



Attitudes toward Participation in Cooperative Coastal Management: Four European Case Studies

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Findings are reported of the VALCOAST project that had as one of its research objectives to ascertain: (a) stakeholder willingness to participate and cooperate in coastal management (CM), given local and national CM practices; and (b) stakeholder assessment of the “accessibility” and “friendliness” of current CM processes. The project involved case studies and stakeholder interviews in Belgium, Greece, Spain, and the UK. Major findings include: (1) most stakeholders are willing to

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cooperate in three out of the four case areas, but not to the same extent; (2) the participating "officials" in the case studies are expecting the stakeholders to be less willing to cooperate than the latter indicate; (3) stakeholders in all case studies do not expect to be heard by those responsible for CM, find it difficult to learn about the relevant institutional arrangements, and consider the communication of the objectives and anticipated impacts of CM policies to be inadequate. It is concluded that the strong evidence of stakeholders' potential willingness to cooperate in local initiatives is very encouraging for a devolved, regional approach to European Union coastal management policies, provided that this potential is capitalized upon in such policy processes.

Keywords agenda setting, coastal management, cooperation, participation, stakeholder

Introduction

This article reports some of the findings of the European Commission (EC)–funded project VALCOAST (Davos et al., 1997; Davos, 1999), which is premised on the assertion that coastal management (CM) is essentially concerned with *collective* actions to sustain *common* resources. Hence, the effectiveness of CM depends unavoidably on the cooperation of a multitude of stakeholders. Cooperation can either be *forced*, directly or indirectly, upon the stakeholders or *nurtured* for its voluntariness by facilitating the direct and proactive participation of the stakeholders in the entire CM process.

The thesis that stakeholder participation and cooperation in CM is critical for the effective implementation of CM and other natural resource management policies (achieving targeted objectives within targeted time horizons) is gaining growing support, both as a theoretical subject and as an objective of actual management applications (Agrawal & Gibson, 1999; Buckingham-Hatfield & Percy, 1999; Davos, 1999; Ellsworth, Hildebrand, & Glover, 1997; Nielsen & Vedsmand, 1999; Sharpe, 1998; Tsing, Brosius, & Zerner, 1999). The VALCOAST project adopted the argument that this thesis is also particularly important for the European Union (EU).

This importance arises from the wide diversity of the EU's coastal communities and their different experiences with national, regional, and local CM policies, as well as the wide diversity of national approaches to complying with EU policies and international agreements. More importantly, these communities face different arrays of conflicts among stakeholders regarding CM priorities and policy preferences and cope with these conflicts with a wide diversity of institutional arrangements and value systems. In this respect, EU experiences with stakeholder attitudes to CM and responses to them assume great relevance for other countries with diverse communities as well as for attempts to internationally coordinate national CM policies. The EC has recently sponsored a demonstration program to explore the challenges and opportunities of a European integrated coastal zone management (ICZM) strategy (EC, 1999), but the implications of this are uncertain as no decision has yet been published as to how ICZM will be promoted by the EC. The development of EC policies to promote CM are thus at a crucial stage.

There is growing recognition among research (Cicin-Sain & Knecht, 1993; Tol et al., 1996), nongovernmental organization (NGO) (Pernetta & Elder, 1993), and policy (OECD, 1993; IPCC, 1994) communities of the importance of achieving ICZM. Cicin-Sain (1993) noted that there are five dimensions of integration that need to be addressed, one of which is vertical integration among levels of government. However, such integration is only noted as extending down to the level of local government, and the critical dimension of extending vertical integration to the level of the actual users of coastal zones is neglected. Similarly, the conference report on "preparing to meet the coastal challenges of the 21st Century" (IPCC, 1994) recognized that public participation in the

planning and implementation of ICZM is essential, but the sections on actual approaches to achieving ICZM neglect the critical need to extend vertical integration to provide for meaningful stakeholder participation. These indications are consistent with the argument that ICZM currently favors normative approaches, the premise of which is that positivist analysis, i.e., rational and expert-based, is capable of determining best institutional or structural CZM solutions (Davos, 1999). This premise essentially precludes the direct and proactive participation of stakeholders, as there is no means within the normative ICZM approach of constructively addressing conflicts where stakeholders' views as to the preferred processes and outcomes of CZM conflict with those of rational experts.

