

CASE REPORT





# Engaging local communities in the process of participatory management in the coastal zone - the experience of the Region of the Vistula Lagoon

Angażowanie społeczności lokalnych w procesie partycypacyjnego zarządzania w strefie przybrzeżnej - doświadczenia z Regionu Zalewu Wiślanego.

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**Abstract:** Based on experience gained through the collaboration of two FP7 projects (ARCH and LAGOONS), a methodology used for stakeholders' involvement in the management of lagoons under climate and anthropogenic pressures is discussed.

The central objective of the ARCH project (Architecture and roadmap to manage multiple pressures on lagoons) was to develop participative methodologies in collaboration with the involved managers, policy makers and stakeholders to manage the multiple problems affecting lagoons in Europe (10 cases). Three main challenges for the improvement of "sustainable lagoon management" were supported by the ARCH, these include the transition: from segregated disciplinary scientific results to well integrated and usable scientific knowledge; from "government" to "governance": from sectoral policies towards sustainable management; from an unaware and uninformed "lagoon community" towards an involved and well-informed community. The main objective of the LAGOONS project (Integrated water resources and coastal zone management in European lagoons in the context of climate change) was to contribute to a science-based seamless strategy — in an integrated and coordinated fashion — of the management of lagoons seen under the land-sea and science-policy-stakeholder interface; i.e., the project seeks to underpin the integration of the EU Water Framework Directive, Habitat Directive, the EU's ICZM Recommendation, and the EU Marine Strategy Directive.

An approach applied to the Vistula Lagoon stakeholders' consultations process (collecting opinions from different groups of interests like public administration, researchers and experts as well as local citizens) was extremely well assessed by all participants. The role of local communities and their actual engagement in the management processes in the Vistula Lagoon Region is analysed in the paper, based on the author's observations as a facilitator of the process. Creating positive and trustful relations is a prerequisite for successful consultations with local communities. An importance of the role played by local communities in the management process is still underestimated by both managers and the communities themselves. However, building trustful relations requires time and efforts from both sides and cannot rely on a 'project to project' basis. Local communities that once got involved in the participatory management process expect continuity and implementation of their ideas through rational and fair-minded debate. Public involvement in decision making processes, if managed properly, increases the legitimacy of decisions in the eyes of those affected by them, which makes it more likely that the decisions will be implemented effectively [1]. There is an urgent need for a permanent consultation process built in a daily routine of managing organisations constituting, in a sense, their statutory task not resulting from different legislation, laws, obligations, etc. but from the will to build a participatory society.

Keywords: participatory management process, involvement of local stakeholders, management of lagoons

**Streszczenie:** W oparciu o doświadczenia zdobyte dzięki współpracy dwóch projektów 7PR (ARCH i LAGOONS) przedstawiono i zanalizowano metodologię zastosowaną do zaangażowania interesariuszy w zarządzaniu zalewami i lagunami będącymi pod presją zmian klimatycznych oraz antropogenicznych.

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Głównym celem projektu ARCH (Architecture and roadmap to manage multiple pressures on lagoons) było opracowanie i przetestowanie metody partycypacyjnego zarządzania opartego o współpracę naukowców, decydentów i interesariuszy (10 studiów przypadku). Trzy główne wyzwania zaadresowane w projekcie to przejścia: od dyscyplinarnych wyników badań do zintegrowanej i użytecznej wiedzy; od "rządzenia" do "zarządzania", od polityki sektorowej do zintegrowanego planowania i zarządzania, od nieświadomej i niezaangażowanej społeczności do wspólnoty zaangażowanych i dobrze poinformowanych interesariuszy. Głównym celem projektu LAGOONS (Integrated water resources and coastal zone management in European lagoons in the context of climate change) było przyczynienie się do wypracowania strategii zarządzania zalewami opartej na wiedzy i umożliwiającej minimalizację problemów związanych z interakcjami na różnych płaszczyznach (ląd-woda, wiedza-polityka-interesariusze).

