

THE “PROSCA” MODEL

Quantiquitative participatory research for sustainable development

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Laying grounds for a sustainable development and using prospective methods for strategy design are closely inter-related. A true challenge is to design an adequate conceptual-methodological framework for a comprehensive collection of data and information, their efficient processing and resourceful outputs, while, at the same time, promoting and making good use of the consensus amongst the participants. This paper brings forward such an experience, based on the application of the PROSCA (Prospective Stepwise Consensus-Seeking Analysis) Model, designed to carry out participatory activities with development stakeholders.

The basic feature of the PROSCA Model is its organization into a logical sequence, starting with the categorization of stakeholders, their assessment of problems and priorities, followed by a step-wise process of quantiquitative condensation of information that culminate in the final approval of proposed interventions for a sustainable local development.

KEYWORDS

Participatory methods, Prospective analysis, Development stakeholders, Local development; Local Agenda 21

INTRODUCTION

Laying grounds for a sustainable development and using prospective methods for development strategy design are closely inter-related, since the solutions to the former must necessarily rely on the participatory methods that are widely applicable within the scope of the latter ones. In this, a true challenge is to create an adequate conceptual-methodological framework for a comprehensive collection of data and information, their logical organization, efficient processing and resourceful outputs, while, at the same time, promoting and making good use of the consensus amongst the participants.

This paper brings forward such an experience, based on the application of the Prospective Stepwise Consensus-Seeking Analysis Model (the PROSCA Model) that was designed for the application of participatory methods with development stakeholders in a R&D Project “Plan of Action for Local Agenda 21 in the Arraiolos County” (the project was implemented in 2004/05 by a team of geographers and other specialists in territorial development planning in collaboration with the local government of the County of Arraiolos, located in the Region of Alentejo in Southern Portugal) [6]. The conceptual framework and functioning of the PROSCA Model are presented the way they were applied in the course of recording and processing of data/information on development stakeholders’ awareness, opinions and proposals about possible policy measures and concrete activities aimed at overcoming difficulties and strengthening advantages for sustainable territorial development in the Arraiolos County.

PARTICIPATORY METHODS IN DEVELOPMENT PROGRAMMS AND POLITICS – AN OVERVIEW

There are many arguments in favour of using interactive participatory methods for sustainable development planning at all levels (national, regional, local) and in different socio-economic contexts, both rural and urban. As amply evidenced in diverse literature on development policies and planning, the traditional top-down approaches, which emanated from the economic development models based on theories of unbalanced growth, have failed in terms of their objectives. Consequently, their use has aggravated social problems, broadened regional disparities in the quality of life and increased

environmental costs of economic growth. According to the basic hypothesis of the top-down paradigm, development is generated on the basis of the external demand and innovation impulses, and it originates from the dynamic sectors and geographically limited poles in order to reach, spontaneously or by induction, the rest of the system. The entire process takes place from global to national and regional levels, either through urban hierarchy, or input-output relations, through internal channels of multi-territorialized organizations and/or large-scale governmental institutions.

An alternative to such situations should be, as suggested by Stohr [14], the bottom-up strategies that enable social groups and economically less developed areas to give priority to their societal patterns and to harmonize the external economy and other interactions with these patterns. This kind of strategic action is governed by a logic that is different from the top-down: instead of a "deterritorialized economy" (i.e., economy with no specific territorial reference), it promotes economy based on concrete local and regional potentials and interests [7], substitution of the profit-making orientation with determination to first satisfy human needs [2], search for alternative forms of production, replacement of large-scale by small-scale economy [13], valorisation of local resources through development process itself, and decentralisation of decision-making.

In view of the above, and recognizing that best results (even in financial terms) are usually obtained when people are involved in projects as active participants, different international organizations, such as OECD [5] and European Union, have strongly recommended direct involvement of interested segments of the communities in the formulation and implementation of programmes and projects they provide support for. For example, the EU projects LEADER have advocated the amplest possible involvement of local populations in all phases of the process, arguing that people "must have the feeling that the consultation is made *in bona fide* and is directly related to the issues in its interests" [1: 8].

The true issue at stake is, therefore, to know how to institutionalise the participation of the civil society in actions promoting development. This, in turn, calls for a clear definition of what the notion of participatory development actually means. According to a sufficiently broad and yet unambiguous conceptual approach adopted by the World Bank, the participation is a process through which individuals and institutions affected by development initiatives can influence the decision-making and the allocation of resources related to such initiatives [15].

It is worth stressing, however, that participation can be effective only if the participants are informed about their rights, responsibilities and options, and if they are given opportunities to adequately express their suggestions and preoccupations (e.g., by means of public hearings and discussions, opinions polls and surveys, etc.). The strictly informative contacts with a central objective being to transfer information to the community, unless there is a possibility that people's reactions can significantly alter direction of the envisaged activities, cannot be considered as effectively participatory [8].