However, there is also growing recognition that there is an insufficient extension of decision-making power to lower levels of governance in ICZM initiatives, particularly to the stakeholders who usually determine the success or failure of such initiatives (CZCA, 2000, p. 18). Instead, ICZM tends to focus on visible, formally structured institutions and tends to neglect the less tangible institutions based on perceptions, values, or cultural patterns (Visser, 1999), to the extent that the latter can be undermined by ICZM initiatives, threatening traditional CM practices (Nichols, 1999). ICZM is thus often interpreted as a more centralized form of management, and since achieving stakeholder participation is likely to require the decentralization and devolvement of decisions, integration and public participation can seem to pull in different directions (Green & Penning-Rowsell, 1999).

Against this background, the premise of the VALCOAST study is that the goal of achieving ICZM is flawed in that it is essentially a *normative* approach based on *institutional integration*, focused on achieving *outcomes* set by such institutions. Accordingly, stakeholders are assigned roles that can be measured along a continuum of participation, ranging from education efforts to convince stakeholders, as a means of promoting their cooperation, of the merits of striving to achieve ICZM outcomes, through (though rarely) to the delegation of authority to make and implement decisions to achieve ICZM outcomes on a joint planning basis (Ellsworth, Hildebrand, & Glover, 1997).

As an alternative to ICZM, which is focused on achieving institutionally set objectives, it is argued that a *cooperative* approach to CZM should be adopted (CCZM). CCZM is focused on achieving outcomes that are negotiated rather than set, by providing for the direct and proactive involvement of stakeholders, with a greater emphasis on CZM *processes* than on outcomes. Such a shift is necessary given that ICZM is evidently generally less than effective, as is revealed by the fact that concerns over the sustainability of coastal zones are escalating despite the prolonged efforts put into this normative approach. It is argued that this lack of effectiveness is largely due to the failure of this approach to nurture stakeholder cooperation, stakeholder responses more often ranging from apathy to rancor and defiance (Davos, 1999).

The VALCOAST project is premised on this argument for CCZM and explores stakeholder views on related issues in the context of case studies of four coastal areas in Europe. These areas are: (a) the Flemish coastal zone in Belgium; (b) the coastal area east of Rethymnon in Greece; (c) the L'Albutera Natural Park in Spain; and (d) the coastal area of the Inner Solway Firth in the United Kingdom.

Research Objectives and Design

Specifically, the findings from the VALCOAST project presented in this article relate to the research objectives of ascertaining: (a) stakeholder willingness to cooperate given current attitudes toward CM practices at both a local and national level; and (b) stakeholder assessment of the "accessibility" and "friendliness" of the current CM processes (subsequently, the latter objective will also be referred to summarily as agenda setting).

Without an appreciation of these two “original conditions,” any attempt to design and implement institutions of stakeholder participation and cooperation in CM is bound to be unnecessarily generic and, thus, susceptible to failure. (For a more detailed discussion of the rationale of this objective as well as its relationship to other research objectives relating to participatory CM, see Davos et al., 1997 and Davos, 1998).

Stakeholders were divided into two major groups: (a) those with a private interest in CM (referred to hereafter as stakeholders); and (b) those with some sort of responsibility in CM, i.e., elected representatives and persons affiliated with governmental agencies (referred to hereafter as “officials”). The rationale for this distinction is straightforward, relating to the need to compare the attitudes of “followers” with those of “leaders.” When the research results are subsequently discussed, both groups will collectively be referred to as “respondents.”

The selection of the respondents was guided by the philosophical thesis of the VALCOAST research that CM can be effective only with a participatory (“bottom-up”) approach that seeks to identify potential conflicts and strategies for their management in order to maximize the potential for voluntary cooperation among stakeholders. Hence, the need for the whole VALCOAST analysis is to involve the greatest number of stakeholders in a search for the greatest possible number of alternative patterns of attitudes and values (relevant social positions). The alternative in selecting participants would have been to seek to achieve statistical representation of the whole population of stakeholders in order to derive a “universal” pattern of attitudes and values. This alternative is compatible with a “top-down,” normative approach to CM, which thus far has been proven less than effective (Davos, 1998).

