Does Your Implementation Fit Your Theory of Change?
Key Insights From Evaluation Practice

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Deborah Welch, SWC

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Agenda

- The situation
- Models and approaches
- Real world applications
- Key learning
Information Programs

“Timeliness is critical for stakeholders...some natural delays are outside of x’s control as it depends on a, b, c etc.”

Collaborative Support

“Collaborative support is very important for the delivery of y however there is limited evidence of recent collaborative efforts as a result of agreements.”
**MOU**
“Data sharing between (jurisdiction, agencies and even within areas of single agencies) was one of the main challenges.”

**Volunteers**
“Interviewees were unanimous in attributing the decline in activity to the reduced availability of volunteers.”

**Overlaps**
“...given that both the department and the beneficiary are involved in delivering similar activities, it is important to ensure that an appropriate delivery model and terms and conditions are clarified for this program.”
Funding Flexibility

“The evaluation found the Program continues to face challenges in balancing a structured planning process with the need to respond to emerging policy priorities.”

Funding ‘Fit’

“The short-term nature of funding was found to be a problem for the longer term investments required for x.”

“Case studies suggested that there is a need for an even stronger continuum of funding support for collaborative research involving both x and y researchers...”
Inappropriate Standards
“There was a question of whether ‘standard x’ fits the nature of ‘activity type y’.”

Roles and Responsibilities
“A lack of clarity regarding the role / responsibilities of y with regard to x was noted as a source of confusion.”

Program Assistance Communications
“The most common concern of both funded and unfunded [recipients] was the amount and quality of the feedback at the [early] program application stage.”
Observation

- A lot of the learning in evaluation reports relates to the way programs / initiatives are delivered.
- Yet most logic models and frameworks are either silent or give short shrift to the implementation (action) theory that serves the theory of change.
- Therefore evaluation learning in its area of highest potential is unsystematic and almost accidental.
Cash For Clunkers vs. Infrastructure Support as Economic Stimulus
What Happened?

- Cash for clunkers spent allocated funding ahead of schedule
- The Great Infrastructure Boom That Wasn't "Very few meaningful stimulus-related infrastructure projects were launched in 2009. In fact, somewhat ironically, some infrastructure spending was actually delayed ... as [provincial, state and local] governments awaited funding from the federal stimulus coffers," noted CIBC World Markets analyst Paul Lechem.

Cash for Clunkers Implementation Process

Government A suggests a ‘Cash for Clunkers’ incentive

Government A offers incentive

(American) consumers take-up incentive to advance car purchases

Auto companies and dealerships respect the program

Economic stimulus effects

Environmental, health and other public good effects
Infrastructure Support Implementation Process

- Government A suggests public infrastructure stimulus
- NGOs and other interested parties present interests
- Media and citizens weigh in
- Provincial or State Governments B-M ‘negotiate’ terms
- Regional and Municipal Governments N-Z get involved and propose projects
- ‘Governance’ relationship agreed
- Governance among all parties ‘consistent’
- Projects decided
- Procurement and contract mgt. process ‘sound’
- Supply community engaged (appropriately)
- Supply community capacity and support achieved
- Infrastructure projects well managed
- Economic stimulus effects

Delays = f (authorities x actors x size of project)
Broader Evidence of the Problem

• Performance information is almost **always** inadequate for some types of programs
• Repayable contributions in some areas rarely get repaid
• Administrative monetary penalties seldom ‘work’ – they almost always disappoint.

Are these ‘management’ problems or are these fundamental mis-fits of implementation design to requirements?
The Solution

• Recognize the implementation (action) ‘logic’ or theory that goes along with the theory of change
• Research (evaluate) what works for whom in what conditions for both and then
• Research (evaluate) how they work with each other
## An Example: Repayable Contributions for High Technology Innovation

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<th>Need Theory:</th>
<th>There is insufficient innovation in sector X caused by a lack of domestic investment to bring innovation research to market.</th>
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<td>Mechanism (Change Theory):</td>
<td>A contribution will provide needed cash to companies to move innovations from discovery to commercialization. (See innovation theory.) Repayability in the contribution will address WTO concerns about unfair support. It will also ensure greater discipline in the innovations to focus on getting product to market.</td>
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<td>Department will team up with sector X association in the selection and delivery of projects on the premise that this group will know and represent the needs of the sector for innovation.</td>
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# Findings from Past Reviews

