

Report SWOT - Orientation

OR.01 - Environment

Sustainable District Logistics (SDL) orients logistics towards:

- Reduction of natural resource consumption (energy, soil, water, fuel, etc.)
- Preserving landscape configuration (density of hard infrastructures, etc.)
- Re-utilisation of products
- Recycling of parts of products, semi-products and wastes
- Pollution prevention and reduction
- Diffusion of new clean technologies, eco-efficient means and modes of transport
- Utilisation of renewable sources of energy

Strengths



- Pasture reconstruction, biodiversity and renewable energy production
- Principles of sustainable development included into several municipal plans: e.g. environmental quality and renewable energy, waste reuse and transportation optimised, integrated infrastructure planning
- Local products and natural wastewater production favoured by the National Park
- Spatial renovation promoted by new projects, e.g. local railway (using ex-factory), road (using old road and circumventing population centres), gas supply lines (using former pipeline areas)
- Flood protection (flood expansion area)
- High tension electricity delivery, improving power delivery
- Environmental protection and improvement (e.g. Leader II, closure of polluting pig farm, recycling of batteries by local company, diffusion of clean technologies through local network, recycling and energy production from local wool production)

Weaknesses



- Waste reduction not considered by municipal plans with consequences also in logistics (e.g. waste mainly transported out of valley to Arezzo)
- Lack of new environmental approaches and strategic impact assessment in the projects of new road, new railway and flood expansion area since their first phases
- Lack of innovative solutions to problems due to specific projects (e.g. landscape impacts of the high tension lines; railroad new sections with several changes in elevation; natural waterways crossed by gas supply lines)
- Lack of environmental awareness in local production network

Threats



- Traffic increase due to a new commercial centre
- Fragmentation of the valley territory
- High tension electrical delivery: probable increase in energy use, impacts on river and on the environment (also from substations)
- New gas line: probable environmental damages and accidents
- Polluting fuels (petrol-coke, animal parts, diesel) used in new energy production and railroad project

Opportunities



- Probable improvement of environmental attention and conditions through municipal structural plans and the project on flood expansion area
- Probable reduction of pollution through a better co-ordination (local network) between municipalities
- Probable increase in value of local agricultural production through rural projects (e.g. Leader)
- Creation of bicycle path (e.g. Bibbiena)
- Probable road traffic reduction and logistics improvement promoted by the railroad project (e.g. new warehouses constructed along the line)

Main hypotheses of alternative options

To integrate planning activities in several local initiatives (e.g. in waste management plans, integrated spatial plans, recycling, energy production from alternative sources, diffusion of clean technologies, agricultural production) in order to create a logistics structure aimed at:

- reducing the energy intensity of the economy; in fact estimates reveal that present consumption levels, nearly 38 goe per unit GDP and 0,8 Toe per inhabitant, are higher than the problematic national average (respectively 35 and 0,7)
- pursuing a substantial reduction and rebalance in energy consumption between the transport modes; in fact estimates reveal that the dominant activity for energy consumption is related to road transport (98%) with private passenger transport arriving at 73% and freight transport at 25%

- reducing pollution due to transport activities; in fact estimates reveal that the largest production of CO₂ (98%) is due to road transport with private passenger transport totalling 75% and freight transport 23%

To support this main action through the creation of an integrated information system (local network between the municipalities) in order to monitor and evaluate the impacts of logistics fluxes (e.g. commercial centres, new road and railways projects, flood expansion area, production chains and networks) utilising a series of strategic indicators (qualitative and quantitative) that orient local stakeholders toward the reduction of environmental pressure (e.g. waste and road traffic) and also favour of the development and use of local products.

O2 - Economy

Sustainable District Logistics (SDL) orients logistics towards efficiency, customer satisfaction and community well-being based on:

- Reduction of the material, energy and transport intensity (flows) in the economy (decoupling) also by means of soft and clean technologies
- Investments for the incorporation and reduction of the environmental and social costs in logistics accounting
- Dematerialisation of economy (durability of goods and services, miniaturisation of products, substitution of products by services)
- Reduction of transport growth and more balanced modal split in favour of rail and water
- Information and Communication Technology to substitute transport (e.g. telecommuting, home-shopping and delivering, teleconferences, teleworking, etc.)

Strengths



- Increase in quality and value of tourism, local production and employment (e.g. the National Park, Life and Leader projects, wool production, municipal investing and plans aimed at territorial marketing and economic diversification)
- Increase in infrastructure investment over time, rationalisation and reduction in costs (e.g. hydroelectric station, multi - municipal waste management, new road project with national and regional financing, new railroad project with increase in loading facilities, new high tension power delivery with reduction of maintenance costs)
- Reduction of information costs and promotion of local socio economic development (e.g. the local Internet - based network for e-government)

Weaknesses



- Lack of integrated economic analysis of costs and benefits of new activities (e.g. the impact of a commercial centre on existing commercial areas, the destination of residual materials from a new energy production plan, waste transported outside the valley to Arezzo)
- Lack of analysis of demographic changes due to new project (e.g. increase of populated areas stimulated by a new road project)

Threats



- Probable unfair competition between businesses (e.g. commercial centre versus small shops)
- Probable low attention to new flood protection areas in municipal plans
- Probable lack of funding for the local municipal network

Opportunities



- Probable development of alternative energy production
- Possible economic development due to local innovative initiatives (e.g. new uses of local wood products (Leader project), new small businesses) supported by municipal plans and information network (e.g.
- Possible development of better connection between industry and populated centres (e.g. new bridges and railroad links planned)