The need to secure representation for the greatest number of possible relevant social positions dictates an effort to identify all classes of stakeholders in each case study and invite their representation with more than one individual. In all, the number of respondents in each case study was: (a) Belgium (BE): 82; (b) Greece (GR): 59; (c) Spain (SP): 150; and (d) United Kingdom (UK): 109.

The research instrument was a two-version questionnaire, one version for the stakeholders and the other (with minor differences necessitated by the fact that some questions were appropriate only for the stakeholders) for the officials. Two sets of slightly different questions were also asked to distinguish the influence on the respondents’ attitudes of the CM practices and conditions prevailing in the case study area from that of the general, national practices and conditions. Those questions pertinent to this article focused on:

1. own willingness to cooperate;
2. perception of others’ willingness to cooperate;
3. perception of institutional receptiveness to own input;
4. perception of institutional receptiveness to others’ input;
5. ease of figuring out the CM process;
6. ease of learning CM institutional arrangements;
7. clarity of communication of CM objectives (by those responsible for CM); and
8. clarity of alternative solutions and their impacts (as presented by those responsible for CM).

Answers to the first two questions were measured on a scale of -3 to $+3$ with 0 implying neutrality. The rest were measured on a scale 0 to 10.

The association of these questions with the two research objectives to which this article relates and which are set out above is straightforward. The first two questions relate to (a) willingness to cooperate, while the rest to (b) stakeholder assessment of the current CM process. In addition, the comparison of the answers to the first two questions provides insight into the stakeholders’ general appraisal of the current CM process

and the potential for this process to engender cooperation. Specifically, the second question estimates the level of optimism about the general level of optimism (in terms of others' willingness to cooperate). If the response to the second question is greater than that to the first, a general level of optimism can be postulated. If, however, the opposite is found, a lack of optimism and feeling of alienation can be assumed in that stakeholders feel that they as individuals are more willing to cooperate than others.

The significance of this variable relates to the argument that a given stakeholder's willingness to cooperate depends on both the expected payoff to that stakeholder from cooperation and the expected cooperativeness of all other stakeholders. Regarding the former expectation, it can be argued that it depends on the interplay between the self-interest of the stakeholder and the anticipated ramifications of whatever actions can feasibly be taken to sustain a particular coastal resource. The latter expectation is influenced by the stakeholder's past experiences of the capacity of the entire process of CM to inspire optimism that all stakeholders will feel optimistic about the prospects for general cooperation. For it is reasonable to expect that when the stakeholders are optimistic that the others will cooperate, they will be more willing to cooperate themselves (Davos, 1998).

Findings and Analysis

When reflecting upon the findings reported below, the following two qualifications should be kept in mind. First, the aforementioned rationale of stakeholder selection restricts the relevance of the findings only to the "population" of the respondents and not to the general population of all stakeholders in each case study. Second, it follows that caution should be exercised when comparing the findings from the four case studies. No valid conclusions can be drawn regarding any set of factors (e.g., "nationality") causing any similarities or dissimilarities. The purpose of pursuing these case studies within the VALCOAST study was not to draw such conclusions. The objective was rather to explore patterns of challenges under various circumstances that may confront efforts for a CM that promotes participation and pursues voluntary cooperation.

For a visual exploration of response patterns, boxplots are presented showing the median as well as the 25th and 75th percentiles, i.e., showing the range of values that the middle 50% the respondents gave (Figures 1–4b, at the end of the article). Estimates of statistical averages and standard deviations do not serve well the above-stated objectives of the whole VALCOAST analysis. It must also be remembered that the boxplots are crude presentations and insensitive to the sample size. Hence, they are not a good basis for drawing conclusions on similarities between the responses of stakeholders and officials within each case study or among case studies.

Regarding null and alternate hypotheses, it is sufficient to note that in each of the analyses presented below, one may view the null and alternate hypotheses proposing similarity or differences in the distributions of responses. In other words, we are seeking to establish whether the observed responses reflect something more than mere chance coincidence among the replies of the stakeholders, something more than random variability in the responses of the groups concerned. Tests were one-way, taking the form of hypotheses, for example, that the stakeholder willingness to cooperate depends on the agenda-setting process. Simple tests of this kind use the Spearman rank order correlation, but other investigations of, for example, whether the stakeholder willingness to cooperate hypothesis tests the same for all stakeholders, regardless of their stakeholder classification, uses the nonparametric ANOVA (Kruskal-Wallis) test. Similarities are explored (for the patterns they reveal and not for their causes) with the ANOVA test

when comparisons involve one categorical variable (e.g., “optimism about the level of optimism”), or when two categorical variables are compared.