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<td>There is insufficient innovation in sector X caused by a lack of domestic investment to bring innovation research to market.</td>
<td>Investment in sector X becoming increasingly multinational...not clear that domestic $ gap hinders innovation but rather gap in international investor confidence.</td>
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<td>A contribution will provide needed cash to companies to move innovations from discovery to implementation. (See innovation theory.) Repayability in the contribution will address WTO concerns about unfair support. It will also ensure greater discipline in the innovations to focus on getting product to market.</td>
<td>‘Repayability ‘clause found to work against the need for nimble investment since consortium often involved and repayment liability handled by lawyers and accountants (this ‘delay’ and increased uncertainty creates a negative feedback loop which leads to a slow hard process which leads to negative reactions which leads to fewer good applicants etc. etc.)</td>
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<td>Department will team up with sector X association in the selection and delivery of projects on the premise that this group will know and represent the needs of the sector for innovation</td>
<td>Associations not always found to represent all sector X Canadian investments – causing internal political battles and lack of trust in the process – reducing reach and slowing process – reinforcing negative feedback loop - leads to fewer good applicants leads to less success leads to reduced reputation etc. etc.</td>
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A Second Example: Administrative Monetary Penalties (AMPs)

Need Theory: Regulators need an ability to moderate an otherwise harsh response (i.e. too big a jump between warning and criminal penalty).

Regulators have inefficient existing means available (i.e. Need to improve efficiency in regulation).

Mechanism (Change Theory): A civil commercial penalty is needed to fill out the pyramid and to allow for scaled deterrence.

Implementation Theory: Agencies will readily apply AMPs to gain efficiencies in sanctioning violators and will improve the cost-effectiveness of the whole system.
# Findings from Past AMPs Reviews

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<td>Not all regulators need a civil sanction and not all civil penalties fit easily into the ‘scaled’ pyramid.</td>
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<td>A civil commercial penalty is needed to fill out the pyramid and to allow for scaled deterrence.</td>
<td>The AMPs mechanism works where:</td>
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<td>* High level of regulated party commitment to the basic intent of the Act (low level of willful non-compliance)</td>
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<td>* Controlled inspection conditions</td>
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<td>* Low complexity in terms of transactions</td>
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<td>* Significant proportion of commercial transaction ‘value’ represented by AMP – the economics of the marketplace</td>
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<td>* Belief on part of regulated party that enforcement actions will be upheld</td>
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<td>Agencies will readily apply AMPs to gain efficiencies in sanctioning violators and will improve the cost-effectiveness of the whole system.</td>
<td>There can be significant cultural differences between and among implementing parties which significantly impact AMPs efficiency.</td>
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<td><strong>The key stakeholders include:</strong></td>
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<td>* Associations (supplier and consumer)</td>
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<td>* Policy makers and program proponents</td>
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<tr>
<td></td>
<td>* Inspectors</td>
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<tr>
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<td>* Enforcement officers</td>
</tr>
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<td>* Legal counsel</td>
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<td>* ‘Review’ institutions</td>
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<td><strong>Key implementation factors include:</strong></td>
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<td>* Clarity of language defining violations</td>
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<td>* Knowledge by inspectors and investigators of what constitutes a violation</td>
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<td>* ‘Commitment’ to promotion of regulatory compliance by inspectors and regulators</td>
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<td>* High level of engagement with regulated parties – and their representatives</td>
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<td>* Consistent interpretation of legal responsibilities of all concerned parties and burden of proof / sufficiency of evidence</td>
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Some Recent Attempts to Systemize Action (Implementation) and Change Theories

• Chen (1990, 2005)
• Mayne and Stern (ACIAR 2013)
• Renger, Bartel, Foltysova (2013)
Chen’s Conceptual Framework of Program Theory (Comprehensive Form)

Action Model

Implementing organizations

Associate organizations and community partners

Ecological Context

Intervention and service delivery protocols

Target populations

Implementers

Resources

Environment

Program implementation

Intervention

Determinants

Outcomes

Change Model

Sager and Andereggen Analytical Framework

### Context
- Federal level
- Financial situation
- Urbanization
- Language region
- History

### Polity
- Planning coordination
- Degree of professionalization in the administration
- Administrative discretion
- Influence of external experts

