Logistics flows

The District Logistics Analysis (DLA) was carried out during 2003 interviewing a sample (40) of locally-based businesses in the following sectors: industry, agriculture and services. The DLA questionnaire gathered information regarding the flows of supply logistics, distribution logistics, reverse logistics and refuse/waste logistics. In each table information regarded: origin, destination, average distance, volume, costs, transport mode, transhipment nodes and load type.

Data concerning each company were inserted in separated spreadsheets to calculate tonnes and Tkm related to supply, distribution, reverse and refuse/waste logistics, as well as the total flow. Specific formulas were used to calculate:

1. total Tkm occurring completely within the concerned local area, e.g. Tkm internally borne and internally provided in the supply chain, Tkm internally borne and internally delivered in the distribution chain; these are strictly endogenous flows which occur between origins and destinations located within the concerned local area;
2. total Tkm of flows beginning or ending outside the concerned local area, e.g. Tkm externally borne and internally utilised in the supply chain, Tkm internally borne and externally delivered in the distribution chain; these are exogenous flows and take into account the overall distances between origins and destinations;
3. the share of exogenous Tkm (from point 2) that transits within the local area e.g. tonnes of an externally delivered product that transit within the local area for a certain distance (km); these flows take into account the distances from and to the boundaries of the concerned local area by exogenous flows. Information was obtained to identify the main routes utilised to enter or to leave the concerned local area.

As a conclusion,
- the total Tkm occurred within the concerned local area were obtained by summing the results of the above-mentioned points 1 + 3;
- the total Tkm occurred outside the concerned local area were obtained by difference between the results of the above-mentioned points 2 - 3.

The calculations allowed researchers to identify additional questions that can improve the overall information value of the questionnaire: that being to add a specific question on the identification of the main transit entrance points entering and leaving the concerned local area.

The following maps show the freight flows (supply, distribution and total) along the main transport networks of the Casentino Valley.
Supply logistics flow

Total road 35,526.163 T/km
Distribution logistics flow

Total road 36,771,321 T kn
Freight flow
The following results (2003) regard freight flows:
- originated by the sample of interviewed;
- estimated in the economy fabric and the territorial dimension through the inference from the sample results;
- occurred inside and outside the local area (both supply and distribution logistics);
- distinguished according to their endogenous or exogenous nature with respect to the local territory;
- distinguished per transported goods;
- evaluated in terms of range of transport costs per main sectors: agriculture, industry and services

Sample results
1) The provided data do not allow for disaggregating them in each logistics typology

Supply logistics| tonnes | Tkm
2.638.848 | 35.525.168
Distribution logistics| tonnes | Tkm
1.723.162 | 38.771.321

4 - Project: INNESTO Pilot Project: Il Casentino/AR, Task: Logistics flows
Reverse logistics | tonnes | Tkm
--- | --- | ---
2.177 | 50.699

Logistics of refusals and wastes | tonnes | Tkm
--- | --- | ---
29.441 | 695.283

Total | tonnes | Tkm
--- | --- | ---
4.393.628 | 75.042.472

Rail stations’ flow(1) | tonnes | Tkm
--- | --- | ---
106.694 | 4.090.640

Overall total | tonnes | Tkm
--- | --- | ---
4.500.322 | 79.133.112

**From the sample to the Valley economic fabric and territorial dimension**

Taking into account the characteristics of each main sector (agriculture, industry and services) in terms of employment dimensions, the results of the sample were utilised to determine the overall Valley entrepreneurial fabric.

**Data (Tkm) resulted from the inference**
164.081.491

**Data (Tkm) estimated (Local Context Analysis)**
164.177.600

**Sample results (Tkm) over the universe estimated data (%)**
48

**The most distant places reached in**

From the sample the most distant places emerged, demonstrating that the economic structure of the Valley is open to international market. This result is due more to large - medium enterprises (primarily industrial) than to the other sectors and sizes.

