Integrated Evaluation for Sustainable River Basin Governance

ADVISOR CONTRACT EVK1-CT-2000-00074
ENERGY, ENVIRONMENT AND SUSTAINABLE DEVELOPMENT RTD PROGRAMME

Focus Group on Integrated Evaluation of Sustainable Water Management.

Costa del Sol Occidental (Malaga, Spain).

ADVISOR – Annex WP3

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May 2004

ADVISOR - Annex WP 3

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1. Presentation and seminar objectives

The seminar is part of a participatory exercise to evaluate water management alternatives identified for the Costa del Sol Occidental area (Malaga). The methodology used in this case study is social multi-criteria analysis, entailing the identification of stakeholders with interests in water management and their involvement in all the stages of the study (see figure 1).

![Diagram showing the methodology of multi-criteria analysis]

Figure 1. Multi-criteria evaluation methodology applied to the Costa del Sol Occidental case study

Multi-criteria evaluation can be defined as a set of techniques used to support decision-making processes with the analysis of a number of alternatives, taking into account conflicting interests and multiple criteria, usually including economic, social and environmental factors. The NAIADE (Novel Approach to Imprecise Assessment and Decision Environments) multi-criteria evaluation model, designed by the Joint Research Centre in Ispra (Italy) in 1995, was used for this case study.

The NAIADE model allows for two types of mutually enriching evaluations. The first is a multi-criteria analysis based on the score values assigned to the criteria of each alternative and performed using a matrix (known as the impact matrix). The second is an equity evaluation, which analyses the value judgements of the stakeholders involved.
in the evaluation process for each alternative using another matrix (known as the equity matrix) and the possible formation of coalitions (groups of stakeholders who support one of the proposed alternatives). In order to fulfil integrated evaluation objectives, multi-criteria analysis, specifically the NAIADE model, is used in combination with institutional analysis and social research methods. This methodological framework is used to define the problem to be evaluated, determine the scope of study, identify the stakeholders and interests involved and establish the alternatives and criteria proposed by the stakeholders to be discussed in the debate.

This methodological approach requires a very active participation process. The stakeholders identified and involved in the case study – whose selection is a key factor in the research process – participate from the very outset and throughout all the phases of the evaluation exercises by means of interviews and written questionnaires.

The final stage in this participatory process was a work session bringing together all the stakeholders involved in the previous research stages and conducted according to the Focus Group methodology. The purpose of the meeting was to return, share and clarify the information obtained and discuss the results achieved up to that point.

The following specific seminar objectives were established:

- Present and debate the research process and the methodology used.
- Present the results obtained to date, returning and sharing the information collected in the previous stages.
- Clarify and elaborate on issues deemed relevant by those who participated in the research process.
- Discuss the results achieved to date.
- Promote mutual understanding among all the participants and members of the research team.
- Assess the validity of the methodology as an instrument to stimulate reflection and facilitate dialogue among the stakeholders involved in the Costa del Sol Occidental total water management cycle.
2. Seminar design and preparation

Preparations for the seminar began with the production of an information leaflet on the research project, with a view to reminding the stakeholders involved of the objectives and various stages of the study. This information was sent out with a letter of invitation to each of the stakeholders to convene the seminar as the last stage of the participatory evaluation process.

All those who had been involved in the project from the outset and identified as stakeholders in the case study were invited to attend the seminar. In some cases, when the original contact person was not able to attend owing to prior commitments, another colleague, duly informed and documented, attended in his or her place. The table below provides a list of the participants who eventually took part in the seminar.

**Participants:**

<table>
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<tr>
<td>Spanish group for the ADVISOR project</td>
<td>Leandro del Moral (coord.), Serafin Corral, Pilar Paneque, Belen Pedregal</td>
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<tr>
<td>Regional Water Department (Junta de Andalucia)</td>
<td>Joan Corominas Masip</td>
</tr>
<tr>
<td>Instituto del Agua de Andalucia – Andalusian Water Institute (end user of ADVISOR project)</td>
<td>Juan López Martos</td>
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<tr>
<td>Malaga Provincial Office for Public Works and Transport (Junta de Andalucia)</td>
<td>Enrique Salvo</td>
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<td>Environment Section (Malaga Provincial Council)</td>
<td>Saturnino Moreno</td>
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**DEcision Makers**