The people-centred development is as a process of socioeconomic change in which growth is not a priority, promoted by economic policy instruments, but, rather, in which human being is the central subject of developmental preoccupations, and in which economy must be oriented to a more effective satisfaction of human needs (see UNDP Human Development Reports since 1990). An important aspect of people-centred development process is the change from the tendency to concentrate decision-making power in the impersonal (or, "neutral") institutions to the transfer of the power to the people and territorially organized communities, since the basic impulse for the formulation and implementation of development policies, programmes and projects should come from a respective community. This implies yet another breakaway from a dominant idea that small-scale (local and regional in rural and urban environment) communities can only be developed by means of the other, more developed ones and by the top-down strategies. Already in 1981, Stohr [14] demonstrated the contrary, that is, that many local and regional communities have a greater potential for small-scale informal interaction (interpersonal relations, group identity, small-scale solidarity bonds, etc.) than communities in materially more developed areas. This small-scale potential is important for human beings (operating on informal basis is very important for the satisfaction of needs such as social security, health care, environmental protection and education), but it is normally not transferable at larger scales, that is, they have a high utility but not exchangeable significance and, as such, it is not accounted for among comparative advantages on a global scale.

However, given that the process in question starts from below, how to give a voice to local and regional communities so as to reverse the roles of the traditional development strategies and to ensure that the main protagonists become those who are usually only passive players: the target population of development policies, programmes and projects? This, in fact, stimulates and calls for people's empowerment, understood as all types of power accumulation, induced or conquered, which allows individuals to augment their efficiency and their social, economic, political and cultural action [3]. This means that the participation is not only a question of participatory techniques (though they provide support to the process) aimed at mobilizing the population, nor just a means of making a development intervention more efficient and effective. It is a process of capacity building, of collective apprenticeship, of sensitisation that should enable individuals to have a clear conscience about the reality in which they live and develop a critical sense about it [4]. Thus, the participation, when materialized in this way, constitutes a process of construction and affirmation of the citizenship.

A change of attitude is expected in order that the participation becomes a deliberate act, a common procedure and an incentive for the people to break away from usual passivity, so that they can mobilize, organize and instrumentalise themselves in search for solutions to their problems. A fundamental condition for achieving this level of civic conscience and citizenship and, consequently, for a democratic management of development is the entire process of community organization and participation.

More recently Putnam [9] demonstrated that more adequate mechanisms for the accumulation of social capital – i.e., “the totality of characteristics of social organization, such as confidence, norms and systems which contribute to the efficiency of a society, and facilitate coordinated actions” [7:177] - seem to be those that enable a permanent interaction among different segments of civil society, as well as between them and different entities of public administration, thus facilitating the processes of collective capacity building and apprenticeship. In this way, such mechanisms may become powerful instruments for the building of the consensus and for the articulation among different social actors.

Finally, a constant practice of participation of the members from different segments of a community in discussion, formulation, implementation and assessment of actions in the interest of the respective locality and region can significantly contribute to the strengthening of a specific territorial identity.

THE CONCEPTUAL-METHODOLOGICAL FRAMEWORK OF THE PROSCA MODEL

The basic structural feature of the PROSCA Model is its organization in a sequence of six phases, from A to F (Figure 1), starting with the identification and classification of local development stakeholders and their involvement in the evaluation of social, economic, environmental and other problems and priorities, followed by a step-wise process of quantiquitative disaggregation, extraction and condensation of information collected through participatory methods, culminating in the final consensual approval of proposals for policy measures, instruments and interventions in favour of sustainable local development