<table>
<thead>
<tr>
<th>Supply logistics</th>
<th>Distribution logistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>America</td>
</tr>
<tr>
<td>Japan</td>
<td>Argentina</td>
</tr>
<tr>
<td>China - Far East</td>
<td>Thailand</td>
</tr>
<tr>
<td>USA North/South</td>
<td>Hong Kong</td>
</tr>
<tr>
<td></td>
<td>Singapore</td>
</tr>
</tbody>
</table>

**Tkms inside and outside Casentino area**

Excluding reverse logistics and that of refuse and waste because of the very low amount (1% of the total Tkm) declared by the respondent companies, freight flows were distinguished between those occurred inside and outside the local area with the following results.

**SUPPLY LOGISTICS**

Tkms occurred within the local area
35.525.168

Tkms occurred outside the local area
376.400.513

Total Tkm
411.925.681

**DISTRIBUTION LOGISTICS**

Tkms occurred within the local area
38.771.321

Tkms occurred outside the local area

---

5 - **Project:** INNESTO Pilot Project: II Casentino/AR, **Task:** Logistics flows
355.256.233
Total Tkm
394.027.554

TOTAL SUPPLY AND DISTRIBUTION LOGISTICS
805.953.235

Tkm occurred within the local area
74.296.489

Tkm occurred outside the local area
731.656.746

Endogenous or exogenous flows
More specifically, flows were identified according to their endogenous or exogenous nature with respect to the local area.

SUPPLY LOGISTICS

Internally borne and Internally provided freight (Tkm)
1.864.995

Externally borne and Internally provided freight (Tkm)
410.060.686

DISTRIBUTION LOGISTICS

Internally borne and Internally delivered freight (Tkm)
239.534

Internally borne and Externally delivered freight (Tkm)
393.788.020
GOODS TRANSPORTED
The main load typologies were semi-bulk (82% in supply and 71% in distribution logistics), unitised (13% in supply and 15% in distribution) and bulk (5% in supply and 14% in distribution). While the main transport mode was road in the inner connection of the Valley, sea-road combined transport prevailed especially in the supply traffic for international relationships, followed by the road-rail combined transport especially in distribution logistics.

The total amount of tonnes concerning the main aggregated typologies of goods transported gave the following results. In the left column data concerning supply logistics; in the right column data concerning distribution logistics.

| Livestock and agricultural products (%) | 0.61 | 0.53 |
| Food and forage products (%)           | 0.48  | 0.18 |

2 - Tkm inside and outside Casentino area: nearly 0% of the total Tkm of the supply chain occurs within the Casentino and 91% occur outside the Valley. For distribution, the Tkm percentages are respectively 10% and 90%.

- Project: INNESTO Pilot Project: Il Casentino/AR, Task: Logistics flows
<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
<th>Tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum products (%)</td>
<td>3.58</td>
<td>0.00</td>
</tr>
<tr>
<td>Mining products (%)</td>
<td>0.98</td>
<td>0.07</td>
</tr>
<tr>
<td>Raw materials, manufacture products and building materials (%)</td>
<td>88.19</td>
<td>85.19</td>
</tr>
<tr>
<td>Chemicals (%)</td>
<td>4.03</td>
<td>4.64</td>
</tr>
<tr>
<td>Industrial machinery, vehicles and different merchandise (%)</td>
<td>1.21</td>
<td>7.90</td>
</tr>
<tr>
<td>Waste - Urban, industrial agricultural (%)</td>
<td>0.91</td>
<td>1.47</td>
</tr>
<tr>
<td>Waste - Special and dangerous (%)</td>
<td>0.00</td>
<td>0.01</td>
</tr>
<tr>
<td>TOTAL (tonnes)</td>
<td>2,638,848</td>
<td>1,723,162</td>
</tr>
</tbody>
</table>

**Transport costs**

<table>
<thead>
<tr>
<th>Range of Transport Cost to each main Sector (Euro per Tkm)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture supply (from</td>
<td>to )</td>
<td>0.14</td>
</tr>
<tr>
<td>Agriculture distribution (from</td>
<td>to)</td>
<td>-</td>
</tr>
<tr>
<td>Industry supply (from</td>
<td>to)</td>
<td>0.01</td>
</tr>
<tr>
<td>Industry distribution (from</td>
<td>to)</td>
<td>0.03</td>
</tr>
<tr>
<td>Services supply (from</td>
<td>to)</td>
<td>0.22</td>
</tr>
<tr>
<td>Services distribution (from</td>
<td>to)</td>
<td>0.09</td>
</tr>
</tbody>
</table>
Freight flow: main characteristics per aggregated sectors

Different logistics profiles emerged between the three main sectors confirming a more reduced range of material flow in agriculture than in the sectors of services and industry.