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<td>Acosol (Costa del Sol water supply and sewerage company)</td>
<td>Miguel López*</td>
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<td></td>
<td>Fernando España*</td>
</tr>
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<td>Aquagest Sur, S.A. (concessionaire for Marbella Town Council)</td>
<td>Álvaro Islán</td>
</tr>
<tr>
<td>Unión de Pequeños Agricultores y Ganaderos – UPA (union of small crop and livestock farmers)</td>
<td>Juan Calderón</td>
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<td>Francisco Díaz*</td>
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**Business Organisations**

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<td>Valle Genal Working Group</td>
<td>Francisco Puche</td>
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<td>FACUA (Consumers’ and Users’ Association)</td>
<td>Manuel Sánchez Vicioso</td>
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**Citizens’ Organisations**

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<td>University of Malaga</td>
<td>Andrés Pérez Latorre</td>
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</table>

*These participants were not the people involved in previous contacts (interviews and questionnaires).

The following stakeholders, who participated in the first stages of the project, were invited to the seminar, but did not attend:
Confederación Hidrográfica del Sur de España (river basin authority)
Directorate General for Tourism Planning (Junta de Andalucía)
Emabesa (Benalmádena municipal water company)
AEHCOS (Costa del Sol Hoteliers’ Association)
Ecologistas en Acción (ecologists in action)
Technical Office for Strategic Action in the Province of Malaga (MADECA-10)
Comisiones Obreras (trade union)

The venue chosen for the Focus Group meeting was a hotel in the municipality of Malaga, near the provincial capital, and therefore within the area under study.

The research team held various preparatory work sessions prior to the seminar (during the two days before) at the meeting venue, in order to design the structure of the seminar and prepare the support material. The following agenda was set for the meeting:

10:00 Welcome
10:30 Presentation of the ADVISOR project. Objectives of the meeting
10:45 Seminar work plan
   - Presentation and justification of participating stakeholders
   - Presentation and discussion of:
     11:15 a) Definition of the water problem in the Costa del Sol Occidental area
     11:40 b) Identification of water management alternatives
     Coffee break
12:20 c) Evaluation/exploration of alternatives
13:45 d) Reflection on the process and results of the meeting
14:30 Lunch

The methodology used involved a brief 5-10 minute presentation of the preliminary results of the project, divided into sections as established in the agenda, given by one of the members of the research team, followed by an open discussion session (confirmation, discrepancies, observations) moderated by the project coordinator, which was originally intended to last between 20 and 45 minutes, but in practice lasted between 40 and 60 minutes. The other two members of the research team acted as observers and secretaries of the meeting. At the end of each discussion session, the
moderator summed up the main contributions and points of agreement. The entire proceedings were recorded on audiotape.

The **support material** provided at the meeting consisted of:

- Power Point slide show, presenting the ADVISOR project, the seminar objectives and the preliminary results of the points to be discussed.

- Posters showing the main points to be debated, on which contributions and points of agreement established during each of the discussion sessions were recorded.

- Photocopies of the matrixes showing the alternatives identified in the preliminary phases of the project, to which new alternatives that emerged during the discussion sessions and the evaluation of each stakeholder were added.

- Use of the NAIADE programme (presented via slide show) in order to a) reassess the matrix showing stakeholder evaluations, taking into account only those stakeholders present at the meeting; b) incorporate new management alternatives proposed during the session and produce a ranking of preferences/joint evaluation by the stakeholders.
3. Structure and proceedings of the meeting

The work session with the stakeholders started slightly behind schedule owing to several late arrivals.

PART I

10:45-11:05

Presentation by the coordinator (Leandro del Moral) of the ADVISOR project and the general objectives of the meeting.

Description of the seminar work plan. As mentioned above, the work session was guided by a presentation of each of the stages of the research process and the points to be discussed, given by Pilar Paneque Salgado, the Spanish team member who carried out the main part of the work for this section of the ADVISOR project. Once the subject to be discussed had been presented, the debate, moderated by the project coordinator, was opened to the floor.

PART II

11:05-12:20

The session began with a recap of the delimitation of the area under study and the methodological approach used in the evaluation exercise, putting particular emphasis on the importance of stakeholder participation from the very start of the study.
This was followed by the presentation and justification of the identification and selection of the sixteen participating stakeholders. Those present were reminded that the initial selection of stakeholders for the interviews had been carried out by analysing the context and legislative framework, supplemented by an analysis of the national and local press to ensure that the various sectors involved in water management – decision makers, business organisations, citizens’ organisations and experts – were included, as recommended by the Water Framework Directive for such exercises. The initial list of stakeholders was added to on the basis of suggestions made by stakeholders during the first round of interviews as to who they thought should participate in the evaluation exercise (see figure 2), without forgetting that an excessively large number of stakeholders would overcomplicate the process. The information provided by the interviewed actors was clarified and elaborated on in a written questionnaire filled out by the stakeholders after the interviews.