Podejście zastosowane w procesie konsultacji z interesariuszami Zalewu Wiślanego (zbieranie opinie różnych grup interesów, takich jak administracja publiczna, naukowcy i eksperci, społeczności lokalne) było bardzo dobrze ocenione przez wszystkich uczestników procesu. Rola społeczności lokalnych i ich rzeczywiste zaangażowanie w procesy zarządzania w regionie Zalewu Wiślanego są analizowane w oparciu o obserwacje autorki jako moderatora procesu. Tworzenie pozytywnych relacji i zdobywanie zaufania jest warunkiem sprowadzenia skutecznych konsultacji z lokalnymi społecznościami. Znaczenie społeczności lokalnych w procesie zarządzania jest wciąż niedoceniane zarówno przez menedżerów, jak i przez same społeczności. Budowanie relacji opartych na zaufaniu wymaga czasu i wysiłku z obu stron i nie należy oczekiwać, że jest to możliwe na zasadzie realizacji incydentalnych projektów. Lokalne społeczności, które raz zaangażowały się w proces zarządzania partycypacyjnego oczekują kontynuacji tego procesu i realizacji swoich pomysłów poprzez racjonalną i umożliwiającą wymianę poglądów debatę. Zaangażowanie społeczeństwa w procesach decyzyjnych, jeżeli są one odpowiednio zarządzane, zwiększa prawomocność decyzji w oczach osób poddanych ich działaniu, co sprawia, że jest bardziej prawdopodobne, że decyzje będą skuteczniej realizowane. Istnieje pilna potrzeba wbudowania procesu konsultacji ze społecznościami lokalnymi w codzienną praktykę organizacji zarządzających obszarem Zalewu Wiślanego, tak by stało się to niejako ich statutowym zadaniem nie wynikające z różnych przepisów, ustaw, zobowiązań, itp, ale z chęci budowania społeczeństwa partycypacyjnego.

**Słowa kluczowe:** partycypacyjne zarzadzanie, społeczności lokalne, Zalew Wiślany

## Introduction

the concept of participative management implies the involvement of different groups of stakeholders in the decision making process. The roles of different groups in this process depend on: the rank of stakeholders (decision makers or those undergoing the consequences of the decision), their involvement in the process (active or not), willingness to cooperate (open to dialogue and seeking a consensus or focused only on securing their own interests). Local communities – defined as the inhabitants of a given area representing different professional groups, e.g. fishermen, teachers, hoteliers etc. - constitutes one group of stakeholders, whose role and engagement in the participatory management process depends on (i) the culture of a public debate in a given society and (ii) formally owned rights in decision-making (the right to intervene). While the second issue is guaranteed by law, the culture of public debate and the consequent role of local communities varies considerably across the European Union. In countries with a long tradition of democratic decision-making, thanks to the mechanisms developed, local communities - aware of their rights and their impact on the final solution - participate in this process with great commitment. In countries like Poland, with a society that is learning democracy, the culture of public debate is in its infancy. Participative management is not a mechanism commonly used in Poland. Most public debates are limited to informing residents by the authorities issuing decisions about the opportunity to review the draft

plan. Consultation meetings aimed at gathering opinions and developing a consensus rarely are organized, and if they are, it is mostly without the assistance of professional mediators using advanced methodologies to facilitate the course of the sometimes stormy discussions. Most of the consultation processes the author has been taking part in are based on the project basis, meaning the participatory management process is organized 'ad-hoc' to serve one particular interest of the process's organizer in opposition to the permanent public involvement in the decision-making.

For many years the Vistula Lagoon Region (as defined in the ARCH project [2], hereafter referred to as the Vistula Lagoon Region or the Region) is facing many challenges: scattered management, eutrophication, rapid changes in the direction of economic development. They can be divided due to the following factors: historical, economic and social.

Historical conditions refer to changes in the population of the region, taking place from the 40's of last century. After World War II the Prussian population – as previously, for more than 200 years, the whole Region belonged to Prussia - was forced to leave these areas. The Region was settled by people from different Polish sites, mainly from the Kaliningrad Region, Lithuania and Belarus, as well as from southern and central Poland. Though more than 70 years have passed one may still observe a lack of attachment to a place among the inhabitants of the Region, recently resulting in an exodus of young people.