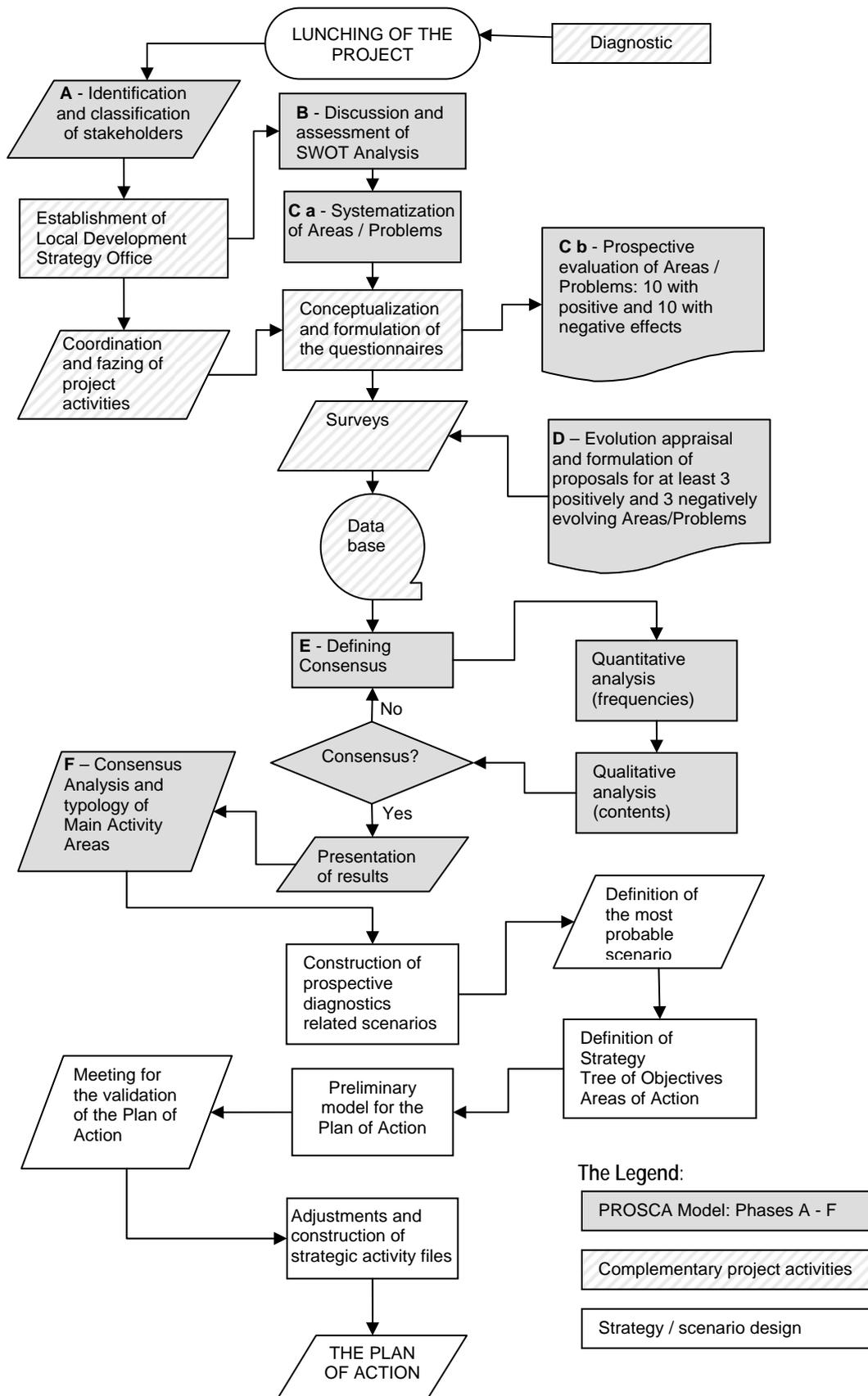


Figure 1: The PROSCA Model in the Project "Plan of Action for Local Agenda 21"

Phase A: Identification and Classification of Stakeholders

Before presenting the methodology and the obtained outputs in Phase 1 of the PROSCA Model, a terminological clarification is needed regarding the concept of “development stakeholder” that is commonly used in participatory methods related to the issues of local development.

The Portuguese translation of the Anglo-Saxon term “development stakeholder” is too vague and calls for a more operational conceptualization. While it is widely accepted that “development stakeholders are all individuals or groups of people and institutions that directly or indirectly stand to gain or lose given a particular development course or activity” [11: 32], in Portuguese the terms “development actor” and “development agent” are more appropriate for interpreting the same type of individual or institutional relation to local development. On one side, a “development actor” is an individual or organization that carries out his/her role as a person (single or collective) and that has some interest in his/her own (individual or organizational) normal functioning, as well as, ultimately, in his/her interaction with other actors and/or in his/her contribution to a commonly established development cause in a given territory. On the other side, an individual or organization whose activity provokes positive social change and/or is conducive to it can be considered as a “development agent”.

In other words, while development actors and agents can be the same face of an individual or organization, what makes them quite different is the nature and degree of their rationality (deliberateness) in assuming attitudes that are conducive to a specific social change. The rationality of motivations is the key difference between passive and active attitudes. Passive is every attitude that represents democratically stipulated manifestation/materialization of economic and social life, while an active attitude means taking/realizing a deliberate decision characterized by objectively known and evaluated consequences. For example, separating waste as a social obligation, and possibly subject of legal regulation, that may contribute to the protection of the environment is a passive attitude, while to do the same on the basis of a technically sound evaluation of, and public sensitisation about, the quantity and types of produced waste (e.g., through consumer education) is an active attitude regarding a need for social change.

Thus, an actor becomes a development agent when proves him/herself capable to overcome passivity of his/her actions, rationally assumes an active attitude towards intervention in the community and starts to condition the future of a society in the territory of his/her operations. In this context, an actor who does not achieve the status of an agent only continues to benefit or lose from the seeds of social change provoked and/or introduced by the agents (Roca, 1999; Oliveira and Mateus, 2005). Though it may seem a simple play of words, one can actually be identified as an actor when interpreting his/her role on a specific stage, decorated by geography, history and society. Moreover, along with the above-mentioned arguments, such a stage – defined by specific spatial and temporal dimensions and social contexts – can itself be a factor of constraint or change and, therefore, can be conceived as a development agent *sui generis*.