Main hypotheses of alternative options

To increase efficiency in the local logistics structure and to stimulate economic efficiency at territorial and business level through:

- a reduction of road transport and a rebalance between the transport modes; in fact estimates reveal that road freight and private passenger transport have nearly 10 percentage points more than the problematic national average; vice versa public passenger transport (by rail and road) and rail freight transport have nearly 10 percentage points lower
- a progressive reduction of the transport intensity in the local economy
- investments in e-logistics (logistics and transport operators) and e-commerce (businesses and households) and supported by the diffusion of the e-government network ("rete civica")
- a co-ordinated organisational and management system (with a diffuse utilisation of ICT) of the supply and distribution chains (local freight logistics network) based on freight rail transportation (e.g. night-freight-trains)

- combined with light freight road transportation (e.g. share-a-ride / vanpool)
- a co-ordinated organisational and management system (with a diffuse utilisation of ICT) of the passenger transportation (local passenger logistics network) based on a metropolitan railway combined with a differentiated supply and demand matching for public (e.g. buses and taxis, dial-a-ride) and private road transport (e.g. share-a-ride - carpool)
- an inter-modal transport system based on linear connection (e.g. a metropolitan railway with a full-day utilisation of its capacity, differentiated between night-freight-trains and day-people-mover) and transversal connections (e.g. the existing road network improved in safety and quality)
- the rationalisation and reduction of general costs (e.g. through co-ordination and aggregation of services as such as waste management, e-government information network, power delivery, railroad facilities and connections) in order to cope also with lack of public funding due the recent financial laws (national budget)
- a progressive reduction of the transport related external costs (environmental, social and health damages) in order to make economic resources available for investment in production, socio-culture and the environment
- the improvement in quality, value, productivity and employment in several fields of activities (e.g. dissemination and transfer of good practices already experimented in tourism, economic diversification, territorial marketing) with a specific support to self-employment, enterprise creation and to the maintenance of the existing fabric of small businesses
- the creation of integrated system (local network between the municipalities) in order to monitor and evaluate the total costs (economic, social and environmental) of the logistics structure utilising a series of indicators (qualitative and quantitative) that allow local stakeholders to improve the quality of business and spatial planning

O3 - Socio-Culture

Sustainable District Logistics (SDL) orients logistics towards:

- Promotion of sustainable styles of production and consumption
- Investments in human capital (education and training) especially on sustainable development, logistics, transport, etc.
- Transdisciplinarity for integrated management of logistics and integrating planning
- Investments on innovation (Research & Development)

Strengths ●●●

- Education to responsible style of life (e.g. multiple municipal waste management, Life and Leader projects, municipal spatial plans)
- Internet diffusion and computer training (e.g. municipal network "rete civica"; public administration personnel; school pupils)
- Cultural activities and renovation (e.g. municipal projects to restore historic centres and sites, National Park initiatives for promoting local traditional culture and quality services)

Weaknesses ●●●●

- Lack of analysis on the cultural impacts, attitudes and behaviour induced by new road project
- Poor quality schools and poor interrelation with local businesses
- A certain attitude to consider immigrants as a mere labour-force

Threats ●●●

- Bureaucratic style in managing innovation (e.g. municipal network "rete civica" not fully exploited to promote the culture of sustainable production and consumption)
- Sectoral culture of innovation (e.g. new railroad project without emphasis on positive changes towards a sustainable mobility)

Opportunities ●●●

- Possible dissemination of e-learning to the general public (e.g. through the local municipal network "rete civica")
- Increase of multicultural, professional, managerial training also accessible to the immigrant population (e.g. Leader project, municipal plans for tourism and social inclusion)

Main hypotheses of alternative options

To promote life styles more orientated towards sustainable consumption and production, to correct the current unbalanced logistics system through the creation of a "centre of resources" able to:

- invest in people (human capital) of all the Valley territories, promoting research, training and education for qualified activities and employment (e.g. in agriculture, industry and services) towards knowledge and skills required by the promotion of sustainable development (logistics, mobility and transport included)
- capitalise positive experiences (e.g. Life and Leader projects, municipal spatial and social insertion plans) of learning methods
- implement e-learning methods enlarging scope and purposes of the local municipal network (rete civica)

- mobilise local schools, businesses, associations and institutions towards shared education and training plans that could increase university and high school degrees lowering the drop-out rate

O4 - Equity between individuals

Sustainable District Logistics (SDL) orients logistics towards:

- Improvement of accessibility to goods, services, people and places, developing services that meet the needs of local population, including women, the poor, the rural, the disabled, elderly people, immigrants, ethnic minorities, etc. (equal accessibility)
- Balanced local development
- Health and safety activities
- Reduction of unnecessary and undesirable travels, movement and material flows

Strengths



- Mobility services for specific categories (e.g. immigrant commuter transport provided by local firms)
- Increase in service accessibility (e.g. local municipal network)
- Initiatives (e.g. municipal and local plans for social services – transport included) to ameliorate the quality of life of people at risk of social exclusion (e.g. minors, immigrants, disables, women), as well as corporate social awareness towards disabled (e.g. labour insertion agreements)

Weaknesses



- Lack of attention on the increase in immigrant presence within local communities and on the support for enterprise and employment creation (e.g. municipal plans)

Threats



- Probable reduction in public expenditure for social services devoted to the most vulnerable people (e.g. disables, elderly, women - transport services included) due to recent national plans and financial (public budget) laws
- Probable displacement effects on entrepreneurial activities and employment (e.g. competition of new commercial centres versus existing small local shops)