### Policy Factors
- Service providers
- Benefits
- Costs
- Inclusion of environmental aspects
- Change in behavior

### Politics Factors
- Conflict among politicians and within the administration
- Participation of affected parties
- Participation of societal players
- Importance of communication
- Decision makers

### Outcomes
- Acceptance
- Success of implementation

Incremental innovations were favored in this time period – low structural readiness for major change (e.g., H2FC, EM)

Favored applied research (TRLs 6-7)

OERD history strong in applied research assistance, less in demonstrations

Worked well in most cases; but gap in H2FC Industry Committee

Incompatibility among some policies, programs and regulatory environments

Priority setting and transparency of processes generally okay; problematic in some cases

In general, shared agendas among GoC partners; some differences in technology outlook / strategy between NRCan, NRC, IC re. H2FC

Context (Social, Economic, Political, Technological)

- Economic Factors (e.g., price of alternative fuel, economic marketplace conditions)
- Infrastructure / value chain ‘structural’ readiness
- Innovation stage(s) involved
- History of programming (experience in use of instruments and mechanisms)
- Compatibility with other policies and programs (e.g., regulatory environment)
- Financial arrangements vs. stage of innovation

Outcomes

Acceptance

Success

(immediate, intermediate and long term)

*Accountability requisite components include clear roles and responsibilities, clear performance expectations, balanced expectations and capacity, credible reporting and reasonable review and adjustment (see OAG principles for Accountability 2009)

**See key considerations for incentive / subsidy programs (Funnell and Rogers, 2011, Leeuw 1998 and others) and innovation support in terms of actions and communications.

Archetype: Motivational Programs that Use Incentives

<table>
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<tr>
<th>Generic outcomes chain for archetype of motivational programs using incentives: carrots</th>
<th>Outcomes chain for performance-based pay programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Desired and result is achieved</td>
<td>6. Results for the organization are improved</td>
</tr>
<tr>
<td>5. Target group behaves in desired ways</td>
<td>5. Managers change/maintain their behavior to ensure that desired results are achieved</td>
</tr>
<tr>
<td>4. Target group is motivated to behave in desirable ways (behavioral intent)</td>
<td>4. Managers desire/attempt to change their behaviors in ways that will attract rewards</td>
</tr>
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**OUTCOMES OF SUCCESSFUL ACTION STRATEGY**

| 3. The probability of receiving appropriate rewards for behavior is high and for inappropriate behavior is low |
| 2. Desirable and undesirable behaviors are identified effectively, reliably, and fairly |
| 1. Desirable and undesirable behaviors, practices, and performance standards and measures are clearly identified |

**OUTCOMES OF SUCCESSFUL COMMUNICATION STRATEGY**

| 3. Target group believes that behavior valued by the program will be rewarded in ways that are valued by recipients and the relevant community |
| 2. Target group believes that desirable and undesirable behaviors will be identified effectively, reliably, and fairly |
| 1. Target group has a clear understanding of desirable behavior and accepts the standards and measures as valuable |

**OUTCOMES OF SUCCESSFUL ACTION STRATEGY**

| 3. Rewards that are given are commensurate with assessed levels of performance and in line with professional standards and measures |
| 2. Performance assessment processes are effective, reliable, and fair |
| 1. Performance-based pay system (criteria, measures, rewards) is clearly defined |

**OUTCOMES OF SUCCESSFUL COMMUNICATION STRATEGY**

| 3. Managers believe that rewards are linked to and commensurate with performance and that inappropriate performance is not rewarded |
| 2. Managers believe that processes for measuring and judging performance are effectively, reliably, and fairly administered |
| 1. Managers accept the importance of the criteria and understand and agree with the measures, standards, and processes to be used to assess performance and decide rewards |

Mayne and Stern: An Indicative Theory of Change for Natural Resource Management Research Programs

Renger, Bartel, Foltysova: The (Simple) Addition of Implementation Theory to the Existing Program Theory

Things should be made as simple as possible – not simpler.