**Figure 2.** Stakeholders identified in the Costa del Sol Occidental area
The presentation of the stakeholders and the selection criteria prompted a series of comments from the representative of the IAA (Andalusian Water Institute), the end user of the ADVISOR project. He lamented the fact that no economic authority or representatives of economic activities were present, arguing that any action would require heavy investments. He also criticised the fact that “no real expert in surface and ground water management” had been interviewed.

In response to these observations, the research team explained that stakeholders related with economic activities, such as the Federation of Urban Developers, EMASA (Malaga municipal water company) and the Malaga Entrepreneurs’ Confederation, were unable to participate owing to their busy agendas, in spite of the team’s interest and insistence.

In response to the criticism that there were no experts among the stakeholders consulted, the research team members pointed out that technical experts from various water companies operating in the area and the Secretary-General of Andalusia’s regional government’s Water Department were participating. They also reiterated that the purpose of the exercise was not to produce a technical hydrological-hydraulic report on the area, but to record the opinions of all parties with interests in water management, going beyond the purely technical expertise that specialists could provide.

**PART III**

11:20-12:10

The debate on the situation diagnosis or definition of the water problem in the Costa del Sol Occidental area based on the stakeholder interviews and questionnaires was opened with a presentation of the assertions – synthesised and largely accepted by the stakeholders – that could define the situation:

- Acknowledgement of the existence of tensions and shortcomings in total water cycle management.
- The problem is not one of scarcity, but of inadequate management of available resources.
- Insufficient coordination among administrations.
- Weak participation mechanisms.
Lack of control over urban development and insufficient land-use and spatial planning.

The participants debated the suitability of the assertions to characterise the status of water resources in the area, although, in general, the diagnosis was widely accepted and openly supported by some participants, including the Secretary-General of the regional government’s Water Department.

At this stage, the following points were discussed:

- The Aquagest representative expressed the view that the issue at hand is “the lack of water supply infrastructures in terms of water distribution and treatment networks, rather than inadequate management”. This assertion was supported by the Acosol representatives, who stressed the difficulties involved in providing an adequate water supply for the population, taking into account the rapid urban development experienced in the area.

- The Acosol representatives also asserted that “there is obviously a problem of water scarcity in this area, although not in the surrounding area, and we must realise that the problem now is that if we have two consecutive years of drought, the Costa del Sol will run out of water”.

- The expert from the University of Malaga denied that water resources are scarce, saying, “this is one of the rainiest areas in the whole of the Peninsula, so the problem is with the way we manage water resources”.

- The representative of the Provincial Office for Public Works and Transport acknowledged the existence of “intraterritorial tensions within the area under study, and also tensions with neighbouring areas – the city of Malaga, the eastern part of the Costa del Sol, inland Bajo Guadalhorce and the coastal cornice – tensions among public administrations and users, tensions among companies, etc.”.

- The representative from the Malaga Provincial Council underlined the need to incorporate the situation diagnosis debate in the overall hydrological system framework. He observed that if we are talking about integrated evaluation “we cannot just ignore rivers; we are not giving them the importance they deserve here...
and most of the waterways in the coastal area of western Malaga are European Union Sites of Community Interest (SCI), which means that management of this water must take into account ecological flows and the environmental status of the rivers. All this must be considered when defining the problem, because, today, these water scenarios are of European importance”.

- The representative of the Valle del Genal Working Group also criticised the diagnosis presented at the seminar because of what he termed a lack of consideration for water as an ecosystem resource and for the total hydrological cycle. This criticism, which is reflected in the subsequent alternative proposal phase, introduced new perspectives in the debate on the boundaries of the problem and its solutions in time and space. It raises the issue of water quality, or in other words, “scarcity in terms of quality, because our waters are of increasingly poorer quality, and that goes for drinking and irrigation water, the water we put into reservoirs and then purify, the water we discharge into the sea when it has been used, etc. We have a problem of scarcity in terms of quality, which departs from the idea of absolute scarcity, but involves social, historical and cyclical factors”. Lastly, he referred to the importance of who manages water resources. In his opinion, “a very significant shift is taking place towards water management by multinationals, and this is very dangerous because they are strategic monopolies that jeopardise our health and fundamental rights”.

