



Applying the “TRIADÉ” concept Challenges for the assessment of the annual allowable cut

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Overview of the presentation

- 1. Background to the involvement of Québec's Chief Forester (CF) in the TRIADE Initiative**
- 2. Main challenges for annual allowable cut assessments during the TRIADE Initiative:**

Challenge 1. Managed land zoning

Challenge 2. Innovative forest practices

Challenge 3. Target setting

Challenge 4. Intensive management and tree farming



Overview of the presentation (continued)

3. Calculation tools and methods available
4. Key elements to take into consideration for the application of the concept
5. Strategic questions requiring further study





1. Background to the involvement of Québec's Chief Forester (CF) in the TRIADE Initiative



1. Background

- **Importance of the pilot project for Québec's department of natural resources and wildlife (MRNF) and Chief Forester (CF):**
 - Increase expertise for sustainable forest management (SFM)
 - Increase expertise for the assessment of the annual allowable cut
- **Involvement of the CF:**
 - Guest observer at meetings of the committee
 - Validation of the calculation made by the committee
- **Position of the Government:**
 - Clear commitment to SFM
 - Details of the ecosystemic approach yet to be defined





2. Main challenges for annual allowable cut assessments during the TRIADE Initiative



2. Challenges

Challenge No. 1: Application of a type of zoning in which a different silvicultural strategy may be applied in each zone

Considerations:

- Several stakeholders involved, with elements requiring harmonization
- Complex spatial and time-related aspects that must be understood, visualized and communicated
- Establishment of conservation areas, versus protected areas (Québec department of sustainable development, environment and parks); impact on annual allowable cuts
- Varying potential by ecological domain and sub-domain



2. Challenges (continued)

Challenge No 2: The need for innovative forest practices to respond to ecosystemic, wildlife-related, economic or social issues

Considerations:

- Reconcile issues by selecting appropriate methods; an enriching process at the human and professional level
- Limited knowledge of yields and effects
- Monitoring of actual effects versus objectives versus issues



2. Challenges (continued)

Challenge No. 3: Consideration given under the indicator/target model to specific issues in a given area

Considerations:

- Coherence between regional and provincial strategies and the SFM strategy
- Need for in-depth knowledge, time and \$\$\$
- Targets for forest mosaics based on knowledge of the original forest cover
- Timeframe for meeting targets versus historic average versus current state
- Constancy in the formulation of W/S models versus issues
- Need for pragmatism in decisions and actions
- Role of Québec government and regional land and natural resource commissions in setting priorities
- Dynamic, adaptive management

2. Challenges (continued)

Challenge No. 4: Ability to implement more intensive management, including tree farming, to compensate loss in annual allowable cut

Considerations:

- Need for knowledge / \$\$\$ / monitoring / training
- Achievement of planned hypotheses / annual allowable cut
- Use and restricted availability of hybrid species versus biodiversity versus SFM strategy
- Social acceptability






3. Calculation tools and methods available to assess the impact of TRIADE implementation



3. Tools and methods

- **Optimization-based calculation method: more suitable to measure the impact of various management or zoning alternatives**
- **Encourages forest managers to consider various options for management strategies**
- **Need to avoid over-ambitiousness in the initial phase**





4. Key elements to take into consideration for the application of the concept



4. Key elements

The impact of the approach may vary considerably depending on the decisions made concerning the following elements:

- Issues and targets selected at the outset
- Current state of the forest versus target state versus time
- Balance between the three SFM poles
- Funding availability





5. Strategic questions requiring further study



5. Strategic questions

- What kind of sustainable forest management (SFM) strategy will the MRNF propose?
- Who will be responsible for making the management choices to define the final management strategy based on optimal scenarios?
- On what scale will the concept be applied (forest management unit, region, bioclimatic domain or sub-domain)?



5. Strategic questions (continued)

- **What will be the timeframe for calculating whether the objectives for the various issues have been met?**
- **What are the acceptable risks (financial, operational, marketing-related) with respect to the introduction of high-yield species?**
- **What is the financial capacity of the various stakeholders?**



■ **Thank you for your attention**