Once more, it must be stressed that the emphasis placed on identifying patterns of values instead of determining a “universal” set of values, even for each case study, makes unnecessary the application of other, perhaps more sophisticated, statistical tests and means of presentation. Such application presented the risk of misleading the readers and users of the findings in believing that a single “top-down” set of values can be imposed with only elementary stakeholder participation.

For clarity, the term “special case” is used to refer to responses when the respondents were asked to consider local CM conditions and “general case” when they were asked to consider the broader regional and national conditions. Finally, the responses are analyzed in three groups under the subtitles: willingness to cooperate, optimism about the level of optimism, and agenda setting.

Willingness to Cooperate

As shown in Figure 1, most of the participating stakeholders in Greece (GR), Spain (SP), and the United Kingdom (UK) are willing to cooperate in both the general and special cases. In SP, the stakeholders’ willingness to cooperate in the special case is actually considerably greater than it is in the general case. The opposite is true for the participating stakeholders in Belgium (BE), where all stakeholders are unwilling to cooperate, and particularly with reference to their special case, half of them are totally unwilling to cooperate.

On the other hand, it is interesting to note that the officials’ expectation of the stakeholders’ willingness to cooperate, indicated by the clear bar, is less than that indicated by the stakeholders themselves in both cases, with the exception of BE. This low expectation of the officials concerning the stakeholders’ willingness to cooperate appears to be a little more erroneous when the special case is considered. Indeed, statistical comparisons confirm that:

1. When the expectation of the officials regarding the stakeholders’ willingness to cooperate is compared with that indicated by the stakeholders: (a) in the general case there is a statistically significant difference for BE and SP but not for GR and UK ($p < 0.001$); and (b) in the special case there is a statistically significant difference for all of them (BE and SP $p < 0.001$; GR and UK $p < 0.01$).
2. The difference in the willingness to cooperate of stakeholders among the four case studies is statistically significant ($p < 0.001$) for both the general and special cases.
3. The same holds true for the officials’ expectation regarding the stakeholders’ willingness to cooperate (in the general case with $p < 0.001$ and in the special case with $p < 0.05$).

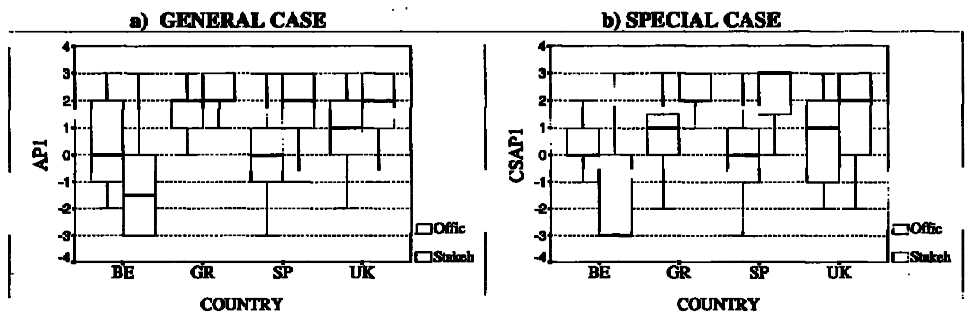


Figure 1. Own willingness to cooperate.

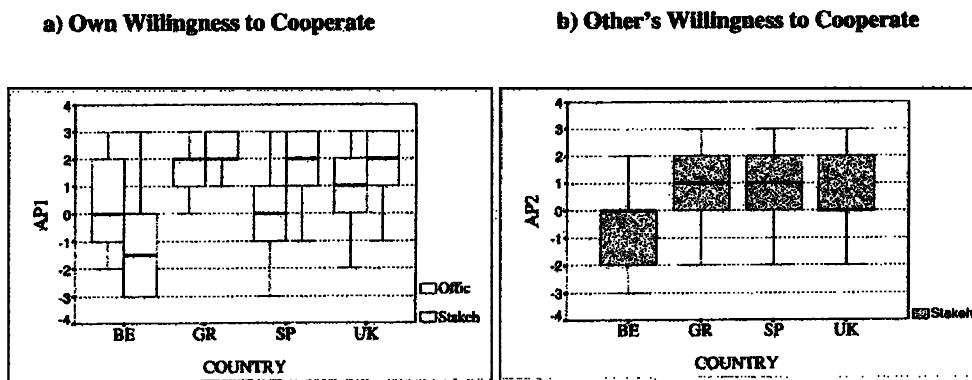


Figure 2. Optimism about the level of optimism (GENERAL CASE).