– Albert Einstein
What We Tried

• Extracted the implementation theory from a conventional logic model

• Lined it up with the change theory

• Drew from research, experience and analysis key assumptions and enabling factors

• Tested those
Intermediate Outcomes

Key influencers have the information they need regarding the (barrier related) credentials of Canada’s sector ‘x’ and its products

Canadian sector ‘x’ products are considered to be an appropriate (re: potential barrier) responsible & preferred choice internationally

Outputs

Science-based information products

Environmental scans, surveys & market intelligence products

Annual work plans

Market outreach communication tools and products [tailored for target audiences]

Tours, meetings and workshops

Networks of experts and stakeholders

Activities

Conduct analysis to address key science gaps

Communicate science-based evidence to Canadian stakeholders

Conduct market research by monitoring and reporting on market trends

Conduct market outreach and leadership activities in key markets

End Outcome

Improved acceptance for Canadian sector ‘x’ products in international markets

Science-based evidence supports sector ‘x’ market outreach

Improved coordination of sector ‘x’ market advocacy efforts in a way that responds to market realities

The Canadian sector ‘x’ industry works proactively with policy-makers in target markets to ensure that decisions are based on scientific evidence

Reduce and avoid market access issues in international target markets

Implementation ‘Model’

Agency funds delivery via sector Not-For-Profit, with oversight by representative advisory aboard

Contextual Factors

Change ‘Model’

Assistance will reach target groups who will appropriately use funding as incentive to change leading to benefits to Canada
<table>
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<tr>
<th>Results Chain</th>
<th>Assumptions / External Factors</th>
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<tr>
<td>1. Government Department (funding agency) determines need.</td>
<td>A. Appropriate information, understanding and analysis of problems convert into appropriate investment</td>
</tr>
<tr>
<td>2. Government Department (funding agency) invests in program(s).</td>
<td>B. Sufficient, appropriate and consistent funding and program assistance</td>
</tr>
<tr>
<td>3. The appropriate governance arrangements and (critical mass of) co-delivery agents engage with Government Department and other ‘partners’</td>
<td>C. Agendas remain consistent with key co-deliverers</td>
</tr>
<tr>
<td>4. Governance structures are formed and actively managed (Advisory Committees and contracted deliverers).</td>
<td>D. Support climate allows for clear governance</td>
</tr>
<tr>
<td>5. Priorities are (clearly) set and projects are solicited (appropriately).</td>
<td>E. Economic, management and political circumstances allow for appropriate sector engagement</td>
</tr>
<tr>
<td>6. Appropriate industry sector participation / engagement in project selection.</td>
<td>F. Key sector proponents have the capacity and commitment to apply for targeted assistance</td>
</tr>
<tr>
<td>7. Appropriately targeted and realistic proposals supported (i.e. they respond to market realities).</td>
<td>G. Proponents have ‘will’ and ability to carry through on commitments</td>
</tr>
<tr>
<td>8. Projects are conducted as anticipated (appropriately addressing needs). Sector ‘x’ industry works with policy makers to encourage use of scientific evidence in decisions</td>
<td>H. Target communities attracted to participate / engage in initiatives (for the right reasons)</td>
</tr>
<tr>
<td>9. Appropriate target groups (e.g. market acceptance and access community) are sufficiently reached / engaged by market development initiatives / projects.</td>
<td>I. Messages / information / supports are ‘attractive’ and compelling to participants</td>
</tr>
<tr>
<td>10. Groups reached by initiatives show positive reactions, capacity (knowledge, abilities, commitments, aspirations) - willingness and commitment to using scientific evidence in decisions, key influencers have info they need re: sector ‘x’ and products. Canadian sector ‘x’ products are considered to be appropriate (vis a vis potential barrier) responsible and preferred choice internationally.</td>
<td>J. Groups have broad economic, policy and management support and conditions</td>
</tr>
<tr>
<td>11. Incremental change to policies and practices related to the use of sector ‘x’ products (empirically focussed, expanded and improved) - reduced access issues Improved acceptance for Canadian sector ‘x’ products in international markets. Market access issues are reduced and avoided in international target markets.</td>
<td>K. Canadian sector ‘x’ products would not be sold elsewhere</td>
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<tr>
<td>12. Improved ‘acceptance’ of Canadian sector ‘x’ products. Increased sales of Canadian products.</td>
<td>L. Canadian sector ‘x’ products cost of goods sold allow for a net profit</td>
</tr>
<tr>
<td>13. Net benefit to Canadian sector ‘x’ companies.</td>
<td>M. Net benefits to Canadian sector ‘x’ companies create net benefits for Canadian communities</td>
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We Need to Recognize the Following:

• Theories of change have common characteristics
  – Kirkpatrick for learning
  – Bennett for change adoption
  – Deterrence pyramid (Ayers and Braithwaite)
  – Homo-economus vs. socio-psychological views of behaviour (Kahneman, Levitt and Dubner, Thaler and Sunstein etc.)