**Percentage of Tkm occurred the local area: Agriculture**

<table>
<thead>
<tr>
<th></th>
<th>Inside</th>
<th>Outside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Supply</td>
<td>13</td>
<td>87</td>
</tr>
<tr>
<td>Distribution</td>
<td>32</td>
<td>68</td>
</tr>
</tbody>
</table>

**Percentage of Tkm occurred the local area: Industry**

<table>
<thead>
<tr>
<th></th>
<th>Inside</th>
<th>Outside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>9</td>
<td>91</td>
</tr>
<tr>
<td>Supply</td>
<td>8</td>
<td>92</td>
</tr>
<tr>
<td>Distribution</td>
<td>10</td>
<td>90</td>
</tr>
</tbody>
</table>

**Percentage of Tkm occurred the local area: Services**

<table>
<thead>
<tr>
<th></th>
<th>Inside</th>
<th>Outside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>Supply</td>
<td>16</td>
<td>84</td>
</tr>
<tr>
<td>Distribution</td>
<td>7</td>
<td>93</td>
</tr>
</tbody>
</table>

**Average distance in km : Agriculture**

<table>
<thead>
<tr>
<th></th>
<th>Inside</th>
<th>Outside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>10</td>
<td>48</td>
</tr>
<tr>
<td>Supply</td>
<td>12</td>
<td>87</td>
</tr>
<tr>
<td>Distribution</td>
<td>17</td>
<td>52</td>
</tr>
</tbody>
</table>

**Average distance in km : Industry**

<table>
<thead>
<tr>
<th></th>
<th>Inside</th>
<th>Outside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>17</td>
<td>187</td>
</tr>
<tr>
<td>Supply</td>
<td>13</td>
<td>162</td>
</tr>
<tr>
<td>Distribution</td>
<td>23</td>
<td>226</td>
</tr>
</tbody>
</table>

**Average distance in km : Services**

<table>
<thead>
<tr>
<th></th>
<th>Inside</th>
<th>Outside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>17</td>
<td>171</td>
</tr>
<tr>
<td>Supply</td>
<td>16</td>
<td>97</td>
</tr>
<tr>
<td>Distribution</td>
<td>17</td>
<td>243</td>
</tr>
</tbody>
</table>
Business performances

SDL indices
The elaboration of the sensitive data collected through the questionnaires was made with the aim of identifying the current profiles of the interviewed firms.

The profiles regard the business performances and are structured according the SQM / SDL 10 orientators.

To this end, the questionnaire asked for more detailed information than those usually provided by the legally required balance sheet: Statements of Assets and Liabilities, Profit and Loss Accounts.

Data from the Statement of Assets and Liabilities gave information on total investments, tangible fixed assets, intangible fixed assets and financial fixed assets, as well as on inventory - stock value.

Data from the Profit and Loss Account gave information on turnover, purchases, production, commercial, administrative and leasing costs, amortizations and reserves and labour cost.

The questionnaire asked also for specific information on goods and services acquired from firms with a social and environmental quality profile, as well as on goods and services acquired from locally-based firms.

Data elaboration was made classifying the specific voices of the balance sheet according to their relevance and appropriateness in relation with the SDL orientators:

- in the case of turnover (Profit and Loss Account) the orientators concerning the environmental, socio-cultural and economic properties assigned to the value created
- in the case of all business costs (Profit and Loss Account) and all the 10 orientators
- in the case of the Statement of Assets and Liabilities, 6 orientators with the exclusion of Social Equity, Intero-Equity, Intertemporal Equity and Diversity.

The results of the data elaboration were expressed in percentage values (SDL indices) in order to make it possible an easy comparison between the different profiles.

Profile results
The sensitive data are presented in an aggregated manner following benchmarking criteria that identify “ideal-types” combining information received from individual firms.