Furthermore, an actor can become an agent not only through his/her relation to the public (external relations that provoke opinions and are subject to evaluation) but also to other actors (internal dimensions, conditioned by their activities). In this way, it is understood that the activities that lead to social change can be induced from the exterior (by the external agents) and that the amplitude of local agents' and actors' roles depends on the power-relations they have established and/or exercised at the interface of internal and external social contexts within the local/global nexus. This conceptual framework is synthesized in Figure 2.

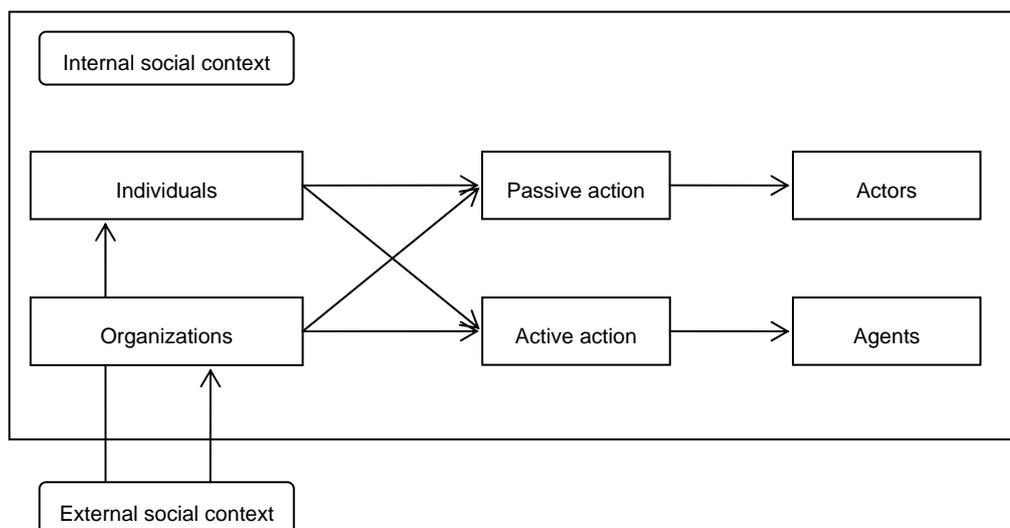


Figure 2: Social Contexts and Roles of Local Actors and Agents

An earlier attempt to identify and classify local development actors and agents in Portugal in the light of the basic concept of the “development stakeholder” resulted in a wide range of actual and potential individual and institutional stakeholders [11, 12], as shown in Table 1.

Individual stakeholders	Institutional stakeholders
– artists (folk and pop);	– cultural institutions (museums, theatres, libraries, etc.)
– civil society activists (environmental protection, human rights, etc.);	– educational institutions (schools, universities, etc.);
– development activists (by type and experience);	– enterprises (by sectors of economic activity and size);
– employees (by sectors of activity and qualification);	– financial institutions;
– entrepreneurs (by sectors of economic activity and size);	– governmental institutions (local, regional, national);
– journalists (local/regional mass media);	– information / communication enterprises
– land-owners (by size and land-use);	– international institutions;
– new residents (national and foreign);	– local/regional development agencies;
– political leaders;	– mass media establishments;
– pupils and students;	– modern civic associations;
– religious leaders;	– producers’ associations and cooperatives (by sectors of activity and size);
– residents working in another territory;	– religious institutions;
– retailers (big, medium, small);	– retail companies;
– retirees;	– tourism and leisure industry firms;
– return migrants (by origin);	– traditional civic associations;
– small industrial producers (by type and technology);	– transport companies.
– subsistence farmers (by type and technology)	
– teachers and professors (by area of specialty);	
– tourists (national and foreign).	

Table 1: Local Development Stakeholders in Portugal

As part of the Phase 1 for the PROSCA Model, twenty-seven institutions were identified as most important local development agents operating in the Arraiolos County. They all showed interest to

actively cooperate in the Project and contribute to the conceptualization and elaboration of and, at a later stage, the implementation of a Plan of Action for Local Agenda 21.

Classified in three sectors, i.e., local government and administration, non-profit organizations (i.e., civic associations, social economy institutions, etc.) and enterprises, these institutions became constitutive members of the Local Development Strategy (LDS) Office that was established by the Project in the town of Arraiolos in the final stage of the Phase 1 of the PROSCA Model.

Phase B: Discussion and Assessment of SWOT Analysis

As a technical background for the design of the PROSCA Model served the Comprehensive Diagnostic Study of Development Issues in the County of Arraiolos, carried out by an independent team of geographers and other territorial development experts. The full version of the Diagnostic Study was presented to the local government authorities and other institutional agents as part of the public launching of the Project.

Findings from the above mentioned in-depth diagnostic study of development problems and prospects in the Arraiolos County were synthesised in the form of a SWOT Analysis (Table 2) and first distributed *via* Internet to local development agents represented in the LDS Office and also directly presented in separate meetings for every sector.

