements in 2011/2012
Model SB & Additional SBs

- Model SB established
- Videos (16) and pictures
  - Uploaded onto project website
  - BPs welcoming visitors to learn
  - Delivered feedback surveys
Achievements in 2011/2012
Baseline survey

- Interest in and awareness of SBs
  - 383 vs. 9000 BPs
  - Intercept & tel. interviews
  - 231 surveys completed
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
• Reconsideration is chiefly for BP
  – 57% had SB / 73% never had
• Factors for reconsideration
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)

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<tr>
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<td>4</td>
<td>4</td>
</tr>
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<td>10</td>
<td>7</td>
</tr>
<tr>
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<td>17</td>
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<td>32</td>
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<td>Soil nutrients</td>
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<td>27</td>
<td>59</td>
</tr>
<tr>
<td>Trouble to maintain</td>
<td>13</td>
<td>28</td>
<td>59</td>
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</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.
References


Thank you.

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