Optimism about the Level of Optimism

The comparison of “own willingness to cooperate” and “others’ willingness to cooperate” values shown in Figure 2 indicates that in the general case, stakeholders in GR, SP, and UK are expecting others to be a little less willing to cooperate, but still the expectation is for all to be willing to cooperate; i.e., all responses were in the positive range. (This analysis is not relevant for officials because there is no valid concern for their “self willingness to cooperate.”) The same is true in the special case, according to the similar comparison of the values shown in Figure 3. These findings suggest optimism about the level of optimism but also the possibility of a mild feeling of alienation. In BE, the opposite appears to be true; i.e., it appears that there is an expectation of others being a little more willing to cooperate, but at least half of the stakeholders expect others to be unwilling to cooperate. Hence, alienation may be less but there is almost pessimism about the level of optimism.

The observed differences among the case studies are statistically significant in the general case for all three variables, i.e., “perceived willingness to cooperate of others,” “optimism about the level of optimism,” and “alienation” ($p < 0.001$). In the special case, the observed differences are significant only for “perceived willingness to cooperate of others” and “optimism about the level of optimism” ($p < 0.001$).

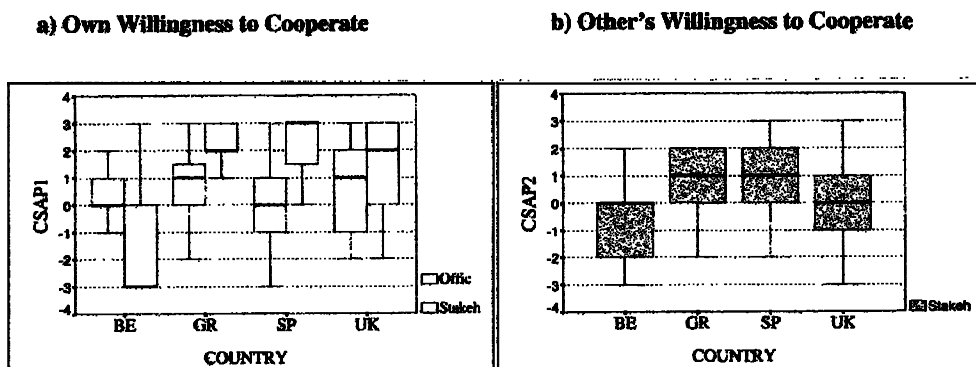


Figure 3. Optimism about the level of optimism (SPECIAL CASE).

Agenda Setting

Figure 4 shows the responses to all questions relating to agenda setting as specified above (questions 3–8). The following observations and findings can be pointed out.

Receptiveness of Own Input

1. Stakeholders do not expect to be heard by those responsible for CM when they have suggestions to make either in general or for their special case study area problems. The difference among the four case studies is statistically insignificant in the general case but significant in the special case ($p < 0.01$).
2. Officials believe that there is greater receptiveness of stakeholder input than the stakeholders do. More importantly, this differing perception is more evident in the special