Strengths	Weaknesses
Areas of resilience. Insignificant environmental pressures and problems. Abundant wild game resources.	Loss of resident population since the 40s. Demographic structure increasingly marked by ageing.
The illiteracy levels lower than in Counties with similar characteristics in the Continental Portugal and the rest of the Alentejo Region.	Weak and non-diversified enterprise structure. Strongly imbalanced enterprise structure amongst the townships within the County
Some firms with the outstanding levels of sales. Certain dynamism of the agricultural sector.	Degradation of certain elements of the local cultural heritage.
Tendency towards concentration of human settlements, thus reaching sufficient population size for economically viable activities, equipments and infrastructure facilities.	Permanence of extremely small and isolated human settlements.
Opportunities	Threats
Availability of spaces for sound urban design and infrastructure facilities favourable to the location of economic activities. Interventions aimed at the establishing services in support of economic activities.	Foreign competition, especially in the area of textiles (tapestries). Lack of intensive actions aimed at promoting certification and valorisation of artisan products, such as shoes, textiles, cork- and food-products.
Activities aimed at attracting the young, especially where the supply of housing is too low.	Population decrease and aging, as well as loss of the minimum critical mass of residents necessary for starting new activities and, consequently, for increasing revenues.
Potentially highly important elements of the local cultural heritage for supporting economic and social activities, especially tourism.	Increasing unemployment, especially among women, and decreasing job opportunities for the active population.
Capacity to offer quality urban environment through investments in public sewage systems and selective waste collection and processing.	Increasing level of eutrofication of artificial lake waters. Degradation of natural and cultural landscape resources.

Table 2: SWOT Analysis of Development Issues in the Arraiolos County

The discussions of the SWOT Analysis among the development agents were organized and facilitated in such a way that the main emphasis was given to those aspects that, in the opinion of the Project Team, are most likely to affect the three sectors to which the involved agents belong.

Phase C: Systematization and prospective evaluation of Areas/Problems

On the basis of the SWOT Analysis evaluation by the participating agents, a set of main development topics/issues, labelled as Areas/Problems (Table 3), was systematized, including several new ones (e.g., criminality, logistic infrastructures, partnerships and associations, etc.) that, in the opinion of the Project Team, could be relevant in the subsequent phases of the PROSCA Model aimed at disaggregating and systematising elements for a Plan of Action

<ol style="list-style-type: none"> 1. Natural resources and environment 2. Location of main logistic infrastructures 3. Transportation systems 4. Geo-strategic position and external accessibilities 5. Successfulness of enterprises in the County 6. Diversification of productive structure 7. County's attractiveness for private investments 8. Technological development and innovation 9. Internationalisation of economy 10. Supply of services in support of enterprises 11. Agricultural development 12. Development of tourism 13. Dynamics of (un)employment 14. Levels of education and professional qualification 15. Educational system and schools network 16. Actions of and relations among social, economic and government agents 17. Cooperation between economic and institutional agents 18. Urban planning and territorial organization 19. Quality of urban design 20. Quality of public services 21. Cultural and sport equipments and services 22. Social infrastructure and equipments (education, health and social services, housing) 23. Activities of associations and socio-cultural traditions 24. Partnerships between public, private and third sector 25. Social marginalization and exclusion 26. Criminality and (in)security
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Table 3: Main Areas/Problems

This selection of Areas/Problems was based on a conceptual framework according to which the process of territorial development relies on the five-fold interface of

- i. Economy – prospects for the development of agricultural activities and tourism; structural features of local enterprises and internal conditions for their development (technology, investments, support services), as well as their capacity for internationalisation;
- ii. Environment – physical (natural and environmental resources) and other conditions related to the quality of life (urban planning and territorial organization, social situation, quality of public services);
- iii. Infrastructure and Equipment – directly related issues, such as social, sportive, cultural and other equipment and infrastructure, as well as less directly related ones, such as transportation equipment, in which infrastructure is just an element;

- iv. Employment and Training –residents’ employment capacities (job opportunities and quality in terms of wages, career-progress, stability, etc.) and access to education and professional training; and
- v. Cooperation – networking and associative spirit, establishment of partnerships and relations among different local agents.

The objective of this Phase of the PROSCA Model was to encourage prospective evaluation on the part of the participating agents. To this end, the above list of twenty-six Areas/Problems was presented to the development agents in separate meetings for each sector. The participants were requested to select ten Areas/Problems they considered most important for a sustainable future of the Arraiolos County in a positive (“things will turn better”) and ten in a negative way (“things will turn worse”), by filling-in a Prospective Evaluation Form (Table 4). If they believed that some important issues had not been adequately addressed among the twenty-six Areas/Problems, the participants were encouraged to add new Areas/Problems, but no such case was registered.

