Development of Logistics Infrastructure in Yenisey Siberia

V. Lukinykh, Dr., professor
P. Shvalov, PhD
Krasnoyarsk State Agrarian University
Part 1

Some notes from the regional market analysis and theory
Russia`s effectiveness in comparison with logistics effectiveness of other countries

At present time level of transport and logistics expenses in Russia for the subjects of any business activity, especially of production, is one of the highest in the world. These expenses come up to 20% of GDP.
Problem

Inefficiency of transport and logistics systems is one of the main factors constraining the economic growth of Russia.
Problems of the present regional logistics system in the food market

• Insufficient development of integrative relations in agro-industrial complex
Task

- Formation of supply chains and project-oriented clusters in agro-industrial complexes of a region
Part 2

Some theory
Process of cluster transformation into a project-oriented one

Tools
- Consolidation on an industrial basis
- Differentiation by product types (specialization)
- Cooperation
- Coordination of activities, total optimization, integration

Catalysts
- Tendencies of economic growth
- Need to improve performance and profitability of the enterprises and a cluster
- Lack of flexible relations among the participants, need in cooperation
- Need to adapt to a large-scale supply chain
- Entrance in the regional supply chain

Loose cluster
- Industry cluster
- Monocluster
- Project-oriented cluster
- Cluster integrated into a supply chain
Advantages of organizing clusters in agro-industrial complex

- cost minimization
- synergetic effect
- close relationship between agro-industrial complex and science
- increasing of employment and improving of life quality
- increasing the competitiveness level of enterprises and the region
Part 3

Practice and recommendations
Scheme of logistics centers disposition

- Ц2 - Большая Мурта
- Ц2 - Дзержинское
- Ц1 - Ачинск
- Ц2 - Абан
- Ц2 - Шарыпово
- Ц1 - Красноярск (Кубеково)
- Ц2 - Заозерная
- Ц1 - Канск
- Ц2 - Ужур
- Ц2 - Ирбейское
- Ц2 - Балахта
- Ц2 - Новоселово
- Ц2 - Иззаозерная
- Ц2 - Шира
- Ц2 - Краснотуранск
- Ц1 - Минусинск (Зеленый Бор)
- Ц2 - Курагино
- Ц2 - Боград
- Ц2 - Шушенское
- Ц2 - Аскиз
Regional integrated logistics system of multilevel management of stock movement on the basis of project-oriented clusters
Coordination groups on supply chains

- Supply chain
  - resources
  - processes
  - indices

- Logistics operator
  - resources
  - processes
  - indices

- Goods manufacturer
  - resources
  - processes
  - indices

- Trading network
  - resources
  - processes
  - indices
Evaluation of effectiveness of agro-industrial complex logistics network on the south of Siberia
Accessibility of transport and logistics infrastructure in small towns of the macro-region “Yenisei Siberia”
Functioning scheme of transport-expediting enterprises in terms of logistics networks of wholesale regional centers
General social and economic results of the program realization “Organization of logistics network of wholesale regional centers in Khakassia”

<table>
<thead>
<tr>
<th>№</th>
<th>Index</th>
<th>Before WRC</th>
<th>After WRC</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Revenue of the enterprises</td>
<td>16 051,00 mln. rub.</td>
<td>16 051,00 mln. rub.</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>General expenses of the enterprises</td>
<td>13 354,43 mln.rub.</td>
<td>12866,46 mln. rub.</td>
<td>↓3,65%</td>
</tr>
<tr>
<td>3</td>
<td>Logistics expenses of the enterprises</td>
<td>2570,73 млн. руб.</td>
<td>2082,76 mln.rub.</td>
<td>↓18,98%</td>
</tr>
<tr>
<td>4</td>
<td>Profitability</td>
<td>16,80%</td>
<td>19,84%</td>
<td>↑3,04%</td>
</tr>
<tr>
<td>5</td>
<td>Net profit of the enterprises</td>
<td>2696,57 mln.rub.</td>
<td>3184,54 mln.rub.</td>
<td>↑487,97 mln.rub.</td>
</tr>
</tbody>
</table>
General social and economic results of the program realization “Organization of logistics network of wholesale regional centers”

<table>
<thead>
<tr>
<th>№</th>
<th>Index</th>
<th>Changes in Krasnoyarsky region, Khakassia and Tyva</th>
<th>In Khakassia</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Revenue of the enterprises</td>
<td>120615,00 mln. rub.</td>
<td>16051,00 mln. rub.</td>
</tr>
<tr>
<td>2</td>
<td>Profit markup</td>
<td>↑3666,85 mln. rub.</td>
<td>↑487,97 mln. rub.</td>
</tr>
<tr>
<td>3</td>
<td>Increase of tax levy in the Federal Budget (3%)</td>
<td>↑110,01 mln. rub. per year</td>
<td>↑14,64 mln. rub. per year</td>
</tr>
<tr>
<td>4</td>
<td>Increase of tax levy in the Regional Budget (17%)</td>
<td>↑623,36 mln. rub. per year</td>
<td>↑82,96 mln. rub. per year (10,01% from a profit tax)</td>
</tr>
</tbody>
</table>
Thus, savings from the delivery of one conventional unit of agricultural products by intermodal method will be from \textbf{4.2 to 7.4 thousand rubles} or from \textbf{12.08 to 21.57\%}
Krasnoyarsk State Agrarian University