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Deliberative Visioning: A Critical View Observations From a Scenario Workshop for Water Management in a Greek Island

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Deliberative Visioning: A critical view

Observations from a Scenario Workshop for water management in a Greek island

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Abstract

There is a growing policy interest in participatory processes that combine deliberation with futures visioning. The EU Water Framework Directive, with its mandate for participatory long-term river basin plans, contributes to this “futures turn” in European governance. In this paper we investigate what Deliberative Visioning can do well and what not in the context of resource planning. Our laboratory is a Scenario Workshop for sustainable water management in a Greek island. We conclude that Deliberative Visioning is useful for preparatory and complementary planning activities such as education, community motivation, communication and consultation but it is not well suited for action planning per se. Visions are not substantive decision outputs or bases for a participatory policy options assessment, but effective devices for communication and mutual learning between participants. Our study touches also some broader issues concerning the interface of participation/deliberation, science and decision-making.

Keywords: sustainable water management, deliberation, visioning, scenario workshops, Greece, Water Framework Directive, planning.

1. Introduction

Agencies and communities in Europe experiment with processes that combine inclusive public deliberation and visioning (www.cordis.lu/easw). Puglisi and While (2004) note a broader “futures turn in European governance”. The Water Framework Directive (WFD), a model policy for future EU environmental legislation, is part of this turn (Kallis and Butler, 2000, van den Helm, 2003). Similarly, Plein et al (1998) note a growing number of citizen-initiated visioning processes in the U.S. Although ecological economists recognize that deliberative visioning (DV) is a potential democratic alternative to conventional economic evaluation (Costanza et al, 1997, Farley and Costanza, 2002), there is scant critical appraisal and theoretical reflection of actual applications. Does experience confirm the “beliefs ... of conventional wisdom” about the usefulness of DV (Shipley, 2002, pp. 8)? What can DV do well and what not? These questions motivated our research. We designed a DV process using the scenario workshops methodology and applied it to discuss water management in a Greek island. Our application is not representative of all DV exercises in all types of contexts. It served as a “laboratory” to observe, identify and discuss key issues, exposing tensions between theory and practice.

Section 2 presents DV and discusses arguments in favour and against it. Section 3 describes the laboratory and its results. Section 4 discusses key observations from the laboratory concerning the educative, communicative, procedural and decision contribution of DV. The paper concludes with a discussion of limitations and the potential contribution of DV. The lessons from this empirical study are important for

ecological economists working with futures methods in participatory settings. Some observations raise also broader issues concerning the interface of participation/deliberation, science and decision-making.

2. Deliberative Visioning

Definition

Deliberative Visioning is a process of inclusive, multi-stakeholder deliberation over a desirable future that enhances mutual understandings and engages participants on collaborative planning and action. Deliberation is a facilitated, language-based interaction that allows a reevaluation of participants' viewpoints and preferences (Holmes and Scoones, 2000). By DV we refer here exclusively to processes with broader community participation and not visioning or scenario studies by groups of experts, planners, etc.

Methods

There are several varieties of DV. Among others these include Scenario Workshops (SW) (Andersen and Jaeger, 1999), Future Search (FS) conferences (Weisbord and Janoff, 2000, Weisbord, 1993) and Community Visioning (CV) (Oregon, 1993, National Civic League, 2000, Walzer, 1996) (Table 1).

The generic form of DV is exemplified by SW and FS. DV is a two-staged process consisting of vision-making and action-planning. In the vision-making phase participants reach agreement on a desirable, yet plausible future image of the system (e.g. the corporation, the city, the island, the resource after X years). Time horizons may vary from 20 to 100 years depending on the scope of the exercise. First, participants work in small homogeneous stakeholder groups and reach a shared vision. Then, groups present their stakeholder visions to the rest of the participants. All participants work then together to reach a shared vision through facilitated discussion and negotiation. A shorter goal statement (the “vision-statement”) summarizes this shared vision.

Different methods use different tools to facilitate deliberation and build up the vision. In SWs, organizers draft before the meeting four alternative visionary scenarios. Participants discuss them and rework them during the meeting, formulating their own desirable future scenario and using it to derive the vision statement (Andersen and Jaeger, 1999). FS in comparison arrives to the vision statement by a different path, which includes typically: a review of the past of the system (participants marking chronologically on a board milestones; personal, system and external ones); an identification of external forces shaping the system (through a collective “mind-map” where participants depict the system dynamics of external factors and their influence on the system); and a list of “prouds and sorries” concerning the state of the system and participants’ actions in it (Weisbord and Janoff, 2000).

The second stage of DV consists of action-planning (typically the 2nd day of a SW or FS). Participants now work in mixed groups, one group for each of the goals of the vision statement. They put down ideas about actions to realize the goals. Participants then join voluntarily groups that work in more detail on how to realize each of the most popular ideas (screened by voting, etc). The outcome is a programme with a time schedule for the implementation of each action, allocated tasks between participants, and a due identification of potential barriers and ways to overcome them.

SW and FS last 2 days (plus a preparatory ½ day afternoon if necessary). In comparison, CV is a longer process. The core events in CV are a visioning and an action-planning workshop; these are preceded by several separate events and in-between activities in subgroups, such as scanning and assessment of community problems, establishment and measurement of civic indicators, etc (NCL, 2000).

SWs operate with a limited number of invited stakeholders (36). They are divided in four groups: policy-makers, market actors, scientists and citizens. FS accommodates more participants (80+), divided in several stakeholder groups (8+). CV aims to a broader representation of community interests. CV applications have involved 200+ participants. Organizers frame the goals of the process and select participants, preferably in consultation with an initial steering group of key stakeholders. Selection of participants should “bring the whole system in the room” (Weisbord and Janoff, 2000). Participants are typically stakeholders, i.e. representatives of broader constituencies. Professional facilitators manage the workshop.

<Table 1 here>

SW has its roots in technology assessment (Mayer, 1997). The Danish Board of Technology developed the method to facilitate public debates between scientists and citizens in the assessment of new technologies (Andersen and Jaeger, 1999). FS was developed in corporations as a tool for collaborative decision-making (Emery, 1977, Weisbord, 1993). Both methods grew beyond their initial applications. SWs have been used for participatory sustainable city planning (e.g. Street, 1997, www.cordis.lu/easw) and FS has seen applications utility, resource and community planning (Weisbord, 1993).