Opportunities



- Probable increase in facilities and services for the public (e.g. commercial centre, local e-government network)
- Probable increase in social and labour insertion for women and immigrants (e.g. municipal plans)

Main hypotheses of alternative options

To increase the accessibility to goods, services, people and places through the development of:

- a safety-orientated transport network (e.g. rail - roads integration) that takes into consideration also people at risk of social exclusion (e.g. social transport for elderly, minors, immigrants, poor families included into the local plan of social services)
- an ICT system that allows logistics to lessen transport intensity and pressure on the local social communities providing services that reach the local inhabitants at home (e.g. e-government network "rete civica" supporting also e-commerce, home-shopping, e-banking, e-administration)
- positive actions in favour of women insertion in labour market, education and decision-making (e.g. planning, management and implementation of local policy strategies with a close attention to logistics impacts)

O5 - Equity between territories

Sustainable District Logistics (SDL) orients logistics towards:

- Balanced interlocal development (economic, socio-cultural and environmental)
- Development of fair and solidarity relationships between different local / regional contexts (equal accessibility in trade, economy, socio-culture, environment)
- Balanced alliance between logistics operators of different local areas
- Diffusion of connecting high technology systems (e.g. digital cities, interlocal digital networks)

Strengths



- Local initiatives with positive impacts on the Valley communities (e.g. Life - biodiversity conservation; waste management and transport; flood expansion area; new road project)

Weaknesses



- Waste transport outside Valley

Threats



- Probable increase in energy import from outside the

Opportunities



- Probable increase in policy co-ordination (e.g. local

Main hypotheses of alternative options

To develop services that are accessible to depressed areas through:

- an integrated e-logistics and an inter-modal (e.g. metropolitan railways connected to intra-valley roads) transport system based on the full utilisation of co-ordination potentials (e.g. local e-government and regional networks, spatial planning, waste management, biodiversity conservation, flood expansion area)

O6 - Equity between generations

Sustainable District Logistics (SDL) orients logistics towards:

- Research concerning sustainable logistics scenarios, patterns, methods and technologies
- Education to nourish the ability of future generations to conceive new styles of production and consumption
- Conservation and development of environmental resources
- Strategic impact assessment of the logistics patterns (long-term risks and damaging changes) considering the aspects of the other 9 components on the future generations

Strengths



- Investments in resources conservation (e.g. Life - biodiversity; National Park; reduction of the fossil fuel usage; traditional techniques applied in wool production; waste recycle at 35% and reduction of landfill dimensions; new gas pipeline)
- Attention to the future generations (e.g. involvement of school children in municipal spatial planning)

Weaknesses



- Lack of an integrated strategic assessment the several environmental, social and economic plans and projects, also from a logistics point of view

Threats



- Probable increase in energy consumption, waste consumption and private traffic (e.g. new road project, new high tension electric power supply)

Opportunities



- Probable increase in information on the future impacts of the current programmes, plans and projects utilising also the local e-government network ("rete civica")

Main hypotheses of alternative options

To evaluate the logistics impacts of the economic development over the next 15 years taking into account:

- demographic changes (e.g. a high dependency rate due to the progressive ageing of the population, which reveals a difference of 10 points of percentage between old and new generations), cultural and educational changes (e.g. probable further increase in the immigrant share of the new generation), availability of public resources (e.g. public debt per inhabitants), availability of environmental resources (e.g. biodiversity and energy)

- new services' demand (e.g. increase in ageing people, decrease in household dimensions)

- new consumption patterns, new production technologies and methods to fight against resources deterioration and shortcoming

- new methods of services delivery (e.g. e-commerce)

O7 - Diversity

Sustainable District Logistics (SDL) orients logistics towards coherence, flexibility, permeability and diffusion of:

- Local identities and fabrics (biodiversity, habitat, socio-cultural heritage, economy vocations, etc.)
- Innovation and development of economic sectors, focused especially on small and medium sized enterprises, income sources both in rural and urban areas, styles of production and consumption (values and ethics)

Strengths



- Environmental diversity (e.g. National Park and Life project, biodiversity and resources conservation)
- Economic diversity (e.g. municipal spatial planning; traditional skills and knowledge reintroduced in wool production)
- Cultural diversity (e.g. eco-museum; municipal network "rete civica"; restoration of historical centres)

Weaknesses



- Limited considerations on impacts of industrial production on local cultural diversity and biodiversity
- Low attention on other cultural diversities (e.g. immigrants not yet well integrated)

Threats



- Probable reduction of economic elasticity (e.g. local products and shops displaced by big commercial centres)

Opportunities



- Probable diversification of economic and cultural activities (e.g. municipal spatial and development plans; increasing presence of immigrants as a local resource)

- Probable limited diversity in access facilities to services from rural areas (e.g. limits of technological and information nature in the municipal network "rete civica")

- Probable dissemination of cultural diversity (e.g. awareness of the local rural / mountain culture promoted by the municipal network "rete civica")

Main hypotheses of alternative options

To provide logistics services with a specific attention on:

- economic and employment diversification (e.g. facilities for small businesses, local products)
- socio-cultural diversity (e.g. facilities for rural areas, local communities, immigrant insertion)
- natural resources (e.g. facilities for biodiversity diffusion)
- corporate social and environmental responsibility (e.g. facilities to support business quality certification through the rationalisation of supply and delivery fluxes)

O8 - Subsidiarity

Sustainable District Logistics (SDL) orients logistics towards capacity building (knowledge dissemination and decision-making openness) based on:

- Integration of local and wider (global) dimensions (glocacity)
- Reduction of the spatial range of material flows
- Streamlined organisation of material flows
- Integration of top-down and bottom-up approaches in streamlined organisations (businesses, public administrations and other associations)
- Empowerment of local communities

Strengths

- Co-operative decision-making between different components of civil society (e.g. citizens and NGOs in municipal spatial planning; local plans of social and health services), public and private sectors (e.g. mixed society for railroad with involvement of large businesses; Leader and Life projects), local, regional and national authorities (e.g. waste management; flood protection area), local authorities (e.g. municipal e-government network "rete civica")

Weaknesses

- Weak dissemination of new governance methods in all policy fields (e.g. limited awareness of transversal value of procedures experimented in local plan for social services' delivery)

Threats

- Public administrative bureaucratic style and limited autonomy of local authorities due to financial restriction (national budget laws)

Opportunities

- Further development of co-ordinated resources' management between public, private and social sectors (e.g. spatial and transport plans)

Main hypotheses of alternative options

To empower local stakeholders (governments, businesses, civil society and citizens) in logistics decision-making (e.g. co-ordinated planning) through the creation of:

- a specific budget line on logistics development (e.g. integration of public and private financial resources)
- a permanent monitoring system of the local, external and transit fluxes of passengers and freights

O9 - Networking / Partnership

Sustainable District Logistics (SDL) orients logistics towards:

- Development of regional / local networks of production, distribution and consumption
- Investments in social capital (community glues, intermediary bodies, bridges and networks)
- Networked organisations (e.g. consortia between businesses, co-operation between private, public and social sectors, co-operation between local and metropolitan consortia of transport and logistics)
- Alliances between environmentally friendly transport modes and operators
- Exchange of experiences and good practice of sustainable transport and logistics between different local and regional contexts
- Alliances and collaboration between public authorities and private actors of different local / regional contexts

Strengths

- Several types of networks (e.g. waste management; information and data on local environment, cultural, education and training initiatives; local products and services; e-government "rete civica")
- Several types of partnerships (e.g. Leader project;

Weaknesses

- Limited involvement of small businesses and limited collaboration between themselves and with other small companies outside the valley

National Park; spatial planning; railroad project) involving private (e.g. big companies, credit institutes), public (e.g. schools, local authorities, Mountain Community) and groups of social-economic interests (e.g. trade associations)

Threats

- Risk of limiting the representation of local interests, particularly those of less favoured people (e.g. vulnerable households, immigrants, women) and less considered issues (e.g. environmental NGOs)



Opportunities

- Probable increase in collaboration between local producers (e.g. farmers and entrepreneurs) through agreements for development plans



Main hypotheses of alternative options

To enlarge scope and dimensions of the present networks for planning logistics fluxes through:

- the analysis of different interests and the creation of a map that cover all potential local logistics stakeholders (e.g. producers, suppliers, consumers, local communities) looking at a long-term perspective
- the creation of local round tables and/or forums in connection with other relevant issues and initiatives (e.g. Local Agenda 21)

O10 - Participation

Sustainable District Logistics (SDL) orients logistics towards:

- Enlargement of the stakeholders constellation to incorporate in the logistics processes new points of view, cultures, interests and behaviours (e.g. those concerning women, new generations, elderly, disabled, poor people)
- Information, animation and facilitation
- Stakeholders involvement and legitimate acknowledgement in the decision-making processes of spatial planning, transport, logistics, etc.
- Involvement of different agencies (private, public and social) in the management of logistics processes
- Community participatory forms of co-operative management of proximity logistics processes
- Democratic management of the strategic impact assessment of logistics processes

Strengths

- Several initiatives to disseminate information to the general public (e.g. waste management; Life and Leader projects; local e-government network "rete civica"; Internet diffusion in the schools and public administrative bodies)
- Several initiatives to foster public participation (e.g. procedures related to the local plan of social services; consultation for road project -questionnaire; consultation and open debate on municipal integrated spatial plans with school pupils involvement)



Weaknesses

- Lack of information on logistics and the related (environmental, social and economic) issues



Threats

- Risk of vague information, low attention on relevant issues (e.g. the environment) and formal procedures of participation without effective impacts on decision-making from the part of the less favoured social categories



Opportunities

- Probable utilisation of the local network "rete civica" as a tool for participation of the citizens (e.g. discussion groups, Internet community) in the decision-making



Main hypotheses of alternative options

To create methods and procedures that increase information and participation of local stakeholders (included less favoured categories, e.g. women, old people, disabled people, immigrants, minors) in decision-making on logistics and spatial planning, utilising experiences gained in other policy fields (e.g. local plans of social services) and involving the education system from the early grades.

Report Swot Social Potential

01 Perception of a variety of development approaches

The Sustainable District Logistics (SDL) approach is facilitated by:

- Willingness and practices of the logistics stakeholders (businesses, public authorities, civil society and communities) to open their views and ways of thinking, looking at new issues and conceptions on local and logistics development (debates, seminars, interdisciplinary working groups, animation and mobilisation of citizens, new plans on sustainable development, etc.)

Strengths



- Presence of principles related to sustainable development in a series of plans and projects (e.g. Leader, Life, municipal spatial plans)

Weaknesses



- Lack of well structured methods and strategies for sustainable development in all fields of activities, as well as in specific projects (e.g. new road and railways projects)

Threats

- Probable low degree of coherence in transferring and implementing principles of sustainable development in other plans (e.g. road and rail transport; commercial centre)



Opportunities



- Probable willingness and capacity of integration between the e-government network "rete civica", the rail and road projects, the municipal spatial plans

Main Hypotheses for action

To integrate programmes, plans, projects and knowledge created by the endogenous human resources and orient them towards sustainable development in order to improve the local logistics system.