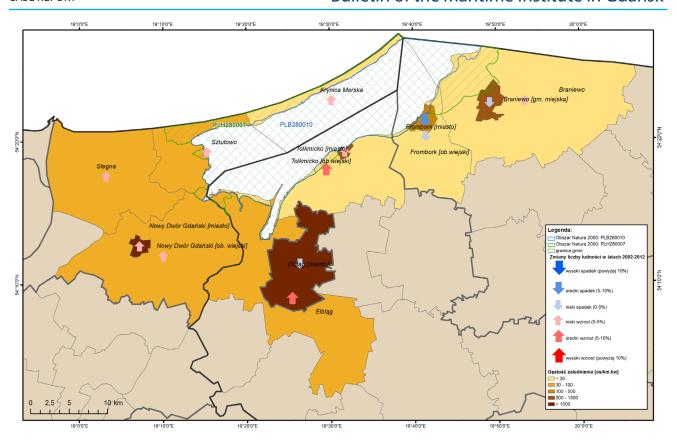


Fig 1. Population density and population changes during the period 2000-2012 Source: The management plan of Natura 2000 sites in the vicinity of the Vistula Lagoon: the Vistula Lagoon (PLB 280010) and the Vistula Lagoon and Vistula Spit (PLH 280007) [3]

Economic conditions result from the change of the political system in the late 80s and changes in the Polish economy after turning to the European Union (amendment of the economy central to local government, new regulations, the transition from intensive agriculture and fishing to tourism).

Social conditions refer to rapid demographic changes (arising from economic changes in the Region) resulting in an aging population, due to an outflow of people to larger cities where there are more opportunities for education and finding a job. Many persons lost their jobs, they were forced to seek other sources of income, many became unemployed. As of 31st December 2012, the population of the Polish part of the Region was 198,479 inhabitants (Figure 1). The population density in the region –129.47 inhabitants per km2 – slightly differs to the national average (123.2 inhabitants per km2). However, the population density in the coastal municipalities of the Region in the summer, often exceeds the national average (for instance in Krynica Morska).

Management in the region is divided by the competence of various bodies responsible for issues related to economic development (9 communes, 4 counties, 2 regional self-administrations), water management (1 Maritime Office, 2 Regional Water Management Boards), environmental protection (2 Regional Inspectorates for Environmental Protection). It is important to mention that the north-eastern part of the Lagoon belongs to Russia. This creates obvious additional challenges

for a coherent management as Russia does not follow the European Union (EU) legislation. However, it is the only Polish part of the Region that is the subject of this study.

The entire Polish part of the Vistula Lagoon, due to the high natural values two Natura 2000 sites have been acquired: PLH280007 (Vistula Lagoon and the Vistula Spit - the area of habitat) and PLB280010 (Vistula Lagoon - bird area). Eutrophication is a result of both natural processes (genesis of the lagoon itself, accumulation of contaminants in a sediment) and human activities (nutrient overload due to unsustainable agricultural practices in the past and an increase in tourism nowadays).

The purpose of this analysis is to present the engagement of local communities in the Vistula Lagoon Region on the example of the methodology used in the case and assess the possibilities for its further enhancement, based on the methodology of the stakeholders' involvement in the management of lagoons under climate and anthropogenic pressures used in the case study area common for the two FP7 projects (ARCH and LAGOONS). The value of the paper is mainly practical. The strength of the paper is the Polish perspective on the practical use of the participatory management of the sea-land interface regions. The paper discusses the potential and drawbacks of participatory approaches to coastal management in Poland. Lessons learned are presented and discussed in relation to all factors described above. Both projects were meant to combine scientific knowledge with that held

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by local communities in order to improve the management of complex ecosystems of bays and lagoons [4]. It is one of key factors of effective sustainable management of social-ecological systems [5],[6],[7]. The other ones, like creating political space for experimentation, matching scales of ecosystem and governance and creating multi-level governance, are difficult to be achieved on a research project basis (in such a project neither politicians nor decision-makers are partners).