DV has been practiced as: 1. a voluntary, bottom-up initiative organized and executed by active citizens / community stakeholders (common in the U.S., see Plein et al, 1998 and various examples in Weisbord, 1993); 2. a participatory planning process run by a planning authority (see DV and urban planning in Canada; Shipley, 2002). 3. a process for consultation and communication between stakeholders, organized by a public authority (see SWs in Europe, Andersen and Jaeger, 1999; consultation processes in the U.K., Holmes and Scoones, 2000).

Claims and counterclaims

DV claims to combine the best of two possible worlds: a futures-based science with a more inclusive, democratic decision process. According to advocates, a futures science:

- Can deal with the system as a whole in the form of integrated futures scenarios or visions (Costanza, 2000, Weisbord, 1993).
- Transcends the dichotomy between positive prediction and normative desire, by combining the two (Costanza, 2000). Hence it facilitates an informed articulation and reconsideration of policy options (Farley and Costanza, 2002).
- Manages uncertainty by considering alternative futures (Costanza, 2000, Ravetz, 1999).
- Helps to set clear goals and guide action planning since “if you don’t know where you are going, you might not get there” (Yogi Berra quoted in Farley and Costanza, 2002).
- Inspires and motivates action; the future-orientation helps participants to leave differences behind and realize their common ground (Weisbord, 1993).
- Serves as a platform for effective public deliberation and mutual education (Yankelovich 1991).

Inclusive deliberation in turn:

- Establishes communication channels between stakeholders that do not talk to each other.
- Gives voice to underrepresented individuals and groups.
- Helps participants to reconsider values and preferences.
- Contributes to resolving conflicts and reaching consensus.

- Brings different knowledges together and contributes to a more democratic application of science (Funtowisz and Ravetz, 1994, Andersen and Jaeger, 1999).
- Engages participants in a shared desired future which they appropriate and hence empowers them to undertake action themselves (Costanza, 2000, Weisbord, 1993).

Shiple (2002) however questions these common-sense claims. He notes the lack of concrete empirical evidence to support advocates' arguments. "Writings about visioning systems are a kind of advertisement rather than analytical discussions" (Shiple, 2002, p.8). Shiple interviewed planners involved in CV and reviewed more than 20 CV urban planning processes in Canada. His conclusion is that:

- The vision statements he examined have had little or only a moderate impact on decision-making.
- A clear vision of the future is not necessary to guide action. Incremental or learning-by-doing decision models often work better.
- Vision statements are typically vague and general. It is questionable whether they can be motivational or useful to derive specific actions. Their all-encompassing nature conceals real dilemmas and avoids commitments with social-spatial specificity (also Neill, 1999, Helling, 1998).
- Inclusive deliberation is not necessary for a good vision. The most effective planning visions have been the product of enlightened individuals (visionaries).

- The skill of creating future images is neither universal nor motivational for all individuals. There are many “backward-looking thinkers” who are motivated by avoiding past mistakes rather than ensuring future benefits.

Other scholars question the practice of deliberative processes within existing institutional and power arrangements and raise issues of representation and legitimacy (Holmes and Scoones, 2000, Cooke and Kothari, 2001). In the words of Selman (1998, pp. 538): “conventional representative democracy may not be glamorous and may suffer from dismally low turnouts in local elections, but it is a well understood and constitutional method which bestows a genuine legitimacy on elected representatives to speak on behalf of constituents”.

3. The laboratory

Our¹ goal was to test some of the above claims, and more generally to examine the advantages and disadvantages of DV as a deliberative planning tool, in the context of implementing the WFD. Towards this end we organized and facilitated a Scenario Workshop in a Greek island that faces intense water problems.

¹ A team of researchers under the auspices of the Environmental Planning Laboratory of the University of the Aegean.

The case-study area

The island of Naxos is 103 nautical miles south-east of Athens in the complex of Cyclades. It has a surface area 448 km², and a coastline 148 km long. The island's population of 18,000 people doubles (by 15-30,000 tourists and visitors) from June to August. Administratively, Naxos is divided in two municipalities: coastal municipality of Naxos (M.Naxos) and rural, mountainous Drimalia (figure 1). Naxos undergoes a process of socio-economic transformation typical of many Aegean islands. Traditional farming activities in M.Naxos and cattle-raising in Drimalia decline, while tourism grows rapidly. New houses and tourism facilities sprawl along the M.Naxos' coast.

<Figure 1 here>

Annual average rainfall is 397 mm. Zero rainfall is typical for summer months. In theory overall water availability surpasses demand. This masks a strong seasonal variability of supply and demand and an uneven spatial distribution of water resources. The most abundant sources lie in deep aquifers in the remote, low altitude north-eastern part of the island. The cost of pumping water to settlements is prohibitive. Farmers and the authorities of Drimalia contest with the municipal authority of M.Naxos over access to the available water supplies. Problems intensify in dry years and summer months. Recently rivalries concentrate on the allocation of water from an under-completion reservoir at the border of the two municipalities ("Faneromeni", see Figure 1).

In Greece, there are no formal water resource management structures. The State designs, finances and constructs waterworks and delegates their use and maintenance to municipalities or irrigation associations. Municipal water agencies have limited human and financial resources and lack expertise. Water allocation and network development policies are ad hoc, responsive to demands and governed by personal relations. During the intense drought of the Summer 2000 the M.Naxos cut off the supply of water from the reservoirs to farmers leading to intense (even violent) reactions. The European WFD requires participatory planning at the catchment level. In this context, we tested the usefulness of SW as a tool to start up a dialogue about water in the island, and if possible, lead to a participatory plan of actions in the spirit of the WFD.

The method

Figure 2 presents our initial design of the Naxos SW.

<Figure 2 here>

Visioning was based on deliberation over four alternative scenarios. These were sufficiently distinctive describing different future images of Naxos in the year 2020, each desirable from a different world-view (Table 2). In comparison to the standard SW methodology, our scenarios did not focus exclusively on water technologies but extended to the wider development future of the island. Our theoretical basis was that water conflicts are primarily conflicts over development opportunities. Therefore the future of

the water system is inter-connected with the future of the island as a whole. We provided the scenarios in a detailed scientific format (including data tables and spatially differentiated demand forecasts) and in a user-friendly format (imaginary letters written by visitors to Naxos in the summer of 2020).

<Table 2 here>

Results

The “Scenario Workshop for the sustainable management of Naxos’ water resources” took place on the 1st and 2nd of November 2003. 36 invited participants attended it. We divided participants in four homogeneous interest groups: policy makers from the municipality of Naxos together with tourism entrepreneurs (coastal group); policy makers from Drimalia together with farmers (rural group); experts (scientists group); and active community individuals together with representatives of non-governmental organizations (citizens group).