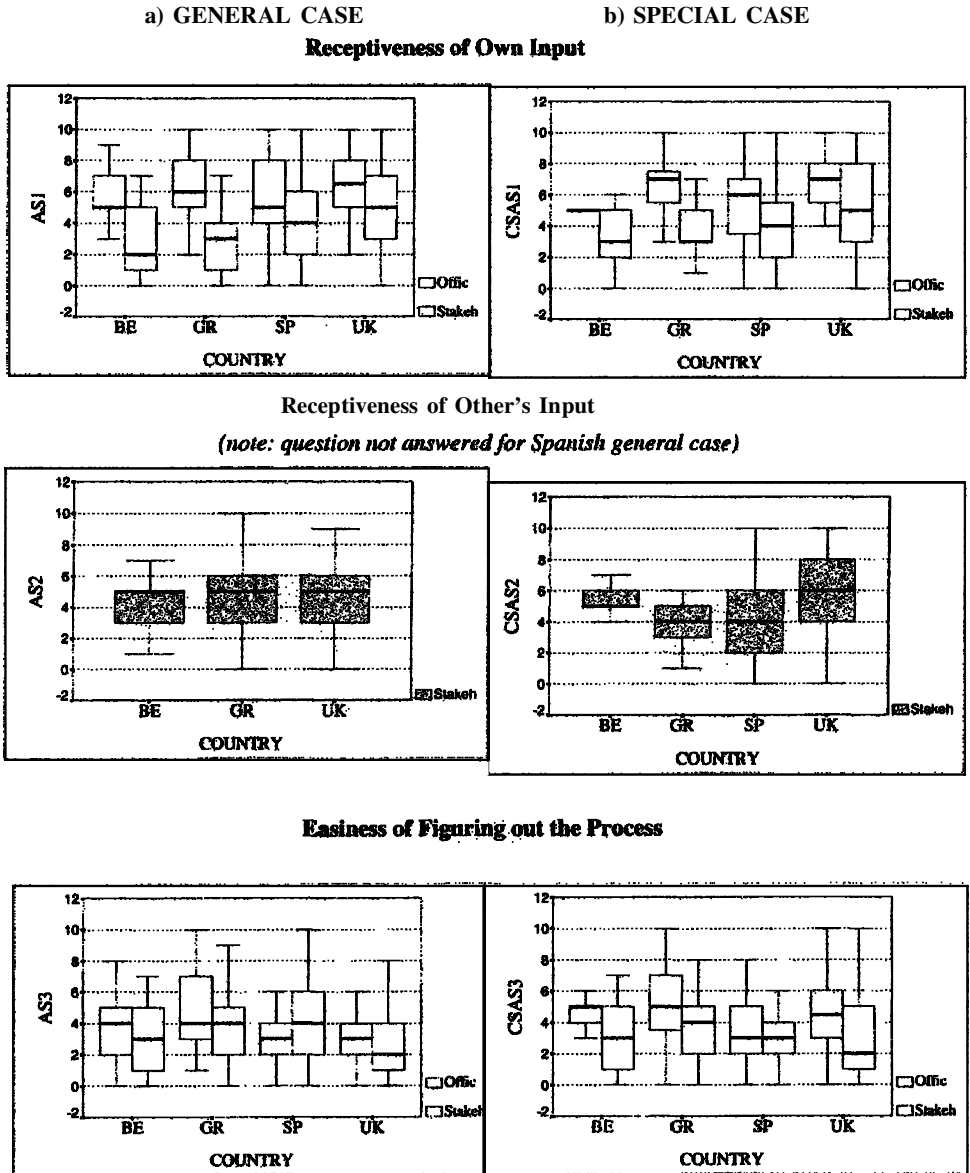


Figure 4. Agenda setting.

case. Once more, the difference among the case studies is insignificant in the general case but significant in the special case ($p < 0.001$).

- The difference between stakeholder and official responses is significant in the general case for BE ($p < 0.01$) and GR ($p < 0.001$) but not for SP and UK, while it is significant for all in the special case, for BE and GR with $p < 0.001$, for SP with $p < 0.01$, and for UK with $p < 0.05$.

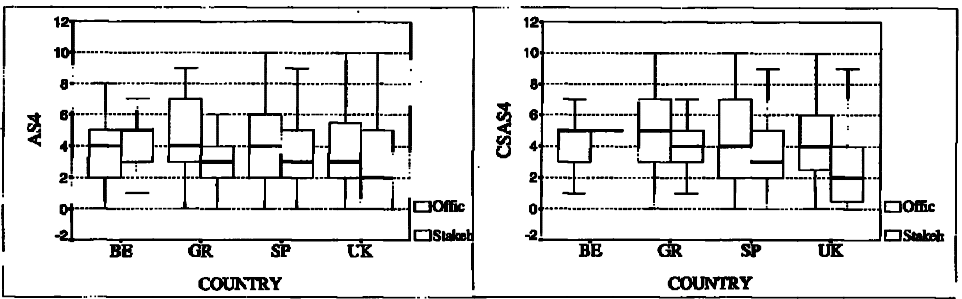
Receptiveness of Others' Input

- Stakeholders do not believe that those responsible for CM are very responsive to others' input either. However, in BE and GR, they believe that in the general case others are heard more than they are, indicating a feeling of alienation (note: question not answered for Spanish general case). The same is not true in the special case, however, where