# Description of the methodology

In a period 2011-2014 two FP7 projects (ARCH and LAGO-ONS) in parallel were carrying out research on stakeholders' participatory processes for the development of the lagoon areas having the same case study area of the Vistula Lagoon Region. Having in mind that the Region was subject to many earlier project initiatives (just to mention that in the same period of 2001-2014, 3 other EU projects were carried out there: HERRING, ARTWEI, VILA), the Polish partners of FP7 projects - the Maritime Institute in Gdańsk (ARCH) and the Institute of Hydro-engineering of the Polish Academy of Sciences (LAGOONS) - consolidated their efforts in order to create the best possible synergies. With the agreement of both projects' coordinators, it was decided that in ARCH the Vistula Lagoon case study would follow the stakeholders' involvement methodology adopted in the LAGOONS project. The LAGOONS's stakeholders' involvement methodology consisted of three steps:

- ♦ Focus Groups (FGs)
- ♦ Citizens Jury (CJ)
- Workshop for all stakeholders
- The author was engaged in all steps with the main role of a moderator, she was however also an active organizer of all events.

The aim of the FGs was identification of the major obstacles, challenges, etc. in the development of the Region from the perspective of the local communities, while the aim of the CJ was the development of future scenarios and formulation of recommendations on the most desirable actions<sup>7[2]</sup>. Finally, the workshop for all stakeholders presented the outcomes of the whole process, i.e. impact of various future scenarios of climate and management in catchment changes on the environment of the Vistula Lagoon. The stakeholders provided advice on how to achieve the desired scenarios and avoid the undesirable scenarios. This is called back-casting and leads to the formulation of policy alternatives to achieve/prevent the results of the scenarios. From the point of view of ARCH, the overall goal of the process was to generate input to the management plan.

Before starting the implementation of the methodology for the stakeholders' involvement process, it was decided to have an additional workshop at the beginning of the process. The goal of this workshop, which was held in Gdańsk on 23rd April 2012, was to inform 'institutionalised' stakeholders about the two projects, the processes and expected outcomes. All participants of this workshop expressed their interest in the projects'

results, though their underlined that they expected results better suited to the Regions' needs as well as better tied to the on-going decision-making processes. The organisers received a better overview of the current political agenda of authorities responsible for management and development in the Region.

The use of the Focus Group methodology in the LAGOONS Project has been disaggregated by Professor Geoffrey D. Gooch (Centre for Water Law, Policy and Science, University of Dundee, Scotland and Linköping University, Sweden) in "Focus Groups and Citizens' Juries" [8]. Here, only the most important issues are presented. The use of focus groups in environmental science is still comparatively limited, though recently the interest in the methodology has increased considerably in many areas and can be expected to continue to increase in the near future. Focus groups have been used in a variety of other contexts, for example, to examine how children use the Internet, in educational programmes, to gather information for safe-sex programmes, to validate earlier conclusions concerning the treatment of schizophrenic patients, to gather information concerning the use of booster seats for children, and to examine the shopping habits and consumption patterns of citizens. They can be used both as the main tool in a research project, or in combination with other methods. The size of a focus group should be between 4-10 participants, where 6 seems to be the most suitable number. The method has been used for the first time in Poland to gather information on how local communities perceive potential and challenges in the Region (environmental status, management, regional economic development etc.).

Four Focus Groups, all moderated by researchers from the LA-GOONS project, were organised and performed in a series of 'cameral' meetings with representatives of local communities:

- Frombork, 29.05.12: FG attended by fishermen, hotel and gastronomy operators, teachers
- Piaski, 30.05.12: FG attended by fishermen and hotel operators
- Kadyny, 30.05.12: FG attended by citizens and local authority.
- ♦ Krynica Morska, 13.06.12: FG attended by fishermen

Participants were recruited starting from personal contacts and continuing with a snow-ball approach. Phone calls and emails were used to invite them to the workshop.