During the first day participants elaborated the scenarios, first in groups and then altogether in the assembly. Groups developed their desired future scenario and then summarised it in a vision statement. The process was structured around a discussion of the four scenarios but we did not ask participants to elaborate or work directly on these pre-existing scenarios, but simply to use them to structure their own scenarios or draw ideas.

Figure 3 presents the final vision statement (our translation from Greek). Some participants described the vision as a combination of balanced rural-coastal development from S3, modern technology from S2 and autonomy and self-sufficiency from S4. Business-as-usual water management and mass tourism-driven development were rejected by the majority of the participants and did not show up in the final vision. The organisational framework of the water sector was strongly debated, but there were disagreements concerning the envisioned arrangement of state, regional and local competencies. Participants however suggested keeping the goal of an effective organizational framework for next days action planning.

< Figure 3 here >

During the second day, participants worked in four mixed thematic groups, one for each of the four key water management goals identified in the vision (good water quality, sufficient water quantity - through i) technological innovations / traditional techniques and ii) water saving - and an effective organisational framework). The four groups recorded sixty-three ideas in total. From the final twelve that made it to the assembly, the highest scoring five were: school education programmes for water-saving; construction of small reservoirs for community supply of mountainous villages; preservation and repair of mountainous land terraces to control rain-water flow; establishment of a laboratory to analyse water quality; prioritization in the allocation of municipal water supply of water for residential uses over water for tourism facilities.

The workshop did not produce an Action Plan. Participants complained that they lacked the necessary knowledge to vote and to elaborate on the implementation of specific actions. Adapting to the group's mood, we decided to deviate from our initial design for the second day's afternoon (figure 2). Instead of elaborating actions, we held a discussion about follow-up activities. We invited individuals to propose and take up the lead to coordinate specific projects deriving from the actions proposed and voted during the morning session.

To evaluate participants' experience of the workshop, we designed a questionnaire. We provided affirmative statements concerning the workshop and asked participants to respond whether they agree with them or not, in a scale of 1-5 (5 denoting full agreement). We also provided an open-end question where participants could write keywords concerning the most positive and negative aspects of the workshop. 21 out of 22 respondents fully agreed that the workshop "worth the time they devoted to it". 18 out of 23 fully confirmed that it was "very useful" (scale 5; the remaining five marked scale 4). 23 out of 25 would "recommend a SW to another island community".

These results formalize the general positive reaction that we received from the participants throughout the event and after its conclusion. However, reports of "short-term successes and how people feel good" are hardly qualifying criteria of success (Shipley, 2002, pp. 9). Weisbord and Janoff (2000) suggest that the criterion of success is whether participants agreed to do something that they were not going to do before the workshop. According to this criterion, the SW in Naxos failed. Participants did not agree

in the implementation of any of the proposed ideas and they did not decide to follow-up the process or any of its recommendations.

Next, we reflect on our observations during designing and executing the workshop with reference to claims and criticisms about DV. We benefit from discussions with individual participants during and after the workshop and from responses to the evaluation questionnaire. We do not pretend that the Naxos SW is representative of all DV applications. Resource issues for example are much more complex and contested than the corporate decisions, for which FS was developed. Naxos' socio-political and economic context differs from that in other parts of the world (e.g. northern/western Europe where SWs originate). Our application was also unique; other applications may have different designs, last longer, have more financial resources or ran by more experienced facilitators. We try to be cautious and reflexive of such particularities, but to the extent possible, yield some insights of broader relevance.

4. Observations

Is DV an educational and communicational process, a motivational instrument, a platform for democratic debate, or a decision-making and planning tool? Advocates seldom distinguish between these dimensions (Shipley, 2002). Although these may be mutually supportive, e.g. communication facilitates decisions, can they all be fulfilled by a single method and more so, in a single event? Below we discuss the performance of the Naxos SW separately for each of these dimensions.

4.1 Education, Communication, Motivation

Participants learn about complex issues actively...

“Education” figured several times in responses to the open question about the positive aspects of the workshop. 12 (out of 25) respondents fully agreed (scale five) with the statement that their “understanding of Naxos’ water issues increased considerably because of the SW”, 7 partly agreed (scale 4), 3 were neutral and only 3 did not agree (scale 1).

We contend that the workshop provided platforms for participants to discuss complex issues informally but with a focus (e.g. working together for a vision, proposing and choosing between ideas, etc). Several participants praised this active form of learning about complex problems and said they preferred it to the passive platforms to which they were accustomed (e.g. seminars, conferences, etc). Participants from the citizens group and farmers appreciated that they heard information from scientists that they did not know before and that they also got to know better the activities and future plans of the authorities.

... though they still need more information..

References to “lack of information” appeared several times in the open question about the negative aspects of the workshop. Several participants complained about the lack of

sufficient information on water resources, uses and water management options and told us that that we should have catered to provide more hard data and “facts”. Participants from the citizens-group in particular felt ill-equipped to choose between alternative actions without having information on feasibility, costs and benefits, etc while scientists and policy-makers questioned the results of a choice process that was not based on scientific grounds.

In the workshop we invited the two experts² that carried out the only water resource study ever carried out for the island. This was meant to be the main form of scientific input in the deliberation. Some farmers and residents from Drimalia reacted fiercely to the study’s conclusions in discussion and questioned the legitimacy of scientific expertise (more on this below). These same individuals however were also asking us for more scientific information. We confirm a contradictory tendency in lay-people in participatory processes, on the one hand to defer to perceived scientific authority in the face of complexity and uncertainty (Holmes and Scoones, 2000) and on the other to reject it challenging its deficiencies or value framings.

Participants get to respect each other’s viewpoints...

According to several participants we talked to, the degree and quality of dialogue during the SW was unprecedented. They contrasted this to the unstructured and confrontational character of - open to the public - municipal hearings held in the past. Indicatively, in the

² The water officer of the regional authority and the consultant hired to prepare a water resource and use assessment of all Cyclades islands.

open-end question about the most positive aspects of the workshop, most of the responses concerned interaction/deliberation in one way or another (9 respondents referred to “dialogue”, 6 to the promotion of “a cooperative spirit” and 4 to the “exchange of views” between participants). 15 out of 25 respondents contended that “after the workshop they had much more understanding of different views” (scale five; 6 respondents more marked scale four). 17 out of 25 fully agreed that that they “believe after the workshop much more in the value of dialogue” (4 participants more marked scale four). We do not imply here that consensus was reached on conflicts or that oppositional factions got to agree with one another. Instead, the workshop seemed to contribute to a better understanding of differences and to more respectful rather than oppositional interaction.

... though viewpoints do not change easily.