Areas/Problems considered important for sustainable development	+ (Will turn better)	- (Will turn worse)
1		
2		
3		
(...)		
n		

Table 4: Prospective Evaluation Form

Phase D: Evolution Appraisal and Formulation of Proposals

Following the above-mentioned systematization of Areas/Problems and the surveys aimed at their prospective evaluation as “positive” and “negative” for the sustainability of local development, the participating agents met in a plenary session to jointly appreciate the results obtained from all three sectors.

Requested to express their opinion regarding the intensity of evolution of these Areas/Problems, the participants then filled-in an Evolution Appraisal Form (Table 5) by attributing Evolution Scores from 1 (minimum evolution) to 5 (maximum evolution) to at least three “positive” and three “negative” Areas/Problems.

Areas/Problems considered important for sustainable development	Evolution scores				
	1	2	3	4	5
1					
2					
3					
(...)					
n					

Table 5: Evolution Appraisal Form

Subsequently, another survey was carried out in which the participating agents were asked to formulate concrete proposals for the solution of at least three negatively evolving Areas/Problems, as well as for the enhancement of the three positively evolving ones. This was not an easy exercise for some participants who, instead of formulating pragmatic solutions to overcome the weaknesses and reinforce the strengths in the Arraiolos County, actually brought forward their opinions and/or wishes regarding local development objectives. Nevertheless, in spite of their structural diversity, all contributions were considered valid and were included as Policy/Action Proposals in the processing of data in the Phase 5.

Phase E: Defining Consensus

The records obtained from these surveys were introduced on a file compatible with a Data Base Management System (DBMS). Simple and relative frequencies of “negatively” and “positively” evaluated Areas/Problems, as well as averages and standard deviations of their Evolution Scores were calculated. This was followed by a statistical analysis that determined the consensual Areas/Problems regarding the level of importance for future development of the Arraiolos County.

In order to obtain a synthesized overview of the complete range of Policy/Action Proposals recorded by the last survey, a Consensual Perception Coefficient was calculated for every Area/Problem by pondering the dispersion among their respective Evolution Scores, as shown by the following formula:

$$c_i = \sqrt{\frac{\sum_{j=1}^n \left(p_{ij} - \frac{\sum_{j=1}^n p_{ij}}{n} \right)^2}{n}} \times \left(\frac{1}{\frac{\sum_{j=1}^n p_{ij}}{n}} \right) \times \frac{1}{n} \times 100$$

where:

c – the value of the Consensual Perception Coefficient for every Area/Problem i ;

p – the Evolution Score attributed to every Area/Problem i by every participant j ;

n – the number of times an Area/Problem is referred to and assessed by participants.

The above formula can be simplified if the ratio between the standard deviation and average (the variation coefficient) is transformed into a ratio between the standard deviation and the sum of Evolution Scores attributed to every Area/Problem. In this way, the Consensual Perception Coefficient c can be calculated as follows:

$$c_i = \sqrt{\frac{\sum_{j=1}^n \left(p_{ij} - \frac{\sum_{j=1}^n p_{ij}}{n} \right)^2}{n}} \times \left(\frac{1}{\sum p_{ij}} \right) \times 100$$

As a rule, the smaller the value of the Consensual Perception Coefficient for an Area/Problem, the higher its level of Evolution Score attributed by the participants and, at the same time, the smaller the dispersion among the Evolution Scores. Also, the smaller the value of the Coefficient, the higher the level of consensus among the participants in terms of the importance (negative or positive) they attributed to every Area/Problem for future development of the Arraiolos County. It is worth stressing that this method implies taking into account only Areas/Problems that the participants referred to at least ten times.

Phase F: Consensus Analysis and Typology of Main Activity Areas

The obtained results are synthesised in Tables 6 and 7 below.

Areas / Problems	Coefficient c
Development of tourism	0,8
County's attractiveness for private investments	1,0
Social infrastructure and equipments	1,1
Culture and sports equipments and services	1,6

Natural resources and environment	1,6
Quality of public services	1,8
Technological development and innovation	1,9
Actions of and relations among social, economic and government agents	1,9
Quality of urban environment	2,1
Geo-strategic position and external accessibilities	2,4

(*) Only Areas/Problems referred 10 or more times are included; $c = \text{variation coefficient} / \text{n}^\circ \text{ of references} \times 100$

Table 6: Consensus about Positively Evolving Areas/Problems (*)

Areas / Problems	Coefficient c
Dynamics of (un)employment	0,6
County's attractiveness for private investments	1,0
Transportation systems	1,0
Agricultural development	1,4
Diversification of productive structure	2,0

(*) Only Areas/Problems referred 10 or more times are included; $c = \text{variation coefficient} / \text{n}^\circ \text{ of references} \times 100$

Table 7: Consensus about Negatively Evolving Areas/Problems (*)

The obtained results revealed the highest level of consensus about tourism as a strategic option for the future of local development, while less consensual, though also on the optimistic side, are the evolution prospects for social infrastructure and equipments. On the pessimist side, the highest consensus was reached about the evolution of (un)employment, followed by the attractiveness of private investments, transportation systems and agricultural development issues.