- The FACUA representative criticised deficiencies in information and participation channels.

**PART IV**

12:10-13:20

**Identification of water management alternatives.** This session began with a presentation by the research team of the alternatives with the broadest consensus identified in the phase involving individual contacts with stakeholders in the area:

1. Heightening of the La Concepción dam (enlarging regulation capacity)
2. Use of desalinated water
3. Reuse of waste water
4. Modernisation of irrigation systems
5. Rationalisation of groundwater use
6. Greater efficiency and savings in the urban water supply
7. Territorial policies to control urban development
8. Non-intervention: maintenance of status quo

The debate was then opened to the floor and the alternatives discussed in depth. Some participants thought that the alternatives identified did not respond closely enough to the situation diagnosis. Specifically, none of them was aimed at improving water quality.

They suggested new water management proposals, which achieved fairly broad consensus among those present. The new proposals were:

- **Single authority for urban hydrological cycle management**, an alternative with far-reaching implications for the debate and the dispute over this issue, which prompted a lengthy debate; it was not included as an alternative until a consensus was reached.

✓ The representative from the Provincial Office for Public Works and Transport maintained the need to unify water management, asserting that "the most needed water management alternative in the Costa del Sol area at the present time is the identification of a single water management authority, created as a consortium or according to some other model. It is patently clear that the lack of unity among public administrations today and the
incorporation of private enterprise in the sector make integration and a single authority increasingly necessary”.

✓ The Secretary-General of the regional government’s Water Department observed that the physical interconnection of the networks of the Costa del Sol Occidental, city of Malaga, Guadalhorce Valley and Costa del Sol Oriental systems is already a reality.

✓ The Provincial Council representative remarked that “preliminary work is already underway on a consortium for water treatment…. It has been proposed that a Provincial Water Agency be set up to provide integrated management of all water processes in the province of Malaga…. There is also a collaboration protocol between the Regional Ministry of Public Works and Transport (Junta de Andalucía – regional government of Andalusia), the Costa del Sol Joint Corporation of Municipalities (Mancomunidad de Municipios) and Axarquía, which establishes the bases and lines of action aimed at improving the management of public drinking water supply services”.

- *Reforestation of river basins*, an alternative consistent with the call for the hydrological system to be considered as an integrated whole, referred to above.

✓ The Valle del Genal Working Group representative observed that “the issue of reforestation is essential, because it increases groundwater flows, improves water quality and extends the life of existing reservoirs and dams”.

- *Water banks*, a less controversial proposal, because such mechanisms are not currently involved in the day-to-day wrangling over water resources.

✓ The Secretary-General of the regional government’s Water Department advocated “setting up public water banks, which are already provided for in the Water Act, although no implementation regulations have yet been passed…. They could contribute, when necessary, to ensuring that available water resources are used in the best possible way, giving priority to the uses
that are most important for society; the drinking water supply would evidently be considered a priority in the case of the Costa del Sol”.

✔ This proposal was also supported by the Spanish ADVISOR project end user. The representative of this institution observed that water banks are an instrument “of great importance for the alternative involving the modernisation of irrigation systems, because if there are no public water banks to receive the water that has been saved and use it where it is needed, we are not going to achieve anything”. He also said, “these water banks could handle treated waste water, water saved as a result of modernised irrigation systems, water from the El Atabal desalination plant, etc.”.

It was agreed to include all these new alternatives in the following session devoted to evaluating the ability of each option to resolve the identified problems.

PART V

13:20-14:15

Evaluation/exploration of alternatives

The session began with a detailed explanation of the procedure followed to obtain the preference matrix as a result of the individual interview and questionnaire phase (see figure 3) and the resulting ranking generated using the NAIADE programme (figure 4), which was presented to the participants.

It was during this stage of the study that the participants first had the opportunity to see the assessments of the alternatives made by the other stakeholders involved in the Costa del Sol water debate.

The participants required certain points to be clarified in relation to the results expressed in the NAIADE programme interface and the exercise in general. The following questions were posed:

✔ Were the stakeholders consulted aware of exactly how much water each alternative could “produce”?
Would it be possible to modify the graphic representation of the results of the ranking for easier reading and interpretation?