We should not overemphasize the transformative contribution of this deliberation. It is overambitious to expect long-standing beliefs and attitudes to change within 2 days of deliberation. Experts and policy-makers treated the event more as an opportunity to *communicate* their knowledge and on-going activities rather than put it to the test of non-experts. The two experts that conveyed the results of the water resources study were initially extremely supportive of the workshop. In the process, and as some participants reacted loudly to their conclusions, they became more skeptical. They told us that it was futile to discuss “complex scientific issues” with people that “did not know the facts” and “were acting emotionally” (their own words). Farmers and citizens from Drimalia contested the experts’ position that it was very costly to build an irrigation network and to

pump water from the reservoir to the mountainous villages. The experts responded that such an investment didn't make sense given the future decline of the agricultural economy. In that they were not ready to recognize their own framing of the problem and their pre-assumption of a "business-as-usual" development path.

Visioning facilitates a systemic-holistic approach...

Scenarios and vision narratives provided an effective platform for combing multiple variables and integrating water resources management with socio-economic development. This interconnection affected deliberations. Broader discussions of sustainable development, equity, governance and democracy spontaneously emerged during the workshop. Participants challenged experts or policy-makers several times when they tended to reduce water problems to technical questions (see the aforementioned presentation of the water resources study). They pointed that water decisions shaped the future of the island and that they had important distributive consequences.

... and energizes deliberations ...

We have grounds to suggest that scenarios and visioning facilitated interaction between participants (though we cannot judge how they compare with tools used in other deliberative processes). 14 out of 22 respondents fully agreed that "vision-making contributed in fostering dialogue" (4 more agreed to a scale of four). 18 out of 22 fully agreed that "the scenarios helped decisively the deliberation" (the remaining 4 marked

agreement to a scale of four). Indeed, before the workshop we feared a skeptical and detached reaction (especially by policy-makers) in the vision-making phase. Instead, we witnessed a surprisingly positive and energetic atmosphere. Talking about the future and imagining a utopian island contributed to a playful, positive-spirit interaction between participants. We do not have psychological evaluation data, but we can attest to Weisbord and Janoff's (2000) experience that visioning has a psychological impact that facilitates finding common ground. Dreaming a desired island, participants got to realize that they have a lot in common; visioning created a spirit of unity that helped leaving behind contemporary rivalries. The focus on the future had also an empowering contribution. Citizen-participants contested more than once during the workshop the pessimism of policy-makers, emphasizing the unpredictability and open possibilities of the future (e.g. "much can change in 20 years; look how much has changed in the past 20 years").

... but it is a mode of thinking that not necessarily everybody shares.

On the other hand, we found evidence that confirms Shipley's argument that not necessarily all individuals connect easily to a future mode of thinking. For example, the president of the island's prefecture declared several times his impotence to engage in a discussion about "an imaginary and unrealistic future". Other administrators from the municipal authorities nodded in agreement and expressed similar views. The reasons for this may not be psychological as Shipley suggests (if by that he means biological-behavioural), but primarily cultural. Policy-makers for example in a context such as this of Naxos (development options limited and mostly exogenously driven; past experience

not allowing optimism for radical changes) may be much more inclined to think in an incremental rather than a visionary/utopian way.

4.2 Democratization

New actors sit on the table ...

DV provides an opportunity to involve underrepresented or marginalized actors in public policy debate and to give them an opportunity to interact with authorities and scientists. In the Naxos SW we invited individuals, farmers and environmental groups that oppose existing municipal policies. We also tried to account for gender and age differences. We invited a representative from the local women cultural association, two individual housewives active in community affairs, and the elected representatives of the local high-school. In that we created a different political arena and gave an opportunity to move beyond confrontational politics and establish channels of communication between authorities and dissident or marginalized voices.

... and voluntary partnerships may emerge ...

Stakeholder-selection aims to bring “in the room” all actors necessary to agree and implement collaborative projects (Weisbord and Janoff, 2000). The Naxos SW included the mayors and the water officers of the two municipalities, the water officer of the regional agency, representatives of farmers’ and tourism enterprise associations and

representatives of the main oppositional parties and citizens groups. However, in the highly centralized decision-making context of Greece, where most of water decisions are taken at the national level, bringing all decisive stakeholders in the room should involve general secretaries of ministries or even ministers themselves. This was practically impossible.

Although we did not witness the emergence of a project partnership in our workshop (for reasons discussed below), we acknowledge that the design of the process was conducive to the building of such partnerships (Weisbord, 1993). Prolonged interaction, familiarization with viewpoints and exchange of information and ideas, build the ground for collaborative projects.

We hypothesize that such collaborations are more likely to emerge in societies with well-established stakeholder interests that have capacity to deliver on agreements. In Naxos, few interests are institutionalized. Participants in the Naxos SW could be best described as “representative” of their professional or social groups, rather than “representing” their groups. Furthermore, the representatives of stakeholder interests do not always exercise control over their constituents. In some cases, their mandates may be limited (Holmes and Scoones, 2000). For example, the president of the hotel association in Naxos can hardly impose restrictions on its members or involve them in common projects. The association is a loose professional coalition with a mandate to advertise and lobby. It is not a planning or executive body.

... but the process is neither representative...

In our statement that “participants in the workshop were representative of the community”, 10 out of the 17 respondents responded negatively (scales 1 and 2). In particular we received complaints that there were more participants from Drimalia than M.Naxos and that we did not have representatives from many important professional classes of the island. We belatedly realized that we failed to include representatives from growing Albanian immigrant labor population, ignored in official demographic-economic statistics. It is important here to recognize the limitations of representation in any stakeholder-based process, and the trade-off between making the workshop more inclusive vs. having a manageable group size.

Some elected representatives complained also that the process gave an equal footing to individuals involved in opposition parties (such as the representative of the environmental NGO, or an organic farmer invited to represent the sector) whose ideas have been rejected by the electorate. Other participants complained about our choice to invite some and not other groups/professional associations. This raise questions concerning the legitimacy of stakeholder-representation vis-à-vis other forms of democratic representation. We have to admit that our selection was based to a large extent on pragmatic considerations, i.e. involve stakeholders and individuals active in common affairs. Our application was experimental; in real applications where a DV might have decision leverage, we expect issues of representation and legitimacy to become critical. We find valid Selman’s (1998) concern about the vague institutional and constitutional

legitimacy of stakeholder-based processes, and the danger to degrade rather than enhance democracy.

... nor necessarily more egalitarian.