In terms of internal homogeneity, equally strong pessimistic and optimistic views were recorded only about County's attractiveness for private investment.

The processed results point to a prospective diagnosis in favour of economy and infrastructure, with fundamental importance given to the development of tourism activities, employment generation and improvement in transportation.

One-hundred-twenty-five valid references (i.e., participating agents' proposals/opinions) were obtained about the ways and means of overcoming the problems and ninety-seven about enhancing the prospects for sustainable development. The classification of the total of two-hundred-twenty-two valid references was based on the analysis of their contents from the point of view of the types of policies and/or interventions that were proposed by the participants in order to attain the objectives inherent to every Area/Problem. As a result of this analysis, a set of twenty-six types of Policy/Action Proposals was first defined, then typified according to the similarity and frequency of proposals and, finally, classified into twenty-six Policy Lines and Measures (Table 8).

- | |
|--|
| <ol style="list-style-type: none"> 1. Information campaigns 2. Incentives for investment attractiveness 3. Certification of products 4. Construction of equipments 5. Cooperation and partnerships 6. Employment generation 7. Education and professional training 8. Infrastructure and equipments for education and professional training 9. Infrastructure and equipments for supporting economic activity |
|--|

10. Research
11. Local government's management practice
12. Housing
13. Territorial identity
14. Road infrastructure
15. Cultural incentives
16. Social integration
17. Territorial marketing
18. Spatial planning
19. Cultural heritage
20. Agricultural practices
21. Environmental protection and education
22. Urban renewal
23. Valorisation of facilities
24. Transpiration services
25. Public services
26. Tourism

Table 8: Proposed Policy Lines and Measures

On the basis of the above classification, the core-contents of Proposed Policy Lines and Measures were further disaggregated, extracted, synthesized and typified into eighteen Main Activity Areas (Table 9) that should be integrated in a Plan of Action for Local Agenda 21 in the Arraiolos County.

1. Education and Professional Training
2. Attraction of Investments
3. Cooperation and Partnerships
4. Construction of Equipments
5. Tourism
6. Spatial Planning
7. Employment Generation Related to Diversification of Activities and Certification of Products
8. Territorial Marketing
9. Agricultural Practice
10. Information, Sensitization and Dissemination Campaigns
11. Cultural Initiatives
12. Public Transportation
13. Public Services
14. Research
15. Cultural Heritage and Urban Renewal
16. Road Infrastructure
17. Social Integration
18. Environmental Protection and Education

(*) Listed by the order of frequency of processed proposals

Table 9: Main Activity Areas for the Plan of Action of Local Agenda 21(*)

LESSONS-LEARNED FROM THE APPLICATION OF THE PROSCA MODEL

As shown in Table 10, the ranking of the Main Activity Areas (resulting from the qualitative analysis of all the valid proposals – Table 9) crossed with the one for the Area/Problems identified by the participants can be read both across the lines and across the columns. Twenty-six columns correspond to the Area/Problems identified by the participants as issues of major concern and/or hope regarding

the future of the Arraiolos. The number of valid references to policies and measures proposed for every Area/Problem is also indicated. At the same time, each line refers to a specific type of activity that the participating agents deemed necessary for correcting negative or enhancing positive evolution Areas/Problems.

In this way, the green section in Table 10 corresponds to the core interface between six priority spheres of development interventions (i.e., Main Activity Areas) and eight Areas/Problems. The yellow section corresponds to the Areas/Problem considered by the agents as most relevant in terms of future positive or negative evolution while the blue section corresponds to the Main Activity Areas or policy lines and measures regarded as most important for the correction or enhancement of that evolution.

Ranking of Areas/Problems													
Ranking of MAIN ACTIVITY AREAS (Spheres of development interventions)	12. Development of tourism	7. County's attractiveness for private investments	1. Natural resources and environment	13. Dynamics of (un)employment	11. Agricultural development	22. Social infrastructure and equipments (education, health and social services, housing)	23. Activities of associations and socio-cultural traditions	25. Social marginalization and exclusion	21. Cultural and sport equipments and services	14. Levels of education and professional qualification	(...)	5. Successfulness of enterprises in the County	TOTAL N° OF REFERENCES
1. Education and Professional Training	1			2	3	1		2		7	(...)	2	29
2. Attraction of Investments	1	11		4	1					(...)		2	26
3. Cooperation and Partnerships		2		2	1		4	3		(...)		2	22
4. Construction of Equipments		1				8			4	(...)			20
5. Tourism	12		4				1			(...)			17
6. Spatial Planning	4		3							(...)		1	14
7. Employment Generation Related to Diversification of Activities and Certification of Products	2			4		1		2		(...)			11
8. Territorial Marketing	3	4	1							(...)			11
9. Agricultural Practice			1		10					(...)			11
10. Information, Sensitization and Dissemination Campaigns			3	1			1	1	1	1	(...)		10
11. Cultural Initiatives	1		1				3	1	4	(...)			10
12. Public Transportation				2		2				(...)		1	8
13. Public Services										(...)			8
14. Research				1		1	3			1	(...)		7
15. Cultural Heritage and Urban Renewal	2								1	(...)			6
16. Road Infrastructure										(...)			5
17. Social Integration				1				2		(...)			3
18. Environmental Protection and Education			4							(...)			4
TOTAL N° OF REFERENCES	26	18	17	17	15	13	12	11	10	9	(...)	8	222

Table 10: The coherence between Main Intervention Areas (policies or measures) and Areas/Problems as viewed by the agents.