The procedure was as follows:

- a profile was determined for each respondent company, considering all the available answers and weighting the data in terms of percentage according to the SDL orientators utilised
- the profiles were separated in the three main sectors (industry, agriculture and services)
- for each sector, subcategories were created according to the typology of products, processes, markets (near or distant) and employment dimensions
- a selection was made to identify the best and the lowest results for each of the SDL orientators utilised
- the above results were handled again (weighted in terms of percentage) in order to draw two significant “ideal-types” for each main sector (industry, agriculture and services)
- the anonymous sectoral “ideal-types” were presented in an aggregated manner (SDL indices) by the following tables with the aims of demonstrating the tendency from a low to a better corporate performance.

PLEASE = Profit and Loss Economic Account with Social and Environmental dimensions

Production costs

<table>
<thead>
<tr>
<th>Orientator</th>
<th>Percentage range</th>
</tr>
</thead>
<tbody>
<tr>
<td>O1. Environment</td>
<td></td>
</tr>
<tr>
<td>Industry % range (from</td>
<td>to)</td>
</tr>
<tr>
<td>Agriculture % range (from</td>
<td>to)</td>
</tr>
<tr>
<td>Services % range (from</td>
<td>to )</td>
</tr>
<tr>
<td>O2. Economy</td>
<td></td>
</tr>
<tr>
<td>Industry % range (from</td>
<td>to)</td>
</tr>
</tbody>
</table>

1 - Project: INNESTO Pilot Project: Il Casentino/AR, Task: Business performances
| Category                                | Industry % range (from | to) | Agriculture % range (from | to) | Services % range (from | to) |
|-----------------------------------------|------------------------|----------------------------------|----------------------------------|----------------------------------|
| 03. Socio-culture                       | 0,02 1,30              | 0 0,14                           | 0 0                             |
| 04. Equity between individuals          | 0,07 0,46              | 0 0,11                           | 0 0                             |
| 05. Equity between territories          | 0 1,22                 | 0 0                             | 0 0                             |
| 06. Equity between generations          | 0 0,01                 | 0 0                             | 0 0                             |
| 07. Diversity                           | 0 2,82                 | 0 0                             | 0 0                             |
| 08. Subsidiarity                        | 0 9,55                 | 5,77 16,92                      | 0 0                             |
| 09. Networking and partnership          | 0,24 0,32              | 0 0                             | 0 0,58                          |
| 10. Participation                       | 0 1,24                 | 0 0,25                          | 0 0,67                          |

Goods and services acquired from: percentage range on production costs

| Category                                | Industry % range (from | to) | Agriculture % range (from | to) | Services % range (from | to) |
|-----------------------------------------|------------------------|----------------------------------|----------------------------------|----------------------------------|
| 03. Socio-culture - socially responsible firms (es. SA8000) | 0 1,3                  | 0 0                             | 0 0                             |
| 01. Environment - environmentally responsible firms (es. ISO 14001, EMASII) | 0 43                  | 9 62,67                         | 0 0                             |
| 08. Subsidiarity - local firms          | 0 9,55                 | 6 16,92                         | 0 0                             |
### Turnover

**Orientator | percentage range**

#### 01. Environment
- **Industry % range (from | to)**: 5 | 40
- **Agriculture % range (from | to)**: 70 | 100
- **Services % range (from | to)**: 0 | 0

#### 02. Economy
- **Industry % range (from | to)**: 55 | 90
- **Agriculture % range (from | to)**: 0 | 30
- **Services % range (from | to)**: 0 | 100

#### 03. Socio-culture
- **Industry % range (from | to)**: 0 | 5
- **Agriculture % range (from | to)**: 0 | 0
- **Services % range (from | to)**: 0 | 0

**SEALES = Statement of Economic Assets and Liabilities with Environmental and Social dimensions**

### Investments | Percentage range

#### 01. Environment
- **Industry % range (from | to)**: 8,6 | 11,29
- **Agriculture % range (from | to)**: 0 | 24,93
- **Services % range (from | to)**: 0 | 25,8

#### 02. Economy
- **Industry % range (from | to)**: 79,51 | 85,74
- **Agriculture % range (from | to)**: 74,76 | 100
- **Services % range (from | to)**: 65,96 | 99,98