• Implementation strategy (action theory) matters and it has some key factors which in turn affect theory of change success
  – Authorizing environment
  – Organizational deliver (government agency, multi-jurisdiction, contribution to delivery agent, private-led, 3P etc.)
  – Generally accepted management principles
  – Hierarchy, matrix, network etc.
  – Historical rules, relationships and culture
Basic Framework for Assessing What Works in Policy, Programs and Delivery

**Contextual Factors**

- Broad Contextual Factors
- Factors related to the policy instrument (carrots, sticks, sermons)
- Engagement and Relationship Factors
- Management and Governance Factors

**Delivery Design**

(Implementation / Action Theory)

**Policy Instrument**

(Theory of Change)

**Definition of Success:** (desired outcomes)

Specific observations re: what worked in the case at hand

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What Works for Administrative Monetary Penalties?
Summary of Factors and Findings for AMPs at CFIA (with reference to others)

Broad Context (Social, Economic, Political, Technological)*
- Political / jurisdictional / legal (authorities over policy area)
- Economic Factors
- Infrastructure / value chain 'structural' readiness
- History of policy and programming (experience in use of instruments and mechanisms)
- Compatibility with other policies and programs (e.g., regulatory environment between and among levels and agencies of government)

Regulatory Instruments Considerations
- A sound understanding of community norms based on empirical evidence rather than assumptions.
- Integration of the various phases of the deterrence process: detection, prosecution, application of sanctions.
- Effective processes for registering and licensing the target group, especially in situations where the penalty relates to withdrawal of licenses as in the program to combat drunk driving.
- Effective screening processes to identify potential offenders.
- Effective inspection processes that detect non-compliance to a sufficient degree to act as a deterrent.
- Effective prosecution processes to ensure that offenders can be successfully prosecuted following detection.
- Penalty processes that fit the offence.
- Effective communication processes concerning the legitimacy of the regulation and that persuade the target audience that the regulation will be effectively implemented.
- Social legitimacy of the instrument and sanction.
(Source: Funnell and Rogers 2011)

AMPs – Specific considerations. Suggestion they should be used for conditions of:
- High volume
- Inadvertent violations (non-systematic intent)
- Clear violation evidence (easy to determine)
(Source: Praphu 2010, Priest 2009, Tait 2007)

Target Community Engagement*
- Level of target community engagement and type of engagement re: initiatives
- Capacity of target area actors
(Source: derived and adapted from Sager and Andereggen 2012)

Partner and Sector Engagement*
- Level of sector engagement in priority setting, planning and governance (Public, Private, NFP, other)
- Capacity and level of shared agenda of Sector and Partner ‘co-deliverers’

Public Management*
- Program (Policy) priorities (planning, coordination)
- Governance and Management Accountability components**
- Accountability requisite components include clear roles and responsibilities, clear performance expectations, balanced expectations and capacity, credible reporting and reasonable review and adjustment (see Sager and Andereggen 2012 and OAG principles for Accountability 2009)

Definition of what ‘works’:
1. Timely and efficient transaction
2. AMP’s group or individual paid fine
3. No appeal
4. No ‘overturns’ on appeal
5. No evidence of recidivism (i.e. violator went back into compliance)

Where AMPs did not work:
- Hard to interpret regulatory clauses (e.g. ‘undue suffering’)
- Complicated interactions (many players) difficult to know who to penalize
- Low unit value cargo (e.g. cull animals) or high total value where penalty considered cost of doing business


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Administrative Monetary Penalties applied to animal health– mostly domestic transportation of animals

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When you have enough !!s – the factors pile up + you fail!!