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<th>Reutilización</th>
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Figure 3. Preference matrix based on individual questionnaires

Figure 4. Ranking resulting from the interview and questionnaire phase

It was decided to remove the opinions of the stakeholders who did not attend the seminar from the new matrix to avoid distorting the final results (see figure 5). A comparison of the results recorded in the previous phase of the study (with the
participants and information obtained during the individual interviews and questionnaires) and the evaluation based on the opinions of the stakeholders who participated in the seminar reveals that there is little change, in spite of the fact that some of the stakeholders who took part in the interview and questionnaire phase did not attend the seminar (see figure 6). The alternatives relating to demand management remained at the top of the ranking, with the highest scores.

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**Figure 5.** Matrix including only Focus Group participants

**Figure 6.** Ranking according to positions taken by the Focus Group participants

The participants were then asked to assess the ability of the new alternatives to resolve the previously defined problems, using nine linguistic categories (ranging from
“perfect” to “extremely bad”). In this work session, the new alternatives and the assessments were incorporated in the NAIADE programme (see figure 7), generating a new ranking of preferences (see figure 8). As a result, one the new alternatives (reforestation), supported during the debate by just one stakeholder, although not rejected by any, moved to the top of the ranking as the most widely accepted alternative.

This significant change in the situation and the high score achieved by the reforestation alternative prompted a number of comments. The Spanish ADVISOR project end user observed, “to ensure that this method does not produce a misleading result, it must be made clear to participants that the aim is to solve a specific problem… [for example] reforestation has a relative value in solving the specific water shortage problem in the Costa del Sol area, because it will be quite a few years before this alternative results in an increase in available water resources. It must be stressed that the point is to analyse a specific alternative to solve a specific problem; reforestation is always beneficial and should be an ongoing activity that progresses little by little each year… but here the goal is to solve a specific problem…. If you fail to delimit the problem clearly, you will end up achieving nothing”.

In response to this observation, the research team explained that the reforestation alternative was included to incorporate a broader vision in the situation diagnosis, because it did not take into account certain dimensions of the problem that had been highlighted in the discussion that took place in the first part of the Focus Group meeting.

The Valle del Genal Working Group representative expressed concern that “specific” is identified with “short-term”, that is to say, there is a problem today and it must be solved tomorrow, but if we always act on the basis of short-term considerations, problems requiring a longer timescale will never be addressed. Therefore, in order to resolve a water problem, it is necessary to take action that will have an immediate effect and also take action that will have an effect in the future. If not, we will never succeed in addressing problems with a long-term solution”.

The research team pointed out that the time factor was included in the analysis as one of the eleven criteria used in the impact matrix.
**Figure 7.** Evaluation of alternatives proposed at the Focus Group meeting

**Figure 8.** Ranking generated following inclusion of the new alternatives

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**PART VI**

14:15-14:30

**Reflection on the process and results of the meeting**

Lastly, the participants were asked to comment on the validity of the methodological process to:

- Structure and systemise the situation diagnosis and the position of the stakeholders
- Facilitate mutual knowledge of the positions of the stakeholders
Stimulate reflection
Promote dialogue

Positive comments were made on the methodology, alongside calls for effective participation mechanisms and criticism of the opacity of the River Basin Authority, which failed to attend the meeting.

On this subject, the end user of the project remarked, “there is a great need to introduce such reflection and dialogue models in our common practice, because in our way of doing things they are not important, and the consequences are all too evident. This River Basin Authority is not the only one; they all… have excellent instruments to build hydraulic infrastructures, but that is all they do, and they continue to believe that that is all there is to do. The Confederación Hidrográfica del Sur was invited to the two Forums held in Malaga¹ and did not attend either, nor did they come today, and this is an issue that should concern them…. I think there is a great need for these issues to be addressed in our country in general and in Andalusia in particular”.

The UPA (union of small crop and livestock farmers) representative added, “it is essential to raise awareness about this issue in Malaga. Nowadays, there are groups to support just about everything, from the cathedral to Picasso, but when there is a meeting to address water issues – and many of us here today have attended such meetings – participants only go for the photo. There is rarely any intention of really getting down to work, and this is all too true in Malaga”. He also said, “the situation of the Confederación, conspicuous once again by its absence, is very serious and must be condemned. What is happening in Malaga is very serious, and that political and institutional forces do not repeatedly condemn the situation is beyond belief”.