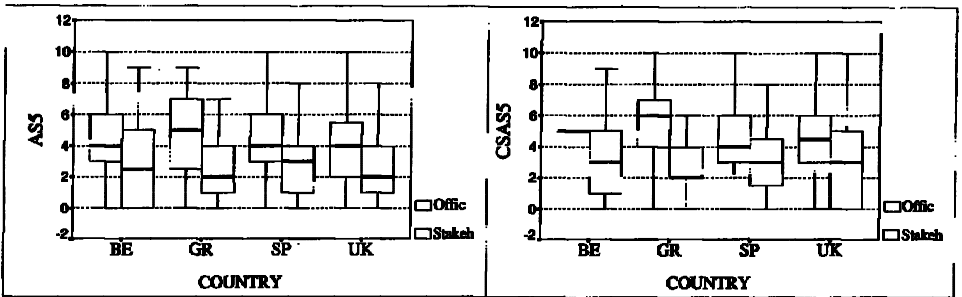
a) GENERAL CASE

b) SPECIAL CASE

Easiness of Learning Institutional Arrangements



Clarity of Communication of Objectives



Clarity of Communication of Solutions and Impacts

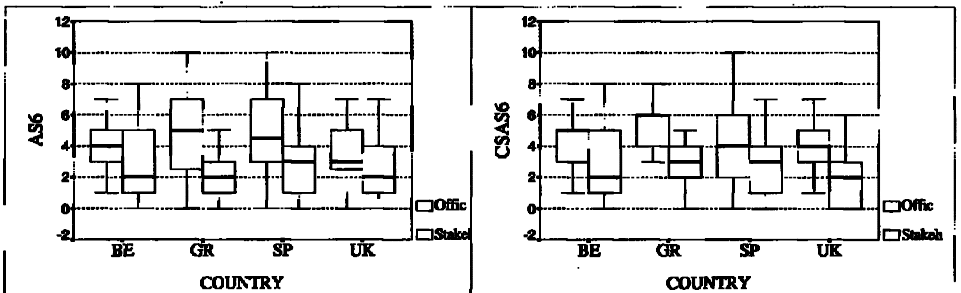


Figure 4. (Continued) Agenda setting.

especially in GR there is a slight feeling of influenceability; i.e., stakeholders feel that their is slightly more influential than that of other stakeholders.

2. The difference among stakeholder responses in the four case studies is insignificant in the general case but significant in the special case ($p < 0.001$), indicating perhaps a greater familiarity of stakeholders with their local CM situation that results in responses that are more sensitive to this situation.

Ease of Figuring Out the Process

Both stakeholders and officials in all case studies believe that it is rather difficult for stakeholders to figure out the CM process in the general as well as in the special case. The differences indicated in the corresponding boxplots are statistically insignificant, with the exception of the officials' opinion regarding the general case ($p < 0.01$).

Ease of Learning Institutional Arrangements

1. The same observation is valid in the case of ease of learning institutional arrangements; i.e., all believe that it is rather difficult. However, the range of opinion seems wider, especially in the special case and among stakeholders. This is confirmed by the statistical test among the four case studies, which shows significant differences among the stakeholders' opinions ($p < 0.001$).
2. In the special case, there is also a significant difference between stakeholders and officials in the UK ($p < 0.01$).

Clarity of Communication of Objectives

1. Most stakeholders and officials also believe that the communication of CM objectives by those responsible for CM is not very clear in both the general and special cases.
2. In both general and special cases, officials appear to believe that there is a higher clarity of objectives than the stakeholders do. The statistical test partially confirms this observation. In the general case, the difference between officials' and stakeholders' assessment is significant in GR and SP ($p < 0.01$). In the special case, the difference is significant for all, for BE, SP, and UK with $p < 0.01$ and for GR with $p < 0.001$.
3. There is no significant difference among the stakeholders or among the officials in all four case studies.