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Contribution Analysis Approach

Set up (regulatory) process to encourage compliance to relevant Act and regulations

Engagement of co-deliverer authorities

Acceptance of common agenda and objectives by co-deliverers and support in terms of coordinated / collaborative efforts

Engagement of regulated parties in terms of inspection / investigation and / or other deterrence mechanisms*

Notice of violation (warning or other) issued appropriately to regulatee and / or other deterrence actions appropriately conducted

Regulatee reacts appropriately to intervention (pays vs. appeals)

Support to appeal process (appropriately) provided to appeal ‘tribunal’ or other

Consistent and clear decisions rendered by appeals tribunal

Regulatee is deterred from non-compliance or encouraged to comply

Health, safety, economic viability of Canadian food system

Assumptions / External Factors

Institutional arrangements are conducive to cooperation / collaborative co-delivery

Shared goals and perspective among key parties, re: risks, authorities and roles

Context, conditions, legal framework allow for appropriate engagement of regulatees

Resources, authorities and other conditions allow for clear, timely and accurate issuance of warnings and penalties

Regulatee understands and respects the system. Relative cost-benefit to regulatee to pay and comply

Context, conditions, authorities and relationships allow for timely and appropriate appeal review. Legal or other clarity re: situation

Legal and situational factors allow for clear and consistent decisions

-Relative cost-benefit of compliance encourages compliance

-Social and other conditions encourage compliance

Compliance will lead to improved health, safety or economic conditions, no compensating behaviours or phenomena (e.g. ‘work arounds’) will work against the benefits

*Deterrence mechanisms could include information, consultations, programs, commercial or criminal sanctions / prosecutions, licence revocation or other actions intended to influence behaviour.

Regulatory Initiative Results Chain for Contribution Analysis –Summary of AMPs Observations

**Results Chain**

Set up (regulatory) process to encourage compliance to relevant Act and regulations

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Acceptance of common agenda and objectives by co-deliverers and support in terms of coordinated / collaborative efforts

Engagement of regulated parties in terms of inspection / investigation and / or other deterrence mechanisms*

Notice of violation (warning or other) issued appropriately to regulatee and / or other deterrence actions appropriately conducted

Regulatee reacts appropriately to intervention (pays vs. appeals)

Support to appeal process (appropriately) provided to appeal ‘tribunal’ or other

Consistent and clear decisions rendered by appeals tribunal

Regulatee is deterred from non-compliance or encouraged to comply

Health, safety, economic viability of Canadian food system

**Assumptions / External Factors**

* = Deterrence mechanisms could include information, consultations, programs, commercial or criminal sanctions / prosecutions, licence revocation or other actions intended to influence behaviour.

** = Major variance

! = Limited variance

? = unknown

Institutional arrangements are conducive to cooperation / collaborative co-delivery!

Shared goals and perspective among key parties, re: risks, authorities and roles!

Context, conditions, legal framework allow for appropriate engagement of regulatees!!

Resources, authorities and other conditions allow for clear, timely and accurate issuance of warnings and penalties!!

Regulatee understands and respects the system. Relative cost-benefit to regulatee to pay and comply!

Context, conditions, authorities and relationships allow for timely and appropriate appeal review. Legal or other clarity re: situation!!

Legal and situational factors allow for clear and consistent decisions!!

Legal and situational factors allow for clear and consistent decisions!!

Compliance will lead to improved health, safety or economic conditions, no compensating behaviours or phenomena (e.g. ‘work arounds’) will work against the benefits?

Verifications and Compliance (Product Monitoring/Regulation) Activities and Implied Results Chain

**Final outcomes (impacts)**

7. A safe and accessible food supply, and plant and animal base
   - Food production risks are mitigated, agricultural inputs are used in a sustainable manner, environmental risks are minimized
   - Farmers and producers have timely access to safe and innovative fertilizers and supplements
   - Level playing field for imports and domestic manufacturers/Facilitated imports and exports
   - Safety of domestic and imported products is maintained
   - There are no gaps between FzA and other relevant legislation including provincial, federal and international regulations
   - Public confidence in the regulatory framework and the integrity of the Canadian fertilizer and supplement sector is maintained and Canada is recognized domestically and internationally for safe and sustainable products

**Intermediate outcomes**

6. Compliance with program policies, requirements and regulations among stakeholders (e.g. labelling and product requirements)

5. Regulated (inspected and investigated groups and others) parties, understand, believe in and are able to comply with requirements