02 Entrepreneurial creativity and innovation

The Sustainable District Logistics (SDL) approach is facilitated by:

- Reproductive capacity of the local context, based on common cultural roots, mobilisation of potential resources and research to improve the quality of life (projects and plans for sustainable businesses, banking, agriculture, tourism, etc.)
- Fertilisation of the local economic fabric to embed the single business into the fluxes of internal and external production relationships (typology and number of businesses, their life expectancy, sizes, markets, eco-efficiency technologies, etc.)
- Corporate Social Responsibility (CSR), defined by the recent (2002) European Union action framework, as "a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis" (typology and number of businesses and public bodies with social and environmental quality certifications, etc.).

Strengths



- Innovation (e.g. landscape, bioengineering techniques) in local plans (e.g. new road) and in industry (e.g. wool production, organic farming)

Weaknesses



- Lack of integrated dissemination and transfer of innovative methods for supporting corporate social and environmental responsibility

Threats

- Probable low financial support to research and sustainable innovative methods specifically directed to small businesses



Opportunities



- Probable increase in awareness of the business community to the value of the environment and culture promoted by current initiatives (e.g. municipal spatial plans; Leader, Life projects)

Main Hypotheses for action

To disseminate CSR (corporate social and environmental responsibility) through financial support and technical assistance (e.g. quality certification) specifically in favour of existing small businesses and enterprise creation.

03 Capacity to cope with complexity and to anticipate change

The Sustainable District Logistics (SDL) approach is facilitated by:

- Strategies at local level able to increase the capacity of the logistics stakeholders to anticipate changes and to cope with a large amount of problems finding solutions that can reduce uncertainty while evaluating and managing local / global interdependencies (flexibility of the local economic and social fabric, integrated programmes and common medium and long term projects supported by training and education on visioning methods, chaos and complexity theories, etc)

Strengths



- Diffusion of objectives and lessons from pilot projects (e.g. Leader and Life) to other initiatives (e.g. Mountain Community development plan)

Weaknesses



- Lack of integration between several initiatives for commonly identified objectives of sustainable development

Threats



- Probable permanence of sectoral interests and points of view

Opportunities



- Probable renewed efforts towards integrated programmes and plans (e.g. Local Agenda 21)

Main Hypotheses for action

To integrate local sustainable accessibility issues into the elaboration of the valley Local Agenda 21 and to support their implementation with training courses and related research

04 Enrichment of the local Knowledge to create a cohesive multicultural environment

The Sustainable District Logistics (SDL) approach is facilitated by:

- Open interrelationships between different knowledge and cultures, considering both the current and future components of the local context and their probable impact on logistics processes (programmes for the emersion of black-market activities, exchange programmes with other local systems, projects on multicultural integration, labour and social insertion, etc.)

Strengths



- Municipal spatial plans aimed at social problems related to immigrants

Weaknesses



- Still limited multi-cultural and inter-disciplinary approaches in schools and training initiatives

Threats



- Immigrants contribution considered mostly in the form of labour force

Opportunities



- Probable future demographic changes with an increase in the immigrant population

Main Hypotheses for action

To increase number and quality of programmes and projects related to integration between different knowledge and cultures taking into account future impacts on logistics dynamics.

05 Discovery and re-encoding of the local specificities and knowledge

The Sustainable District Logistics (SDL) approach is facilitated by:

- Close interrelationships between the components of the concerned local context, considering different cultures and knowledge that can have an impact on logistics processes (number of endogenous companies, projects on local diversity recovery, cultural heritage, arts & crafts, oeno-gastronomy, agro-eco-natural tourism, economic and social diversification, etc.)

Strengths



- A series of initiatives focused on putting in value local cultures, products, arts and crafts, landscape, environmental characteristics biodiversity (e.g. Leader and Life projects; new road project; local spatial plans, National Park)

Weaknesses



- Lack of an in depth evaluation of local plans on the local environmental, economic and socio-cultural identities (e.g. new road and watershed plans)

Threats



- Probable negative impacts of local plans on social and economic tissue, as well as on specific archaeological and hydrological characteristics of the territory (e.g. commercial centre, new road and railroad projects)

Opportunities



- Probable increase in awareness of specific features of the territory (e.g. conservation of particular biotopes, landscape value underlined in new road project)

Main Hypotheses for action

To increase the knowledge on local economic, socio-cultural and environmental characteristics in order to utilise diversification as a driving factor for innovation and renewal of local development and employment, considering accompaniment measures related to the logistics structure

06 Ability to reach optimal levels of attainment and fulfilment of life

The Sustainable District Logistics (SDL) approach is facilitated by:

- Dialogical capacity of a territorial system to be simultaneously open and cohesive in order to create the

knowledge preconditions for integrated logistics plans (interdisciplinary training and university courses on individual and collective empowerment, motivation and participation, etc.)

Strengths

- Attention to the increase of territorial and business quality (e.g. new railroad project, some local firm, local spatial plans)



Weaknesses

- Limited number of initiatives to integrate social and environmental accounting into business and territorial plans



Threats

- Probable conflicts between economic, social and environmental interests



Opportunities

- Support to local initiatives for social and environmental quality provided by the regional operational programme on Objective 2 (EU structural funds)



Main Hypotheses for action

To provide long-term quantitative objectives that support qualitative objectives and guidelines provided by several local plans, together with adequate systems and methods of social and environmental accounting.