All meetings were both video and audio recorded and notes were taken. All started with the distribution to the attendees of a number of documents, including a participant information sheet, flyers with information on the project and a map of the Vistula Lagoon. After the short presentation about the projects, the aims of the focus group were explained and participants were asked to share their views on the situation of the lagoon and the surrounding region and to indicate the problems they face living and working in the lagoon region. At the end of this discussion phase, the participants were asked to use the map provided and stickers to colour-code different areas, which they thought were "Good", "Not good" or "Not sure whether good or not good" from the point of



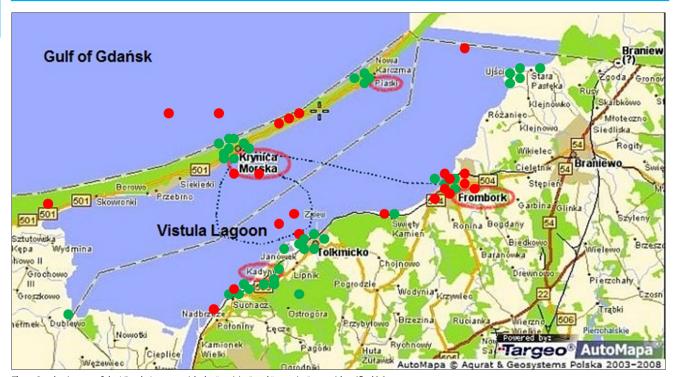


Fig 2. Synthetic map of the Vistula Lagoon with the "positive" and "negative" areas identified [9]

view of their environmental conditions and their management. Maps produced during each FG were combined, providing an overall picture of public perception on the obstacles and challenges in the development and management of the Region. Figure 2 presents a synthesis of potentials ('positive areas') and challenges ('negative areas') in the Region identified by the FGs attendees — the 'picture' corresponds quite well with the state-of- the-art situation as described in the report [2]. This proves that the local communities have a good understanding of the current situation. The synthesis was the basis for the selection of topics to be discussed during the Citizens Jury meeting. The unstructured and flexible approach to conducting the sessions worked very well, while attempts at more structured discussions resulted in a less active response from the participants.

The <u>Citizen Jury</u> took place on 5<sup>th</sup>-6<sup>th</sup> April 2013. The discussion was moderated by Joanna Przedrzymirska (ARCH), Małgorzata Bielecka, Grzegorz Różyński and Anna Reda (LAGOONS). The meeting was organised in Kadyny, a small village on the Vistula Lagoon coast and easily accessible by the participants. Since the meeting lasted for two days, citizens in the Jury were provided with accommodation.

Participants were recruited by advertising the meeting in e-mails and announcements as well as through telephone calls. The Jury members had to be local citizens willing to share their views. Although experts and organizers took part in the meeting, only the Jury (consisting of 12 persons) based on inputs from invited experts, had the right to discuss issues.

The meeting was divided into 7 segments, each 1.5 hours long. Each segment followed the same format and consisted of

an expert presentation (0.5 hours), a closed Jury session (0.5 hours), and an expert's interrogation (0.5 hours). At the end of the meeting the Jury had an additional 1.5 hour session focusing on recommendations and scenarios.

The Citizens Jury methodology was applied during the Kadyny meeting, following the Citizen Jury Handook [10]. For each topic (environment, fishery, agriculture, regional development, transport and infrastructure, Natura2000, tourism and recreation) the CJ members were provided with information by experts. During their closed sessions (without experts and public) they could share their views and formulate doubts and questions, which later were addressed to the expert during the "interrogation" session. Finally, based on the knowledge gained during the 7 sessions, the CJ discussed scenarios of future changes in the region and formulated recommendations for the development of the Region, which were agreed upon unanimously. The final outcome of the CJ meeting was a three page document illustrating the Citizens' vision of the Vistula Lagoon Region in the next 20 years and recommendations for its future development and management.