The representative from the University of Malaga observed that “it is not in our power to facilitate dialogue, because those who are not willing to take part in a forum do not come…. Those who are not here did not come because they did not want to or because they were afraid of what they might be faced with”.

¹ The Forums held in Malaga were a set of meetings organised by the Spanish end user of the Advisor project over 2002 and 2003 in order to investigated the weaknesses of the water management system through a broad social participatory experience. It will be presented at the Advisor final meeting in Seville (5th July 2004).
The participants agreed that the methodology used serves to distinguish different groups of alternatives with greater or lesser consensus.

Some of the participants observed that the main weakness of the method is the lack of public awareness and interest in taking part in decision-making processes. The tool loses its validity if there is not a majority of stakeholders interested in participating.

It was suggested that prior knowledge of the opinions of the other stakeholders would facilitate communication and discussion.

The representative from the University of Malaga suggested that “with regard to mutual knowledge, it would have helped to have received documentation providing a summary of the opinions of the other stakeholders before the meeting, because there was a lot of information in the interviews and questionnaires, and I would have liked to have had some idea of what Acosol thinks, what Acusur thinks, what Confederación Hidrográfica del Sur thinks, what the irrigators think… it would have helped me to clarify my ideas and put forward better founded opinions”.

The overall assessment of the exercise seemed to be very positive and, in the words of the representative of the Provincial Office for Public Works and Transport, “if I were asked to assess the process I would give it top marks. I think that it has succeeded in achieving the original goal of providing integrated evaluation of sustainable water management in the Costa del Sol Occidental area and, in that respect, I believe that it
has been perfectly successful both in defining the problem and evaluating the alternatives according to the four principles established in the methodological process. It has proved to be an important step forward, and we look forward to the conclusions, because we will be pleasantly surprised when we see them in writing”.

14:30 Close of the seminar and lunch
4. Main conclusions and results

The experience confirmed that, in general, in an environment of open deliberation new perspectives and assessments emerge, and when the reflection process becomes collective (progressing from individual interviews and questionnaires to the collective dynamics of the Focus Group), the diagnoses become even more complex and involved, and the alternatives acquire a more strategic dimension.

Two processes, of great significance for the evaluation exercise they formed part of, were carried out at the Focus Group meeting. First, when the participants examined the list of alternatives drawn up on the basis of the synthesis and interpretation of the proposals that they themselves had made during the previous stage of the project, new alternatives emerged that had not been incorporated in the list because, in the opinion of the research team, they had not been presented with sufficient support in the individual consultation phase. However, following a lively debate, one of these new alternatives – reforestation of the river basins in the area under study – became the top scoring alternative when the alternatives were reevaluated by the Focus Group participants. This shows that the latter phase of the process, which brings all the stakeholders together, can significantly change the final result, as issues overlooked during individual contacts are raised and debated.

Second, in this phase of the participatory process, a certain sector of stakeholders was conspicuous by its absence. This is, to some extent, a reflection of the conflicts existing among the stakeholders and their availability and willingness to participate in open dialogue at the time when the study was conducted. The stakeholders who were less willing or found it more difficult to participate –in the initial interview phase, but more particularly in the Focus Group meeting –belong mainly to the tourist trade sector and the authority responsible for water management in the area. The absence of the latter, the Confederación Hidrográfica del Sur, was particularly significant.
The staging of the seminar therefore revealed how difficult it is to bring together a broad group of stakeholders with decision-making powers and responsibilities in water management in an exercise of this kind, for various reasons:

- Politically conflictive issue
- Climate of confrontation, lack of dialogue between the river basin authority and other agents
- Lack of a well-developed organisational culture in the region that would put such information activities on the agenda of decision-makers, maybe caused by the fact that participation has no direct consequences on the decisions to be taken.

It can therefore be said that the main difficulty encountered while implementing the project was the highly conflictive climate surrounding the issue of water management. In the case of the Costa del Sol, this ‘sectoral’ friction overrides an extraordinary ‘territorial’ friction. The shortage of water resources or competition for them can be attributed to growing demand resulting from rapid, uncontrolled urban and tourism development, in which strong economic, social and political interests are at stake and which is characterised by a lack of transparency and recurrent cases of irregular conduct. These characteristics, coupled with the institutional framework of the public water administration, explain the difficulties involved in gathering relevant information and the limited availability of certain stakeholders to participate in the study, particularly in the final collective reflection phase.