07 Fractal distribution of responsibilities and competence

The Sustainable District Logistics (SDL) approach is facilitated by a multi-level governance of the logistics processes, based on:

- Integration of top-down and bottom-up approaches in decision-making at a territorial level (diversity of institutional characteristics in number of structures, distribution of responsibilities and power, etc.)
- Integration between local and global dimensions (balanced responsibilities and co-operation between small and large transport and logistics companies, etc.)
- Close interaction between economic actors, the society and the institutions (informal relationships and formal procedures of decision-making in public policies and programmes, etc.)

Strengths

- Institutional strategy aimed at integrating the administrative and managerial structure of the valley local authorities (e.g. social and economic development plan defined by the Mountain Community)



Weaknesses

- Still limited transfer of methods for integrated management (e.g. good practices in social, services, spatial, railroad, road, waste, hydrological expansion area plans) in all local policy fields



Threats

- Limits to local availability of financial resources due to the national budget plans



Opportunities

- Probable increase in collaboration between experts, actors (private and public) and different dimensions of responsibility (local and regional) also by means of the e-government network (rete civica)



Main Hypotheses for action

To elaborate a Charter of main orientation principles and procedures (e.g. a self-training handbook) in order to implement the institutional strategy for an integrated management of local plans.

08 Facilitating structure for autonomy and collaboration into the decision-making

The Sustainable District Logistics (SDL) approach is facilitated by:

- Collective identity of the local context where political institutions, civil society and citizens manifest different economic, environmental and social interests (participation at public budget allocation and shared responsibilities in public spending, mutual and co-operative collaboration between the logistics companies and their stakeholders, etc.)

Strengths

- Experiences of citizens and civil society involvement into the decision-making (e.g. Leader and Life project, waste management, municipal network for e-government "rete civica", school networks)



Weaknesses

- Lack of structured and harmonised methods for facilitating citizen and civil society involvement in decision-making



Threats

- The already absence of a national reform for fiscal federalism with a balanced role between territorial dimensions and responsibility levels



Opportunities

- Utilisation of spontaneously determined criteria for the dissemination of participation rules in decision-making related all main policy fields



Main Hypotheses for action

To provide clear criteria on stakeholder (citizens, civil society and governments) analysis and involvement in the public decision-making according to the specific field of problems, issues, policies and services, as well as stimulating analogous methods in corporate strategies on a volunteer basis.

09 Primary reliance on the endogenous resources without compromising the ones of the others

The Sustainable District Logistics (SDL) approach is facilitated by:

- Collaboration between the local actors to utilise endogenous and exogenous resources in a synergetic way (common territorial marketing plans, locally based investments, exchange of good practices with other local contexts, pilot projects between universities, businesses, trade associations, etc.)

<p>Strengths</p> <p>●●●● Quality of local products and local knowledge value recognised together with the synergetic role of local public and private financing in a long series of initiatives and plans</p>	<p>●●●●</p>	<p>Weaknesses</p> <p>●●● Lack of an in depth analysis of the impacts of local initiatives in external communities (e.g. waste treatment performed outside the valley)</p>	<p>●●●</p>
<p>Threats</p> <p>●●●● Economic competition of big companies versus local businesses</p>	<p>●●●●</p>	<p>Opportunities</p> <p>●●●● Probable increase in collaboration between local businesses, public authorities and communities, stimulated by provincial, regional and EU funds</p>	<p>●●●●</p>

Main Hypotheses for action

To develop methods of project financing based on clear protocols and agreements that respect local autonomy in decision-making.

10 Shared value system taking into account environmental, socio-cultural and economic interdependencies

The Sustainable District Logistics (SDL) approach is facilitated by:

- Collaboration between the logistics stakeholders (businesses, public authorities, civil society and communities) in taking into account the economic, social, cultural and environmental values and interdependencies (programmes for public awareness raising, typologies of stakeholders involved in relevant local initiatives, committees, forums, inter-departmental groups, etc.)

<p>Strengths</p> <p>●●●● Involvement of a wide range of stakeholders and diffusion of methods and lessons derived from many project (e.g. Life, Leader, waste management, municipal e-government network "rete civica")</p>	<p>●●●●</p>	<p>Weaknesses</p> <p>●●● Still limited awareness of local businesses on the importance of environmental, social and economic integration</p>	<p>●●●</p>
<p>Threats</p> <p>●●●● Probable conflicts of interests between economic, environmental and socio-cultural development plans and between the related stakeholders</p>	<p>●●●●</p>	<p>Opportunities</p> <p>●●● Probable increased in determining shared value system, supported by information, research, new technologies, impact analysis and learning (e.g. municipal e-government network "rete civica")</p>	<p>●●●</p>

Main Hypotheses for action

To invest in impact analysis, monitoring and evaluating systems, research, learning and training, as well as in an integrated system of public information, enlarging the scope of the already existing e-government network (rete civica) and focusing its purposes on sustainable development issues.

11 Social cohesion

The Sustainable District Logistics (SDL) approach is facilitated by:

- Networks of interpersonal relationships, common culture, sense of belonging, mutual trust between local operators and communities (role of the volunteer sector, socio-ethics funds, plans for urban renovation, social inclusion, employment, housing, etc.)