CONCLUSION

The basic feature of the PROSCA Model is its organization in a logical sequence of six phases, starting with the categorization of stakeholders and their involvement in the identification and assessment of problems and priorities, followed by a step-wise process of quantiquitative disaggregation, extraction and condensation of information, and culminating in the final approval of proposed interventions for a sustainable local development.

The categorization of individual and institutional development stakeholders is based on the nature and degree of their "(non)rationality" and "(non)passivity", with a distinction between actors and agents.

After being confronted with the issues from a grid of twenty-six "Areas/Problems" (derived from the findings of a previously realized SWOT Analysis), organized in five "Major Areas of Intervention" (Economy, Environment, Infrastructure and Equipment, Employment and Training and Cooperation), the stakeholders were asked to select ten "Areas/Problems" that, in their view, are most relevant in a positive or negative way, for the sustainability of future development. Subsequently, the stakeholders evaluated the strength of the positive and negative evolution of all "Areas/Problems", by attributing them values from 1 (minimum) to 5 (maximum). This exercise was followed by the formulation, on the part of every stakeholder, of at least three concrete (pragmatic) proposals for the solution of the negatively evolving "Areas/Problems", as well as for the enhancement of the positive ones. The evaluation of the obtained results, held in a plenary session, did not generate any polemic confrontations, thus proving that the achieved consensus is indeed an intrinsic quality of the PROSCA Model.

On the basis on data obtained and introduced on a file compatible with a Data Base Management System (DBMS), simple and relative frequencies of the identified negative and positive "Areas/Problems" as well as averages and standard deviations of their respective evaluation scores, were calculated. In order to obtain a synthetic overview of the entire range of the recorded opinions, a "Consensus Coefficient" was calculated for every "Area/Problem" by pondering the dispersion among their respective evaluation scores. The lesser the value of the Coefficient for an "Areas/Problems", the greater evaluation score attributed to it by the stakeholders, while, at the same time, the lesser the dispersion of their value-judgment responses. Also, the lesser the value of the Coefficient, the greater the degree of the consensus amongst the participating stakeholders in terms of the importance they attributed to every "Area/Problem" facing future development of their territory.

The obtained results revealed that that the highest degree of consensus was reached regarding tourism as a strategic option for the future of local development, while a less consensual, though also optimistic, are the evolution prospects for social infrastructure and equipments. On the pessimist side, the highest consensus was reached on the evolution of (un)employment, followed by transportation systems and agricultural development. Equally strong (in terms of the degree of internal homogeneity) pessimistic and optimistic views were recorded regarding only one "Area/Problem" – the attraction of private investment. These results point to a prospective diagnosis that favours economy and infrastructure, with the development of tourism activities, employment generation and improvement in transportation being considered as fundamental.

In total two-hundred-two proposals for overcoming the problems and enhancing prospects for sustainable development were obtained. Their classification was based on the analysis of their contents in terms of types of interventions deemed necessary for attaining the objectives inherent to every "Area/Problem". According to their similarity and frequency, the resultant groups of proposals were consolidated into twenty-six "Policy Lines" and "Policy Measures", and then synthesised, according to the identified core-contents of the proposals, into eighteen "Main Activity Areas": (i) Education and Professional Training; (ii) Attraction of Investments; (iii) Cooperation and Partnerships; (iv) Construction of Equipments; (v) Tourism; (vi) Spatial Planning; (vii) Employment Generation related to Diversification of Activities and Certification of Products; (viii) Territorial Marketing; (ix) Agricultural Practice; (x) Information, Sensitization and Dissemination Campaigns; (xi) Cultural Initiatives; (xii) Public Transportation; (xiii) Research; (xiv) Cultural Heritage and Urban Renewal; (xv) Road Infrastructure; (xvi) Social Integration; (xvii) Environmental Protection and (xviii) Education.

Finally, every stakeholder selected three most relevant proposals for action from each "Policy Measure". This actually meant that they approved the results of the application of the PROSCA Model and, at the same time, prioritized activities that should lay grounds for the strategic projects design and their integration in the Plan Action for a Local Agenda 21.

The utilization of the PROSCA model in a real-life situation, such as the elaboration of the Local Agenda 21 for Arraiolos County, proved to be valid and useful not only in terms of its straightforwardness in recording and processing of the results from the surveys of agents' opinions, but also because it actually enabled the construction of an operational Plan of Action for sustainable development.

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