The last meeting in the Lagoons methodology - the workshop for all stakeholders took place on 9<sup>th</sup> July 2014 in Gdańsk. Representatives from Russia (scientists and regional administration) were also attending this workshop. The recommendations and four socio-economic scenarios of future lagoon development by the year 2030 (LAGOONS project outcome), as well as the draft management plan (ARCH project outcome), were discussed with key stakeholders responsible for the development of the Vistula Lagoon region. The workshop aimed at the development of alternative scenarios. From the ARCH project

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perspective, the purpose of the workshop was to confront ideas collected in the draft management plan with expectations of and threats to the ones who are meant to implement this plan. As this is tidily connected with the implementation of regional operational programmes, the immediate goal of the workshop was to influence the content of these programmes so they can accommodate as much as possible from ideas agreed at the meeting. Some ideas from the proposed document have been identified as fitting under regional operational programmes at that time being under public consultations in two Polish provinces (Pomorskie and Warmińsko-Mazurskie). However, general concern was that the plan lacks detailed actions with indication of entities responsible for their implementation as well as the time schedule. Therefore, it was suggested to develop a roadmap for its implementation.

# Analysis of outcomes and conclusions

Methods of involving local communities in the management process that were deployed for the first time in the Vistula Lagoon Region enabled the identification of the main features of the lagoon and the Region from the perspective of local representatives' as well as — in line with the methodology used in the LAGOONS project - any concerns regarding any issues or problems they had identified in relation to the lagoon, where they might be located and if so what future changes, if any, they would like to see in place [11].

Communities like fishermen and entrepreneurs (hoteliers, restaurant owners etc.) rely deeply on the Lagoons itself – so they are aware of its status and realistic (in current circumstances) possibilities of further development. During FG discussions as well as at the CJ, the lack of consolidated management (enormous bureaucracy and related lower investment rate) was pointed out as the main threat to the future of the Region. Conflicts between nature protection and local infrastructure development as well as fishery, the slower rate of development of the southern part of the region in relation to areas on the Vistula Spit were also indicated as management challenges. Similar observations have been in the region of the Ria de Aveiro Lagoon (another case study in the Lagoon project in Portugal), where fishermen have demonstrated a good understanding of the importance of the sustainable use of the lagoon's resources. They acknowledged the impact of their activities in the ecosystem because they experienced the impoverishment of the sediment bed and loss of species due to the use of non-authorized fishing gear<sup>12</sup>. However, in contrast to the Ria de Avairo, local representatives in the Vistula Lagoon Region do not have a clear feeling of ownership of the lagoon. It is important to mention that they were strongly in favour of the concentration of individual management tasks in one single institution. In contrast to the researchers' recommendation given in the Management Plan that was developed in the ARCH project, they proposed using an existing organisation instead of the creation of a new dedicated unit that would voice their interest via their active involvement in shaping the work program of the new unit. This clearly shows that they do have a strong sense of what is needed, however they do not have the will to take matters into their own hands. Such an attitude stems from the aforementioned historical and social conditions. Local communities who took part in the case study represent the socio-economic situation in the region very well: an aging society with very limited possibilities to make income. Given this fact, one shouldn't wonder that people in the Region focus on their own particular interests without seeing the opportunities to unite efforts and jointly care for the interests of the region.

Having in mind a characteristic of local communities in the Region, one could expect that gathering local citizens for the FG meetings may not be an easy task. Indeed, at the end, less than 50 citizens of the Region took part in the FG. The experience shows that it could be even less. From an organizational point of view, e-mails did not work very well as a way of recruiting stakeholders, while phone calls were much more successful. A deep engagement of only one person (extremely gifted in creating positive and trustful relations with people) was a critical factor to create an interest and to raise willingness to be active among those who participated in the FG. Such skills and attitude are prerequisite for any successful participatory management process, though it is very often undervalued, if not neglected. One should note that that participants of the CJ were 'recruited' via phone calls thanks to this person's activeness.