<p>Strengths</p> <p>●●●● Wide and dense network of mutual support (e.g. NGOs, social economy) with the involvement also of big local industry</p>	<p>●●●●</p>	<p>Weaknesses</p> <p>●●● A certain lack of integration between environmental and social issues (e.g. local plan for social inclusion)</p>	<p>●●●</p>
<p>Threats</p>	<p>●●</p>	<p>Opportunities</p>	<p>●●●</p>

- Some negative attitudes against diverse cultures and social groups (e.g. immigrants)
- Probable increase in mutual trust and social inclusion supported by regional and provincial laws and plans

Main Hypotheses for action

To utilise social cohesion as a driving force for innovating the local logistics structure towards sustainable development

12 Opportunity and room for fair interactions

The Sustainable District Logistics (SDL) approach is facilitated by:

- Interactions aimed at guarantying the rights to be parts and citizen of the local system through appropriate structures and services (logistics plans based on eco and fair trade with other local contexts, projects on equal opportunities between men and women, human and not-only-human civil rights, involvement in public spending management, etc.)

Strengths

- A long series of local initiatives to affirm equal opportunities between women and men

Weaknesses

- Lack of support from recent national acts and plans

Threats

- A certain attitude against immigrant issues, supported by recent national policy orientation

Opportunities

- Probable increase in initiatives concerning fair and solidarity trade with other distant local communities

Main Hypotheses for action

To support fair interactions also in trade through specific initiatives concerning logistics facilities with different immigrant communities and countries

13 Capacity for creating shared visions of local development

The Sustainable District Logistics (SDL) approach is facilitated by:

- Courses of action based on long term strategic thinking, transdisciplinary co-operation between the logistics stakeholders, flows of knowledge and participative decision-making (territorial pacts and agreements, Local Agenda 21, environmental education plans, etc.).

Strengths

- Dissemination throughout the territory of objectives, issues, results, cultural activities related to the environment, biodiversity and local culture (e.g. Leader and Life projects; waste management plans)

Weaknesses

- Lack of a diffused perception on the serious problems determined by the current economic fabric and by the people behaviour on the available environmental resources

Threats

- Probable conflicts of interests between local stakeholders, specifically as far as economic and environmental issues are concerned)

Opportunities

- Probable raising of environmental awareness promoted by public authorities at regional, provincial and local levels

Main Hypotheses for action

To revise previous territorial pacts and local development agreements in order to incorporate and harmonise objectives and measures towards sustainability, logistics issues included.

14 Integration of social and technical skills for innovative processes

The Sustainable District Logistics (SDL) approach is facilitated by:

- Integration of "tacit" (embedded in the local context) and codified (formalised learning methods) knowledge (professional, technological and business-orientated), as well as access to higher technologies to smaller businesses (training courses, connection with universities, inter-companies collaboration, stages and professional mobility, participatory planning for urban and rural renovation and development, etc.)

Strengths

- Involvement of different disciplines, knowledge and bodies in innovative projects (e.g. universities, administrators and local actors in Leader; environmental aspects in the new road project; training courses and outside logistics operators in local business; technical and information co-ordination group in the local e-government network "rete civica")

Weaknesses

- Lack of a clear orientation towards sustainable development in training courses

Threats

- Probable limitation of knowledge necessary for sustainable development to the experts' arena



Opportunities

- Probable promotion of integrated knowledge and training courses as a supportive basis for developing the valley Local Agenda 21



Main Hypotheses for action

To organise a series of experimental courses on sustainable development in order to support the integration between knowledge and skills requested by Local Agenda 21 and logistics issues.

15 Access to information and dialogue

The Sustainable District Logistics (SDL) approach is facilitated by:

- Information and debate on transport and logistics issues and processes to favour connective tissues between local actors, communities and institutions (transparent procedures in decision-making, acknowledgement of what decision can be really influenced by the citizens' participation, campaigns and projects for awareness raising, etc.)

Strengths

- Press conferences, consultation meetings, public debate and information diffusion experimented by several initiatives (e.g. municipal network "rete civica", waste management, Life and Leader projects)



Weaknesses

- Lack of an integrated monitoring and information systems on the issues related to sustainable development



Threats

- Probable limitation to the public understanding of sustainable development issues because of the utilisation of difficult and complicated language



Opportunities

- Probable capacity to replicate and enlarge scope and purposes of monitoring systems created by specific projects (e.g. Leader - Nature watching observation centre and information base in forest)



Main Hypotheses for action

To create a communication centre on the issues related to sustainable development, utilising the current e-government portal managed by the Mountain Community.

16 Existence of facilitators and animators of multiple interactions

The Sustainable District Logistics (SDL) approach is facilitated by:

- Local development agencies and agents to facilitate interactions between the logistics stakeholders through a knowledge flow aimed at capacity building (promotion of participatory spatial and logistics planning, joint projects on corporate social and environmental responsibility, networks of businesses innovation and support services, etc.).

Strengths

- Knowledge and skills for the promotion of local development as a result of specific projects (e.g. Leader and Life)



Weaknesses

- Lack of facilitators and animators with the skills requested for implementing sustainable development plans



Threats

- Probable underestimation of the role played by facilitators and animators and of their professional requirements



Opportunities

- Probable creation of local facilitators and animators determined by the implementation of the future Local Agenda 21



Main Hypotheses for action

To create a group of local sustainable development agents able to deal also with logistics issues.