4. Key target stakeholders become appropriately aware of the Fertilizer Act and Regulations requirements

3. Appropriate fertilizer marketplace / stakeholders are engaged in verification and enforcement actions

2. Appropriate inspections, label reviews warning letters and corrective action requests produced; Appropriate deterrence and prosecutions

1. Investments are made in verification and inspection, and enforcement

**Outside Factors / Assumptions**

- **Assumptions:**
  - Economic, marketplace, social cultural, technological, environmental and political conditions enable and / or reinforce marketplace outcomes

- **Assumptions:**
  - Industry has will (See 1.2A) and means (capacity) to achieve compliance

- **Assumptions:**
  - Industry is receptive to information

- **Assumptions:**
  - Conditions allow / encourage appropriate learning

- **Assumptions:**
  - Verification / compliance programs are appropriately designed and functional direction is ‘attractive’ enough to engage key fertilizer marketplace stakeholders and decision-makers

- **Assumptions:**
  - Sufficient analytical capacity exists to monitor products effectively
  - Investments are made in inspection capacity and training

Source: Canadian Food Inspection Agency (2013-13) Evaluation of the CFIA's Fertilizer Program

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### CTS Results Chain Factors and Assumptions

<table>
<thead>
<tr>
<th>CTS Results Expectations</th>
<th>Assumptions (External Factors)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. NRCan determines need and defines CTS and component program objectives</td>
<td>A. Appropriate information, understanding and analysis of problems convert into appropriate program design, investment</td>
</tr>
<tr>
<td>2. NRCan and co-delivery agents invest in program(s)</td>
<td>B. Sufficient, appropriate and consistent funding and program assistance</td>
</tr>
<tr>
<td>3. The appropriate arrangements and (critical mass of) co-delivery agents engage with NRCan and other ‘partners/beneficiaries’ to develop the program</td>
<td>C. Agendas remain consistent with key co-deliverers</td>
</tr>
<tr>
<td>4. Governance structures are formed and actively managed (Program Advisory Committees and OERD)</td>
<td>D. Support climate allows for clear governance</td>
</tr>
<tr>
<td>5. Program priorities are (clearly) set and projects are solicited (appropriately)</td>
<td>E. Economic, management and political circumstances allow for appropriate public and private sector engagement in project proposals</td>
</tr>
<tr>
<td>6. Appropriate public and private sector participation / engagement in project proposals</td>
<td>F. Key sector proponents have the capacity and commitment to participate in project proposals</td>
</tr>
<tr>
<td>7. Appropriately targeted and realistic proposals supported (i.e., they respond to public and private sector needs / market realities)</td>
<td>G. Proponents have ‘will’ and ability to carry through on project</td>
</tr>
<tr>
<td>8. Projects are conducted as anticipated (appropriately addressing needs).</td>
<td>H. Target communities attracted to participate / engage in initiatives</td>
</tr>
<tr>
<td>9. Appropriate target groups (e.g., regulatory, industry, research community, etc.) are reached by CTS dissemination activities.</td>
<td>I. Information / technology developments are ‘attractive’ and compelling to participants, used in making decisions</td>
</tr>
<tr>
<td>10. Groups reached by initiatives show positive reactions, capacity (knowledge, abilities, commitments): • public sector - willingness and commitment to using scientific evidence in decisions, key influencers have info they need • private sector – apply scientific knowledge and technology in development of new products and processes (vehicle fuels, systems and components) • International partners (US and others) consider Canadian transportation sector regulations, products and processes to be environmentally responsible and preferred choice</td>
<td>J. Canadian transportation sector technologies (regulations, vehicles, fuels) are recognized as environmentally responsible, preferred choice (nationally and internationally)</td>
</tr>
<tr>
<td>11. CTS objectives are met: • Development and use of cleaner, sustainable transportation fuels and systems and regulations • Adoption of cleaner sustainable transportation vehicle fuels and systems in domestic and international markets (sales of new technologies, fuels, transportation systems)</td>
<td>K. Canadian transportation fuels and systems are cost-competitive and meet international environmental standards</td>
</tr>
<tr>
<td>12. Reduced GHG and CAC emissions from transportation sector</td>
<td>L. Clean transportation technologies are a competitive advantage for the Canadian transportation sector</td>
</tr>
<tr>
<td>13. Sustainable transportation sector</td>
<td>M. Net benefit to Canadian transportation sector companies leads to net benefits to Canada and Canadian communities</td>
</tr>
<tr>
<td>14. Net benefit to Canada and Canadian communities</td>
<td>The engagement, reaction and supportive actions of key reach groups has varied considerably.</td>
</tr>
</tbody>
</table>

*Key links for causal influence tests.