DV commits to treating all participants as equals (Weibord and Janoff, 2000). But as the common say goes, there is nothing more unequal than an equal process between unequals. Participants differ in terms of education, knowledge, communicative abilities and more importantly, power/status in the real world. DV provides a new arena that redistributes the relative importance of such differences. This does not automatically lead to a fairer outcome. In this respect, it becomes important to understand how DV redistributes participants' powers.

The resolution of differences in DV proceeds in two main ways. First, the facilitator helps participants to reach a minimum agreement they can all get along with (the "I can live with it" rule). This increases the leverage of minority views. Note that these might include marginalized or powerful actors alike, who might use this partial veto power to accommodate their views. This leads to less radical, watered-down agreements. Second, if differences persist, then the facilitator may use voting. But if the group is not representative (e.g. of the community, the island, etc), then majority-based consensus makes less sense.

Facilitation and framing matter a lot.

Facilitators have power. There are many ways in which they can intervene or direct the discussion to privilege disadvantaged individuals (e.g. passing the floor to those who are more hesitant to express themselves, etc). The issue however is who to privilege and why. This has led some facilitators to favor a “hands-off” approach since it is impossible (and un-legitimate) to account for all possible differences between participants (Weisbord and Janoff, 2000). But, non-intervention is a choice too.

In principle, and assuming that it is possible, a professional facilitator should not allow personal views and values to affect facilitation. We found this particularly challenging in Naxos, given our background as environmental scientists that shaped our views on the issues discussed. For example, our very choice to link water with development issues and to bring the environmental dimension in the forefront of the scenarios reflects our predisposition to ideas of “sustainable development”. Had the same workshop been organized by civil engineers, would the scenarios or the results be the same?

Facilitators typically have also a belief in the value of collaboration and deliberation, the need to democratize science, etc, and they bring these values in the process. Even if they do not have a stake in the issue discussed, they have a stake in the method and its success (especially if they are promoters of the method, or if organizers hired them to resolve a conflict, achieve consensus, etc). Facilitating the Naxos SW we felt strongly inclined to drive the workshop to productive avenues and to concrete outcomes that would fulfill our

initial promises to authorities and participants. In that, we are concerned that we may have forced consensus in cases that it might not have emerged spontaneously.

A crucial related issue is “who convenes the process, who defines the objectives, and who frames the problem” (Holmes and Scoones, 2000). Puglisi and While (2004) show how public authorities in Cambridge, U.K. by framing a participatory scenario process on urban development as “Planning for Growth”, they effectively sidelined anti-growth groups and “set certain path dependencies within the debate and distinctively shaped public opinion in favour of what amounted to a fairly narrow set of policy considerations” (pp.14). Similarly, citizen-initiated DVs may be framed in ways that promote the particular agendas of the groups that organize them.

We are not arguing naively here for “objective” DV processes. We emphasize though that who facilitates the process, who organizes it and how affect its outcomes and we challenge simplistic claims about the democratic benefits of DV to raise questions of legitimacy: who has the right to organize and frame a DV, why and under what entitlements and responsibilities?

In Naxos we followed Weisbord and Janoff’s (2000) suggestion to set up an inclusive steering committee early on the process and frame consensually the SW’s objectives. Whereas we initially intended to focus on the implementation of the WFD, in the process we realized that the stakeholders did not share the - primarily ecological - concerns of the directive. For them, the main concerns had to do with water quantity and allocation of

water from the reservoir. We ended up with a broader framing of a SW on “sustainable water management” but as a result during the workshop the ecological dimension was only lightly discussed. This highlights somewhat a tension between the commitment of DV to unconstrained deliberation and institutionally-framed objectives that unavoidably narrow the scope of deliberation and impose a preexisting framing that might not be shared by the participants.

4.3 Decisions and Actions

Our application was experimental. The failure to produce a plan was partly expectable since the workshop was not embedded in a real planning process. This, and the lack of appropriation of the process by the community, might have weakened participants’ commitment to the workshop. Still, we designed and run the process with the aim to produce an action plan and hence we drew some provisional observations about the applicability of the method in this respect.

Furthermore, a challenging question for other practitioners, who have also developed processes in similar experimental or quasi-policy contexts, is whether the relatively liberated, bi-partisan dialogue and consensual agreements that result would be realised if the process really did matter. There are good reasons to suspect that the greater the decision impact of a deliberative process, the more it would be governed by strategic behaviour and attempts by powerful interests to capture its outcomes.

Participatory visions and scenarios are not a basis for assessment.

Scenarios have been used as tools for policy assessment (Rotmans et al, 2000, Mexa, 2002). An earlier emphasis on forecasting and prediction has given its place to imagining “alternative futures” though scenarios that combine predictive and normative elements, and assessing the desirability vs. risk of these alternative futures (Ravetz, 1999, Costanza, 2000).

Making such scenarios is a challenging task, even for a single analyst or a small group of scientists or planners (Mexa, 2002). We spend 9 months in preparing the four alternative scenarios for the Naxos SW (Table 2). Our research entailed a thorough review of demographic, economic, water resources and environmental data, interviews with experts and stakeholders to get qualitative information, and a review process of the four initial scenarios by discussions with local readers. Our goal was to provide scenarios that are internally cohesive, empirically sound, yet substantially different in terms of underlying worldviews and assumptions about the future. In that we have to admit a substantial degree of adhocery in the causative linkages we chose. For example, we assumed that under a future of intensifying globalization, the Greek state will modernize infrastructures and liberalize markets and water services. This will lead to a Naxos with a technologically-sophisticated agriculture, a high-income oriented tourism and a technologically-advanced water system (S2). One could imagine several other plausible combinations of these variables. The lack of sufficient data and our limited time and resources did not allow us to develop more elaborated futures models.

Our experience leads us to question the feasibility of using scenarios for participatory policy options analysis or for dealing democratically with uncertainty (Costanza, 2000). It seems unrealistic to expect from participants a sophisticated scenario development of that sort in the single day devoted to the task. The visions that the participants developed in Naxos read more like wish-lists. They are not internally coherent scenarios reflecting choices about a desirable and resilient future. It was not possible to assess in detail the compatibility of the different wishes or their feasibility vis-à-vis ecological, economic or social constraints. Participants expressed particular difficulty in addressing exogenous forces. They felt that the future of the island will be determined by external trends over which they had little control. Was the vision supposed to be a vision of the island within a desired world? Or was it supposed to be a vision resilient to alternative possible worlds? Participants felt they did not have data nor the knowledge and capacity for such assessments. Their scenarios were nice and engaging stories but not more than that. And indeed, scenarios in SWs were initially not conceived as instruments of policy assessment or action-planning but as platforms of deliberation between scientists and lay audiences (Andersen and Jaeger, 1999).