Clarity of Communication of Solutions and Impacts

1. The level of this clarity is also relatively low according to the opinion of all respondents.
2. In both the general and special case, officials believe that this clarity is higher than the stakeholders do. This is statistically significant, in the general case for GR and SP ($p < 0.001$), and in the special case for all (BE and SP $p < 0.01$; GR and UK $p < 0.001$).
3. There is no significant difference among the stakeholders or among the officials in all four case studies.

Reflections

Reflecting upon the reported findings and their analysis leads to the following important conclusions. First, the stakeholders' willingness to cooperate in three cases is encouraging for those who (as the VALCOAST project) call for proactive stakeholder participation and cooperation as the only viable strategy for effective CM, i.e., for minimizing contentious opposition, litigation, protracted public debate, or even sheer defiance. It is also encouraging that in all cases, the stakeholders expect the others to have around the same willingness. The fact that this stakeholder willingness to cooperate is expressed regardless of an accompanying poor assessment of current CM institutions adds to the significance of these findings.

This conclusion is particularly important for the EU, whose CM policies are more

dependent for their effectiveness on the cooperation of stakeholders in culturally, politically, and legally diverse regions, and is particularly relevant given the current debates within the EC as to how ICZM might be promoted throughout the EU, following the recent demonstration program (EC, 1999). Clearly, the finding that stakeholders are willing to cooperate and expect others to be so should encourage the EC to promote policies that nurture and build on such willingness and should caution against the promotion of policies that coerce stakeholders. The same is logically applied to international efforts for coordinated global coastal management.

It may be argued, of course, that this expressed willingness to cooperate might be influenced by pure self-interest (the quintessential guide of normative, top-down CM), i.e., by an expectation that cooperating with at least a subgroup of other stakeholders to form coalitions and lobby for coalitional choices may be more effective than acting alone to oppose objectionable policies. However, such a potentiality does not negate the importance of seeking to maximize cooperation as a foundation of effective CM because it is immaterial whether cooperation is motivated by adherence to self or collective interest. Moreover, the juxtaposition of the findings on willingness to cooperate with those on the overall poor assessment of current CM institutions suggests a rather collective-interest-motivated willingness to cooperate.

The fact that these findings hold true for the three case studies (GR, SP, and UK) but not for the BE case study should not subtract from their importance. (Possible reasons for the peculiarity of the BE case are traced in its description in the VALCOAST report [Davos et al., 1997] but their analysis is beyond the scope of this article.) On the contrary, the BE case findings augment the value of the research findings by pointing to a challenge that participatory and cooperative CM must confront, especially in the EU.

Another major conclusion rises from the finding that officials expect the stakeholders to be less willing to cooperate than the latter indicate to a statistically significant degree and this is particularly true when the local CM (special case) is considered. This finding becomes more intriguing when it is considered in light of the other finding that officials believe, in general, that the whole CM process is more open and friendly to the stakeholders than the latter believe it is, in both the national and local level. It is true that self-serving assessments may explain these findings to a certain degree. However, this gap between stakeholder and official assessments should not be dismissed with such an easy explanation. When officials believe that they are receptive and caring for the stakeholders' understanding of their policy choices but they expect them to be less cooperative while the stakeholders are willing to cooperate despite their low opinion regarding the openness of the agenda-setting process, there is a problem that may explain the animosity and opposition that characterizes the CM history. Facing this problem is important regardless of whether one subscribes to normative or cooperative CM. It is also critical for the EC, especially if there is a sense that its officials harbor similar attitudes as the officials appear to do in the case studies.

Finally, it must be emphasized that the finding that stakeholders may be willing to cooperate (at least in some areas) despite their poor assessment of the current agenda setting characteristics should *not* subtract from the importance of the need to alleviate the causes of this poor assessment. Once more, this need may be more critical for the EC, particularly when considering the extent to which its forthcoming CM policies might introduce new agenda in a top-down manner, potentially worsening the stakeholders' assessment of agenda setting characteristics to the extent that their willingness to cooperate might be undermined. On the other hand, the strong evidence of stakeholder's potential willingness to cooperate in local initiatives is very encouraging for a devolved, regional approach to the EC's coastal management policies, provided that this potential is capitalized upon in such policy processes. Clearly, these findings are relevant to the

EC at a time when it is considering options to promote sustainable coastal management throughout the EU.

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