#### 03. Socio-culture
- **Industry % range (from | to)**: 0 | 0,15
- **Agriculture % range (from | to)**: 0 | 0
- **Services % range (from | to)**: 0 | 0

#### 04. Subsidiarity
- **Industry % range (from | to)**: 0 | 0,14
- **Agriculture % range (from | to)**: 0 | 0
- **Services % range (from | to)**: 0 | 0

#### 09. Networking and partnership
- **Industry % range (from | to)**: 0 | 2,7
- **Agriculture % range (from | to)**: 0 | 0,31
- **Services % range (from | to)**: 0,02 | 8,24

#### 10. Participation
- **Industry % range (from | to)**: 5,66 | 6,21
- **Agriculture % range (from | to)**: 0 | 0
- **Services % range (from | to)**: 0 | 0

---

**Project:** INNESTO Pilot Project: Il Casentino/AR, **Task:** Business performances
Trends during the last five years

Data extracted from the Statement of Assets and Liabilities and from the Profit and Loss Account were accompanied by a short assessment of trends concerning the economic values recorded in the last five years: increased, equal or decreased.

An inclusive business profile emerged from the received answers (66% of the final sample) that show the following prevalent trends.

A scale from 0 to 3 points underlines the trend intensity in terms of number of businesses that approached the profile.

<table>
<thead>
<tr>
<th>Trend direction</th>
<th>Trend intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased</td>
<td>Marked</td>
</tr>
<tr>
<td>Equal</td>
<td>Average</td>
</tr>
<tr>
<td>Decreased</td>
<td>Feeble</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trend direction</th>
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<tbody>
<tr>
<td>Increased</td>
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</tr>
<tr>
<td>Equal</td>
<td>Average</td>
</tr>
<tr>
<td>Decreased</td>
<td>Feeble</td>
</tr>
</tbody>
</table>

STATEMENT OF ASSETS AND LIABILITIES

A. TOTAL INVESTMENTS
A1. TOTAL TANGIBLE FIXED ASSETS, of which for:
- Lands assigned to warehouse areas
- Warehouses
  - of which bio-buildings
- Machineries for warehouse
  - of which with low environmental impact (energy, noise, pollution, etc.)
- Equipments for warehouses
  - of which with low environmental impact (energy, noise, pollution, etc.)
- Vehicles for warehouses
  - of which with low environmental impact (energy, noise, pollution, etc.)
- Systems to reduce packaging
- Means of transport
  - of which with low environmental impact (energy, noise, pollution, etc.)
- Systems for energy saving and efficiency
- Systems for water saving, efficiency and recycle
- Systems for minimising greenhouse emissions
- Systems for recovering and recycling of refusals, discards, used products
- Bio-buildings
- Systems for lowering ground pollution
- Technologies for electronic commerce
A2. TOTAL INTANGIBLE FIXED ASSETS, of which for:
- Environmental Quality certifications and marks (specify)
- Social Quality certifications and marks (specify)
- Economic Quality certifications and marks (specify)
- Strategic environmental marketing
- Strategic social marketing
- Strategic economic marketing
A3. TOTAL FINANCIAL FIXED ASSETS, of which for:
- Participations in firms and associations of an economic nature
- Participations - donations in firms and associations involved in environmental and socio-cultural issues
- Participations in ethical and green funds
- Participations in local production and consumption networks (purchase groups, etc.)
- Participations in organisations (networks) for responsible consumption

1 - Project: INNESTO Pilot Project: Il Casentino/AR, Task: Trends during the last five years
INVENTORY: STOCK VALUE
Final surplus of in working, semi-finished and finished products Decreased 1
Final surplus of raw materials, subsidiary materials, consumables and goods Increased 2