One might speculate whether in a longer process supported by more human and financial resources, non-scientists could directly work to produce and assess scenarios. In practice, limitations of available data and of the time participants can devote to the task make difficult such participatory applications of science. In Naxos for example there is hardly any data on water resources and uses (other than some gross figures in the study we

referred to). Committing the participants to the 2 days workshop was difficult enough as many had to leave their work (farmers, tourism entrepreneurs, etc).

Vision is vague; it does not provide clear goals.

The Naxos experience confirms Shipley's (2002) finding that vision statements tend to be vague and internally contradictory. The Naxos vision statement (Figure 3) was broadly-worded (e.g. "diversified economy", "self-sufficiency", "humans and the environment in harmony", "sufficient water quality and quantity"). Certain elements contradicted each other. For example, a reference was included to "modernized transport infra-structures", a hint to the extension of the peripheral coastal road and the building of a new airport that environmentalists oppose. Yet, the statement included also a reference to "protecting sensitive ecosystems", a nod to the protection of the salt marshes and the coastal dunes that will suffer from the transportation projects. By employing a general language, the conflicts underlying these two commitments were concealed.

We think that this vagueness is an inherent property of any inclusive, democratic process based on negotiation between multiple, heterogeneous interests. The more homogenous the group of participants, the more cohesive the vision would be, but the less representative of a broader community the outcome³.

³ For example, Farley and Costanza's, 2000 FS for a sustainable U.S.A. produced an ecologically radical vision. Probably this is related to the process of self-selection that the authors refer to, leading to only like-minded individuals participating in the conference. The vision would evidently not be the same if

Conflicts are not resolved. Attention is redirected from conflicts to projects of common interest.

DV is not so much designed to resolve conflicts but to “put them on hold and common stakes up front” (Weisbord and Janoff, 2000, pp. 58). Facilitation aims to divert attention from conflicting issues to previously ignored “win-win” opportunities. But in the kind of environmental problems interesting us, especially in less-developed areas such as Naxos with little “room to maneuver”, there might be few, if any, win-win opportunities. Resolving specific conflicts and finding consensual trade-offs may be important per se. As an illustration: participants in the Naxos SW “agreed” for example that they should implement a school water education programme (one of the top-5 actions). This however was of marginal importance compared to the urgent, conflicting issue of how to allocate water from the reservoir. Some farmers expressed their disappointment with the method because it didn’t give them sufficient opportunities to discuss their concerns with what they considered an unfair water allocation.

Vision is not a basis for designing action.

The methodology does not provide any mechanism to ensure that the actions proposed/selected in the second day conform to the vision (or at least, its spirit). It rests on the strong assumption that by definition participants appropriate the shared vision

conservative, religious or other stakeholders representative of segments of the American society were also included.

since they agreed to it, and that they will hence design action accordingly. In Naxos, we noted that the vision did not affect discussions during the second day. Participants often referred to the future on the basis of current development trends (i.e. mass tourism growth, rural decline) and not on the basis of their desired vision. Participants proposed and voted actions on the basis of personal references, not the accomplishment of the shared vision.

Of course, given that the vision was vague it follows that it could not serve as a concrete basis for designing action. The vision statement in Naxos culminated in a desire for “sufficient water quantity and quality”; this hardly provided a screen for proposing or selecting actions.

Action planning is problematic.

Participants complained that it made little sense to vote between alternative actions, since their voting expressed personal intuition and preference, not informed judgment on which action is better. DV has been extensively applied in corporations, where knowledge about the system is relatively comparable and equitably distributed between participants. In complex environment-development issues, there are stronger uncertainties and gaps in knowledge and importantly an intense asymmetry in the quantity and form of knowledge between participants. Lay-people may contribute to identify local variabilities or bring in their own personal experiences, but they may be less capable of understanding complex interconnections or recognizing the larger context (Holmes and Scoones, 2000). A

housewife for example might have a certain personal experience of water uses or water problems in Naxos. Water planners can learn from her and she can learn from them, and both change their practices (water use and water planning) as an outcome of this mutual learning. It makes less sense however to treat them as equals and ask them to vote to choose between alternatives for a water resource plan. We think this is a falsely perceived notion of direct democracy.

Participants may also propose actions that are very different in scope and scale, ending up in “comparing apples to oranges” (e.g. “cooperation between the two municipalities on water issues” vs. “installing bricks on water faucets”). A further drawback is that whereas integrated water resource management requires “packages” and combinations of mutually supportive measures, the action-planning stage fosters the proposal and ranking of individual ideas. Participants for example had to choose between a new tariff and a water saving technology. But these were not competitive, but mutually supportive actions.

In this respect, voting and ranking make little sense, other than to sort some actions/projects that most participants are interested to engage with. Indeed, in comparison to SW, FS does not use voting, but asks participants to voluntarily decide on which action they want to work on from a provisional broader list proposed. The outcome of is not meant so much to be a comprehensive action plan, but at best, agreement to act on a few projects of common interest.

Yet collaborative projects could still result.

We recognize the important motivational impact that the process has and how it builds up channels of communication between participants. We can speculate that in a different type of application - especially a community-initiated event with the participation of well-articulated stakeholder interests with the capacity to implement - agreement over some “win-win” projects of common interest could result (see relevant cases in Weisbord, 1993, Plein et al, 1999). Stakeholder-selection and voting may not be proper ways to reach a community shared Action Plan, but they are useful instruments to identify and sort feasible projects of joint interest. Visioning and action planning are not decision instruments or outputs in this sense. They are devices that structure deliberation and motivate participants into collaborative action.

5. Conclusion

The Naxos laboratory made us think realistically and be more precise about what a DV can do well and what not.

- a) DV is a promising education tool. It provides an active form of learning about complex resource issues by engaging participants rather than relegating them to passive recipients of expert knowledge. It facilitates a systemic and holistic understanding of problems and options.

- b) DV facilitates communication and can improve understanding between stakeholders (importantly scientists, policy-makers and citizens). The method may hence be useful for public consultations and community debates.

- c) DV motivates and energizes participants and clears out common ground for action. It directs debate away from confrontational issues to possible projects of shared interest. By engaging in the process stakeholders with the capacity to implement such projects, DV may be an instrument for collaborative action. DV may hence be useful for participatory, action-oriented community initiatives.

- d) DV does not allow an informed choice of alternative policy options. It is very difficult to combine positive with normative elements and to account for exogenous forces and uncertainty in future scenarios, especially in participatory settings.

- e) DV does not help to define clear goals and to guide action planning. Participatory visions tend to be vague, all-encompassing and scientifically unfound.