Report Swot Dynamics

01 Enhancing problem understanding

Changes in favour of Sustainable District Logistics (SDL) can be produced by:

- Increasing the capacity of the logistics stakeholders to enlarge scope and perspective of analysis in order to nourish innovation and creativity that are based on social and environmental awareness and responsibility; this means, for instance, to consider the close interrelationships between organisations, territories, spatial and temporal dimensions

Strengths



- Some examples of monitoring, evaluation, research and debate (e.g. Life Nature on the projects progress; new road project on innovative solution for the environment; new rail road project on increase of rail freight transport through collaboration with local businesses; waste management on alternative solutions and information diffusion; municipal information network "rete civica" with the creation of discussion groups)

Weaknesses



- Lack of new principles and criteria for the utilisation of the available resources (e.g. reduction of waste generation; combination of positive impacts of railroad and road projects on environmental, economic and socio-cultural fabric)

Threats



- Risk of awareness reduction, especially in environmental issues, because of scarce coherence in national laws, criteria and policies

Opportunities



- Probable increase in collaboration and interaction between local stakeholders and inter-local bodies because of the multilevel dimensions (e.g. provincial and regional) assumed by specific issues (e.g. watershed, road, railway, waste)

Main Hypotheses for action

To foster a close co-operation between local and regional bodies in research, evaluation and innovative solutions with a specific attention on logistics issues and sustainable development.

02 Open collective learning

Changes in favour of Sustainable District Logistics (SDL) can be produced by:

- Improving the capacity of the logistics stakeholders to acquire and utilise knowledge and know-how; this means to develop a culture of co-operation in several policy fields, for instance in spatial planning and territorial flows management

Strengths



- Knowledge diffusion of principles related to sustainable development through information on objectives, difficulties and results of some projects (e.g. Leader, Life)

Weaknesses



- Already scarce research, education (e.g. schools and families) and training activities on sustainable development

Threats



- Risk of a very generic knowledge on sustainable development, limited to education initiatives (e.g. school pupils) without enlarge the scope on the entire society (businesses included)

Opportunities



- Probable integrated diffusion of information on the environmental impacts of new plans (e.g. road and railroad projects)

Main Hypotheses for action

To increase knowledge, know-how and skills in logistics through courses, seminars and workshops based on the principles of sustainable development.

03 Negotiation and co-decision

Changes in favour of Sustainable District Logistics (SDL) can be produced by:

- Improving the capacity of the logistics stakeholders to determine strategies that have the wider possible consensus; this means to develop a culture of participation, attributing, for instance, equal decision role to the different interest groups (economic, social and environmental)

Strengths



- Participation of a wide variety of actors, experts and institutions in local development initiatives (e.g. flood expansion area; Life and Leader projects; railroad and roads plans, local spatial planning, local plan for social

Weaknesses



- Scarce focus on sustainable development paths in the co-ordination and integration of several local initiatives

services)

Threats



- Probable poor national policies towards sustainable development with reduction of financial resources allocated to local authorities

Opportunities



- Probable better orientation and integration of several initiatives through the elaboration of the valley Local Agenda 21

Main Hypotheses for action

To create a roundtable on logistics issues, with the involvement of a large variety of stakeholders, as a specific thematic section of the Local Agenda 21 forum.

04 Creation of a shared vision

Changes in favour of Sustainable District Logistics (SDL) can be produced by:

- Improving the capacity of the logistics stakeholders to think strategically in a long-term perspective; this means, for instance, to define transparent business and territorial purposes and to follow them with coherent organisational behaviours (missions)

Strengths



- Experiences of integrated approach with the involvement of public and private actors (e.g. Life and Leader projects; waste management plans; road and railroads plans; local spatial planning)

Weaknesses



- Lack of a coherent overall vision of sustainable development

Threats



- Probable conflicts between different interests and stakeholders

Opportunities



- The elaboration of the first Local Agenda 21 regarding the valley communities

Main Hypotheses for action

To create a group of local professionals trained in facilitation methods for "win-win" solutions.

05 Client orientation

Changes in favour of Sustainable District Logistics (SDL) can be produced by:

- Improving the capacity of the logistics stakeholders to elaborate and perform eco-prosumerism strategies; this means, for instance, to create alliances between producers, consumers, local communities and suppliers taking into account the natural environment, the non human species and the future generation

Strengths



- Plans and projects motivated by end-user (public) needs (e.g. flood expansion area; road and railroad; electric power delivery)
- Attention to quality management in services and production with examples of client assistance from project design to product usage (e.g. local plan for social services, new working style of different public bodies, some local business, National Park)

Weaknesses



- Lack of a systematic analysis of end-user (public) needs in crucial plans (e.g. new road project)

Threats



- Probable resistance of hierarchical work organisation and bureaucratic styles (e.g. public administration) or paternalistic behaviours (e.g. small businesses)

Opportunities



- Probable increase in the role of associations representing a wide range of interests (e.g. consumers, households, women, minors, elderly, immigrants and the environment)

Main Hypotheses for action

To include quality management issues and sustainable development principles as specific contents to be treated in all training courses and e-learning tools.

06 Result orientation

Changes in favour of Sustainable District Logistics (SDL) can be produced by:

- Improving the capacity of the logistics stakeholders to assess constantly the outcomes of business and territorial plans; this means, for instance, to monitor client-satisfaction, stakeholders appreciation, performance costs and revenues, taking into account also the impacts of logistics on the environment, health and socio-culture in terms of styles of production, consumption and life

Strengths



Weaknesses



- Definition of clear expected results (e.g. flood protection area; railroad project), quality and environmental targets (e.g. National Park, Life project), performance indicators (e.g. Leader project)

- Scarce focus on results clearly orientated towards sustainable development and determined through an in depth analysis of environmental, socio-cultural and economic impacts and outcomes

Threats

- Probable bureaucratic utilisation of parameters and indicators regarding project performance and outcomes



Opportunities

- Probable development of parameters (and indicators) of project performance and outcomes, fostered by EU and regional requirements



Main Hypotheses for action

To assist logistics stakeholders with a locally based system for monitoring and evaluating the ongoing results of their activities in terms of performance and outcomes focused on sustainable development criteria.