PROFIT AND LOSS ACCOUNT

A. TURNOVER:
Total revenues from products and performances Increased 3

B. PRODUCTION COSTS
Total of the purchases of raw materials, subsidiary materials, consumables and goods Increased 2
- of which recyclable, recycled, substitutive of dangerous materials Increased 1
Total of production expenses, of which for:
- studies for appraisal and assessment of environmental, economic and socio-cultural impacts None 0
- studies for economic, environmental and socio-cultural diversification and innovation Increased 1
- improvement of work organisation, behaviour, motivation, participation and social relations Increased 1
- utilisation of renewable and recycled resources (energy, water, etc.) Increased 1
Total of commercial expenses and charges, of which for:
- warehouse services Increased 1
- transport services Increased 1
- logistics and transport systems with environment saving None 0
- packaging Increased 1
- of which re-usable and recycled Increased 1
- operating social marketing None 0
- operating environmental marketing None 0
- fair trade Increased 1
Total of administrative and overhead expenses, of which for:
- customer services Increased 1
- of which electronic commerce Increased 1
- risk assurance for warehouse and transport Increased 1
- duties and taxes for the environment, waste, water, etc. Increased 1
- penalties for lacked respect of social and environmental norms None 0
- subsidies for associations of economic, socio-cultural and environmental interests Increased 1
Total of leasing expenses Increased 1
- of which for systems of environmental protection None 0
Total labour cost, of which for activities regarding:
- transport Increased 1
- warehouse Increased 1
- customer services Increased 1
Total amortizations and reserves, of which:
- amortizations of investments in tangible fixed assets related to warehouses and transport Increased 2
- amortizations of investments in intangible fixed assets related to quality improvement and business promotion Increased 1
- amortizations of investments in financial assets related to participations in firms, associations, funds and networks Decreased 1
- reserves for transport and warehouse risks Increased 1

2 - Project: INNESTO Pilot Project: Il Casentino/AR, Task: Trends during the last five years
Logistics costs

A calculation of the logistics costs is made elaborating data of the balance sheets and adjusting the results according to basic criteria defined by a long series of research e.g.:


<table>
<thead>
<tr>
<th>Logistics costs</th>
<th>Voice of the Profit &amp; Loss Account</th>
<th>Voice of the Statement of Assets &amp; Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transportation</strong></td>
<td>Production costs:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• transport services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• labour costs for transport</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• logistics and transport systems with environment saving</td>
<td></td>
</tr>
<tr>
<td><strong>Warehousing</strong></td>
<td>• warehouse services, packaging</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• labour costs for warehousing</td>
<td></td>
</tr>
<tr>
<td><strong>Administration</strong></td>
<td>• (labour costs for transport, warehouse, customer services) / total labour costs x Total administrative and overhead expenses</td>
<td></td>
</tr>
<tr>
<td><strong>Inventory carrying</strong></td>
<td>• packaging</td>
<td>Inventory (stock value):</td>
</tr>
<tr>
<td></td>
<td>• operating social and economic marketing</td>
<td>• final surplus of in working, semi-finished and finished products</td>
</tr>
<tr>
<td></td>
<td>• fair trade</td>
<td>• final surplus of raw materials, subsidiary materials, consumables and goods</td>
</tr>
<tr>
<td></td>
<td>• customer services (and electronic commerce)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• risk assurance for warehouse and transport</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• reserves for transport and warehouse risks</td>
<td></td>
</tr>
</tbody>
</table>

Also the logistics costs are presented in an anonymous manner but they strictly refer to individual firms.

The procedure was as follows:

- a calculation was made for each respondent company
- the calculations were separated in the three main sectors (industry, agriculture and services)
- for each sector, subcategories were created according to the typology of products, processes, markets (near or distant) and employment dimensions
- a range was calculated from the lowest to the highest costs for each main sector (industry, agriculture and services)
- the best performances were selected within the above range and presented in the following tables.

**Costs over turnover | percentage range**
| Category          | Industry % range (from | to) | Agriculture % range (from | to) | Services % range (from | to) |
|-------------------|------------------------|---------------------------------|---------------------------------|------------------------|
| **Transportation**| 3,3                    | 16,8                           | 0,2                             | 5,3                     | 1,5                         | 4,7                           |
| **Warehousing**   | 0,9                    | 2,5                            | 2,5                             | 2,5                     | 2                            | 10,4                          |
| **Administration**| 0,6                    | 0,6                            | 1                               | 2                       | 0,1                          | 5                             |
| **Inventory carrying** | 1,7                    | 2                              | 2,3                             | 2,3                     | 1,1                          | 1,7                           |
| **Total on turnover** | 6,4                    | 21,9                           | 5,9                             | 12,1                    | 10,2                         | 16,2                          |