DV is therefore good in what SWs and FSs were initially conceived for: communication, motivation and collaborative action (Andersen and Jaeger, 1999, Weisbord and Jannoff, 2000). Visioning and action planning are not substantive decision outputs, but devices for promoting these goals. In the context of water resources planning and the WFD, DV could be used for preparatory and complementary planning activities (e.g. education,

community motivation, communication, consultation) but not for evaluating projects, derogations, etc or for formulating the “river basin program of measures”.

Reading some of the promotional material of DV, one is left with the impression that within a single 2 ½ days workshop participants can be educated, motivated, resolve conflicts, assess options, reach informed decisions and plan action. We started preparing the Naxos workshop with this naïve intention. In the process we realized that we had to decide emphasis and make methodological choices accordingly. Were we aiming to educate the community, help scientists benefit from local knowledge or to motivate some critical stakeholders to take action? Did we want to produce a participatory water resources plan or to resolve conflicts between farmers and M.Naxos? Depending on our choices we would have to invite different participants, frame the scenarios differently, facilitate the process differently, etc. We recommend that DV practitioners choose very carefully the goals they want to achieve and design their method and participant selection accordingly, rather than try to put “too many eggs in one basket”.

We treated initially SW as a decision-making tool, a potential alternative to cost-benefit evaluation or other expert-based decision tools, more so a directly democratic one. In the process we realized that the method was a good platform for deliberation (and hence a potential aid to a broader decision process), but not a decision tool per se.

Can DV provide a decision tool? Changes in methodological design could cater for some of the deficiencies we identified. For example, scenarios trade-off analysis could be used

for options assessment (Costanza, 2000) or negotiation techniques added to resolve conflicts. Larger and more inclusive processes with longer engagement of participants, more data and more human/financial resources are a prerequisite for participatory decision-making. We wonder however whether such processes are really possible within existing socio-economic and political arrangements.

In moving to a more participatory/deliberative democracy, there are some important questions that our study briefly touched and raised (c.f. Holmes and Scoones, 2000):

- a) Negotiated agreements may not necessarily be feasible or sustainable. The challenge remains how to combine scientific knowledge (with its complexities and uncertainties) with inclusive decision processes to reach informed public choices. How can scientific and lay expertise meaningfully collaborate in constructing and assessing alternative futures?
- b) There is a certain trade-off between inclusiveness and specificity. Inclusive, democratic processes tend to produce vague and all-encompassing conclusions that may not be specific enough for action-planning or decision-making. How can we be inclusive and encompass different views, yet produce concrete, applicable results?
- c) In relation: who is responsible for defining what is expected from a participatory process? For example, there is a tension between unconstrained deliberation / open framings and confinement within narrowly-set institutional objectives for which

deliberative input is often required (e.g. the ecological objectives of the WFD). These institutional objectives convey definitions of the public good from other governance levels (e.g. nation state, EU, etc). How should local participatory processes articulate with those broader governance processes? What is the role of elected authorities and representatives in participatory processes; mere participants, users of the result, guardians of the quality of the process, organizers and framers, etc?

- d) This raises the crucial question of legitimacy. Stakeholder-based participation of the type examined here, is not necessarily an improvement compared to elected representation. The more such processes begin to matter, the more there will be efforts from powerful interests to control them. Furthermore, powerful interests would certainly prefer less regulated, open-ended participatory processes than tight government regulation. Who regulates participatory processes and guarantees for their quality and legitimacy? Who is accountable for their results? Who decides who participates, and with what rights and obligations?

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Method	Tools	Deliverables	Duration	Participants	More info
SW	Scenarios Facilitated group discussion	Future scenario Vision statement Action Plan	2-2.5 days	Stakeholders 36 max.	www.cordis.lu/easw
FS	Milestone map Mind map Facilitated group discussion	Vision Statement Implementation programme & partnerships	2-2.5 days	Stakeholders 40 - 80 +	www.futuresearch.net
CV	Community Scanning Scenarios Indicators Facilitated meetings & Sub-group committees	Civic Index Vision Statement Key performance areas Implementation Plan	5 events (1-2 days each) & in-between work	Stakeholders 200 +	www.ncl.org

Table 1. Comparison of three Deliberative Visioning Methods

Scenario	Title	Island	Water	External context
S1	Business as Usual	Mass tourism Coastal urbanization	Big water-works Water transfers State-managed	Conventional growth of Greek economy Lack of enforceable environmental policies
S2	Modern Naxos	High-income tourism Technology-intensive farming Modernised infrastructures	Desalination Wastewater recycling Privatised inter-municipal water utility	Modernisation of Greek economy and public administration Privatization of public services
S3	Balanced Development	Eco/cultural tourism Modern organic farming	Demand-side management Local, small-scale waterworks Public inter-municipal water utility	Growing global “green” markets Strong policies for sustainable development
S4	Back to Nature	Self-sufficiency No tourism Conventional agriculture Revival of wild nature	Traditional water techniques Minimal household water use Collective community councils	Collapse of global economic order Decentralization – revival of small communities