- Needs assessment, priority setting and governance factors appear to have strongly affected CTS programs
- Longer term impacts and mission achievement.

Source: Natural Resources Canada (2013) *Evaluation of Clean Transportation Systems Portfolio* [https://www.nrcan.gc.ca/evaluation/reports/2013/14844#3_2](https://www.nrcan.gc.ca/evaluation/reports/2013/14844#3_2)
### WP Theory Components

<table>
<thead>
<tr>
<th>Need</th>
</tr>
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<tbody>
<tr>
<td>Infrastructure</td>
</tr>
<tr>
<td>Priorities are identified, set, and agreed upon</td>
</tr>
<tr>
<td>Projects solicited</td>
</tr>
<tr>
<td>Invitations for funding</td>
</tr>
<tr>
<td>Reach and engagement of target groups</td>
</tr>
<tr>
<td>Proposals</td>
</tr>
</tbody>
</table>

**Access to supports***

**Access to opportunities***

**Target groups advance equality***

**Equality in Canada is advanced***

### Change Section

### Implementation Section

* Denotes components identified in current WP logic model

Welch and Whynot (2014)
## WP Theory - Implementation

<table>
<thead>
<tr>
<th>Assumptions and Constraints Affecting Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Relevant approaches are considered</td>
</tr>
<tr>
<td>• Adequate resources available to implement programmatic response</td>
</tr>
<tr>
<td>• Broader government policies and structures are supportive of programmatic response</td>
</tr>
<tr>
<td>• Effective governance</td>
</tr>
<tr>
<td>• Effective delivery structure</td>
</tr>
<tr>
<td>• Effective procedures in place</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Determines need for programmatic response to address issues of gender equity in Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWC develops the appropriate infrastructure to deliver program</td>
</tr>
<tr>
<td>Priorities are identified, set, and agreed upon</td>
</tr>
<tr>
<td>Priorities are communicated and projects are solicited</td>
</tr>
<tr>
<td>Project proponents respond to invitations to apply for funding</td>
</tr>
<tr>
<td>Appropriate target groups are sufficiently reached and engaged in applying and obtaining funding</td>
</tr>
<tr>
<td>Realistic and appropriate proposals are supported in the development process/assistance given and approved</td>
</tr>
</tbody>
</table>

Welch and Whynot (2014)
Approved projects are conducted as planned and achieved planned outcomes

Women and communities have access to supports to address issues relating to equality between women and men

Communities and stakeholders have access to opportunities to advance equality between women and men

Communities and stakeholders advance equality between women and men

Equality between women and men in Canada is advanced

• Appropriate processes and tools are in place to guide projects throughout lifecycles
• Groups have capacity to deliver projects as per expectations
• Groups have commitment to deliver projects as per expectations

• Target communities are attracted to participate in initiative

• Groups have engaged appropriate stakeholders to influence change

• Groups have broad socio-economic conditions to influence change
• Groups have appropriate timing to leverage change

• Change promoted by groups has sustainable impact

Assumptions and Constraints Affecting Context

Welch and Whynot (2014)
Think about a recent evaluation:

• Can any of the factors mentioned ‘explain’ your findings?

• Might more explicit modelling of the implementation (action) theory with the change theory help?
Key Lessons

• Implementation activities, design and delivery matter a lot (even for impact evaluations)
• Need to explicitly include theories of implementation with theories of change
• Need to look at each – then how they interact together
• New evaluation design implications
  – Generative approaches (do homework first, then lay out explicit expectations)
  – Process and impact evaluations done together
  – Common key factors and assumptions for both implementation and change theory should be considered
  – Stronger context, communication and engagement emphasis
  – A better basis for evaluation planning, management and use?

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Select References


Pawson, R. Evidence-based Policy A Realist Perspective 2006

Pawson and Tilley Realist Evaluation 2005


Welch, D. and Whynot, J. (2014) Using a Theory Based Approach (TBA) for the Women’s Program (WP) at Status of Women (SWC) (presentation to Carleton University, DPE)


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