Participants of the FG and CJ were very eager to share their opinions and discuss the problems they face in their daily activities in the lagoon area. They had been looking forward to opportunities to share their views in the hope that these would be taken into account in the development of management plans for the area. Especially during CJ, representatives of local communities asked many questions to experts and were eager to learn about new information and knowledge they had lacked so far. On the other hand, after FG and CJ one could observe their doubts whether 'their voice had been heard by decision makers' and their engagement will make any difference in the process of strategic regional planning. Indeed, only a few representatives of local communities took part in the final workshop in Gdansk. Still, this would not have happened if they would not be involved in earlier stages.

The timing and location of the debate is the most decisive factor for engaging representatives of local communities in the participatory management process. First of all, one should take into account the fact that engagement in such a process requires them to take a break from everyday affairs. Timing is crucial especially for those dealing with fishery, but also for those active in tourism. But a decisive factor is the distance to the venue - it should be as short as possible. An evidence of this critical factor is that – as mentioned above - at the last workshop in Gdansk only 3 persons appeared, while at the CJ in Kadyny 12 representatives were present.

Given the fact that the unified ARCH project's questionnaire for evaluation of each event was only available half a year later



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(after the Citizens Jury on 14 October 2013) it was not possible to collect participants' feedback at the time when Focus Groups and CJ were held. The feedback was collected only from participants of the third workshop, some of whom took part either in FG or in Cl.

An evaluation of filled-in questionnaires after the last workshop revealed that an approach undertaken within the stakeholders consultation process (collecting input from different groups of interests like public administration, researchers and experts as well as local citizens) was extremely well assessed by all participants. Additionally, a possibility to learn about activities and development plans in Russia directly from Russian representatives was very well welcomed by most of participants. On the other hand, this workshop revealed one important issue: how to organise simultaneous translation in case it is needed.

The most important was to get an approval for recording during events from all participants. Apart from obvious benefits for the organisers, recording could be a disturbing factor for participants. It turned out that once they agreed to be recorded they were not disturbed by this fact and were very open in giving their opinions.

The methodology was new for both sides: for moderators and for participants. However, the outcomes seem to prove well known facts in co-management practices: local communities are fully aware of what is happening in the Region, what are the main environmental, economic and social challenges; local communities - if approached - want to share their knowledge and concerns, to get to their tacit knowledge requires resources (in terms of time, human capacity and funding); understanding of the benefits of participatory process for both sides (decision-makers and local communities) is important , but it cannot be reached through incidental episodes like scientific projects. Combining scientific knowledge with that held by local communities in order to improve the management of complex ecosystems of lagoons - which was the goal of both projects - shall not be an accidental effort: to be effective it has to be built into the management process.

There is still no understanding of the role of local communities in management processes in the Vistula Lagoon Region - both among the 'rulers' and among the communities themselves.

Therefore, an action is needed from a top-down approach (necessary for stimulation) as well as bottom-up actions (as a result of stimulation). Having in mind the challenges the Region is facing at the moment, there is an urgent need to introduce into a formal governance process new and effective mechanisms that would enhance the engagement of local communities into the making of decisions that directly affect their living. It is crucial to realize that the change should be based on two pillars: building trust in the authorities and to ensure continuity of operations.

A change in the management process is postulated towards making participatory management a statutory process in all institutions responsible for the management of the Region. In order to enhance the role of local communities in the management processes and thus to build a mature participatory society that is willing to take responsibility it is recommended to:

- make a dedicated allocation of funds from the Technical Assistance of Regional Operational Programmes of Pomorskie and Warminsko-Mazurskie provinces for activities dedicated to, among others, the wide and customized media campaign dedicated to the activation of 'the people from the Lagoon';
- establish a dedicated governance body to be funded by regional self-administration devoted to strengthening the participatory management process
- enable direct financial support for the creation of local leaders (angels of change) clearly define preferences in access to financial resources for entrepreneurs from the Vistula Lagoon Region.

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- Atucha A., Matczak M., Oen A., Palmieri M., Przedrzymirska J., Różyński G., Sousa A., Sousa A., Tuchkovenko Y., Zaucha J., Assessment of Marine Ecosystem Services indicators: experiences and lessons learned from 14 European case studies. Integrated Environmental Assessment and Management. in press.
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