Table 2. Key points of the four scenarios

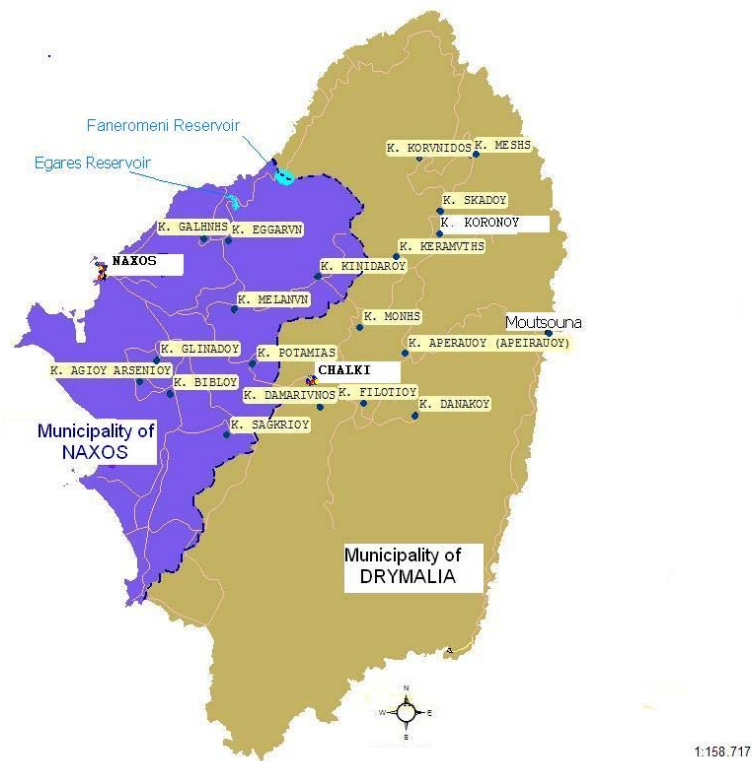
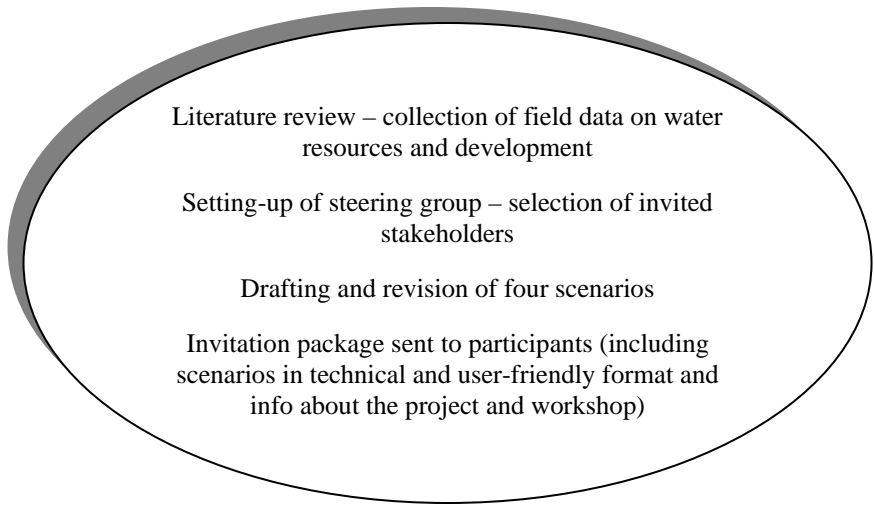
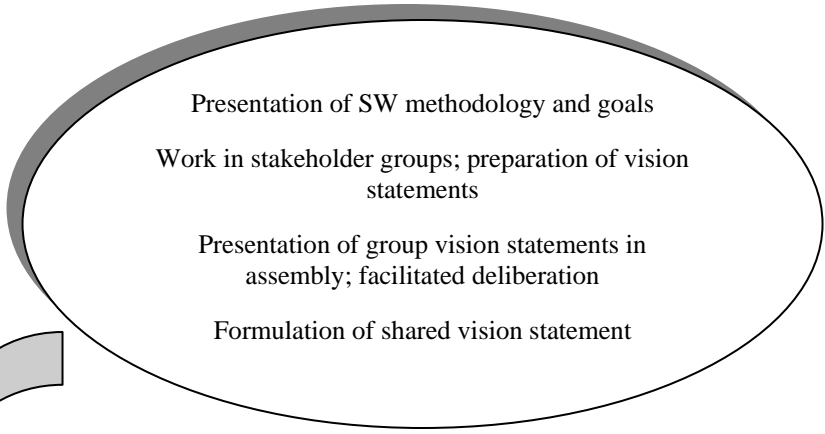


Figure 1. Map of Naxos

↑
PREPARATION
↓

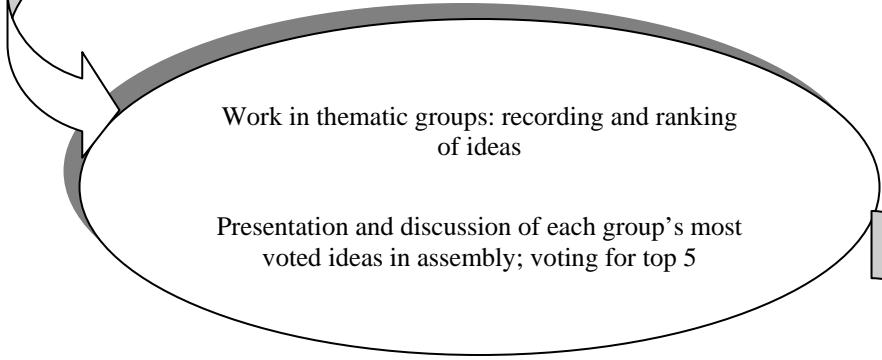


↑
VISION-MAKING
(Day 1)
↓

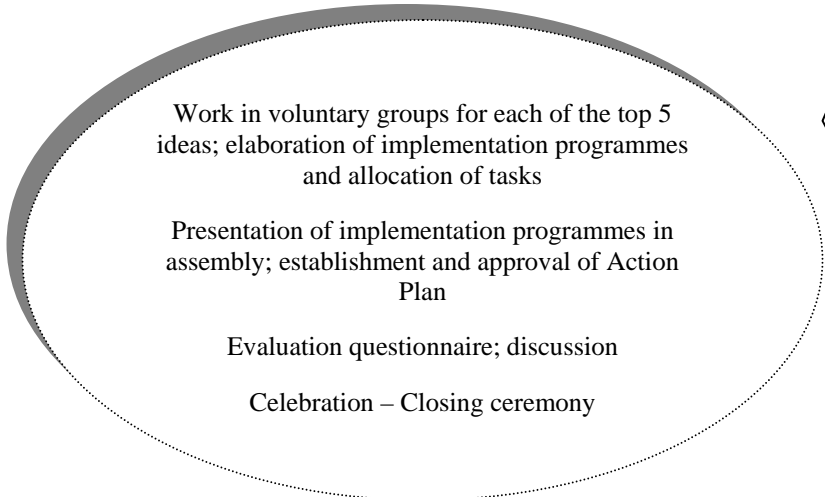


↑
SCENARIO WORKSHOP
↓

IDEA GENERATION
(Day 2 - morning)



ACTION PLANNING & EVALUATION
(Day 2 - afternoon)



↓

Figure 2. Design of the Naxos Scenario Workshop

Figure 3. The Vision Statement

We envision a Naxos in the year 2020 characterised by a diversified, medium-scale economy, with improved, modernized infrastructures. With educated and responsible citizens, who are informed about issues concerning sustainable development. We envision a Naxos that is a centre of knowledge and education, with University institutions contributing to the life of the island. A Naxos relying more on self- sufficiency. A Naxos, where there is dialogue and cooperation between citizens and institutional bodies. Where humans and the environment co-exist in harmony and the most important and sensitive natural ecosystems are protected.

We envision a Naxos with sufficient water supplies of **good quality**, with application of appropriate **technologic innovations**, but also using **traditional techniques**, that ensure demand management and **water saving**.