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SHERPA

Small Hydro Energy Efficient Promotion Campaign Action
WP 5: SHP & Local development

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DEVELOPMENT OF A “GOOD PRACTICE BROCHURE” OF PARTICIPATORY APPROACH FOR SHP DEVELOPMENT

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Intelligent Energy  **Europe**



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1. PARTICIPATIVE APPROACH: A NEW GENERATION OF REGULATORY INSTRUMENTS FOR THE SMALL HYDROELECTRICITY



Generally, projects of energy and environmental features are irremediably sullied with conflicts and leave room to an irreducible plurality of points of view and thus of systems of value emanating from individuals or very diverse lobbies.

A manner of considering the acceptability of “sacrifices” that a group “could” make would be to ensure the participation of the actors concerned in the decision-making process.

This participation should positively contribute to make actors aware of the benefits associated with the sacrifices made, even if those ones are differed in time.

This acknowledgement indicates the need to set up *multi-actors participative processes* for the management of hydropower development project.

Environmental and lawful negotiations, mediation, advisory groups, multi-actors workshops, experts/decision makers interfaces, think-tank cells are **participative approaches** being increasingly used for decision-making regarding hydropower sector.

Regulatory instruments for small hydroelectricity are currently advancing, based on “multi-stakeholders” dialog processes.

After the emergence of direct regulatory and economic instruments, a third generation of regulatory instruments is now emerging: the participative instruments.

2. CONTRIBUTIONS OF THE PARTICIPATIVE APPROACHES TO THE DECISION-MAKING PROCESS IN THE FIELD OF THE SMALL HYDROELECTRICITY

Participative approaches play a significant role on quality of decisions and results related to the development of the energy potential development of rivers.

Indeed, a participative decision-making approach improves quality of decisions while facilitating more advantageous choices regarding environmental and economic aspects, with choices , technically wiser and socially more acceptable than those that would emerge from non-participative decision-making processes, as top-down process.

From the environmental point of view: The participative approach makes it possible to leave the very restricted expertise circle, and to integrate into the process a pluralistic expertise, taking into account some dimensions sometimes unconsidered by the traditional expertise. It also facilitates a transverse approach, integrating into the reflection all the energy policy fields concerned (other than hydraulic ones) in the perspective of sustainable development.

From the economic point of view: The participative approach in a hydropower development project leads to choices economically more relevant, through energy choices resulting in lower economic costs for those who will implement them, provided some external costs have been internalised and a cost/advantages (or social cost) analysis was carried out for each project, highlighting clear improvement of all actors well being.

From the technological point of view: Compared to a traditional process, the participative approach allows more flexibility and innovation in the way where technology is apprehended. Through opened processes, within which the actors, in particular industrialists, aware of technological breakthrough can express themselves, it will be possible to both avoid too rigid decisions which keep the technological framework in some privileged ways and also , to integrate the technological development in real time in decision-making process.

3. SOME RECOMMENDATIONS ACHIEVE A GOOD PARTICIPATIVE APPROACH IN THE FIELD OF SMALL HYDRAULICS

They are as follow:

- To integrate the project in a territorial planning approach,**
- To associate the project to the development of the territory,**
- To implement the project through a steering committee as broad as possible,**
- To inform the residents as soon as possible,**
- To associate the industrialists and the companies to the programme objectives during the consultation and the project implementation,**
- To set up multicriteria analysis tools covering all the thematic linked to project development,**
- To associate universally recognised independent experts to your choices.**

To integrate the project in a territorial planning approach,

The territorial approach is the recommended scale to implement an energy development project.

The territorial approach is the starting point of a useful reflection and the stake of a thorough knowledge of the territory.

Politicians are not excluded. If not associated, he should be at least partner of the project. If he is not directly involved, project characteristics should be quickly brought to his attention, and he should be continuously informed on activities development.

When adopting a territorial planning approach- for example at a catchment area scale - an enthusiastic and voluntary partner(which can be a politician) is then necessary so that strong actions can be indeed carried out during the project life.

Ideally, this partner could be a planning authority (non-political partner but involved in the development of the territory) or a State representative within the Region or the Department (also non-political partner but representing a political partner)

To associate the project to the development of the territory,



The regional planning refers to both the action of a community on its territory, and the result of this action.

The two main and sometimes contradictory objectives of regional planning policies consist in supporting economic development of the territories, and in reducing spatial disparities in economic or social terms. These objectives are both considered when planning a balanced development of the territory, as stated in many planning and legal documents.

The integration of a small hydropower project to into the development of the territory is the natural consequence of territorial planning above mentioned : It makes it possible to integrate the energy potential development project into a wider settlement programme and in more balances.

The project objective is therefore part of the implementation of the guiding principle, that is to say the sustainable spatial development by integrating the small hydropower project both in its environment (through the development of its natural resources) and in a balanced urban and/or rural development.

To implement the project through a steering committee as broad as possible,

To improve the follow-up of the project regarding the observation and choices to make, it is necessary to constitute a broad team for project management: **the steering committee.**

The steering committee generally consists of a member of each category of role. It must be set up to plan, arbitrate, analyze and decide actions to be carried out in a process of costs reduction, follow-up, improvement and acceptability of the processes.

The steering committee gathers decision makers who are able to make the necessary arbitration's for the project conduction and to set a consensus (budget or resource allocations, project perimeter revision, deadlines revision...) The contractor (strategic or representative) takes part in the Steering committee, as well as the person in charge of the control of works who, usually leads the committee.

Within the framework of complex or important energy development projects , it is often useful to set up **a steering committee, with operational vocation and a management committee**, with strategic vocation, usually gathering the company or the organization leaders, who are in a position to return arbitrations ahead of operational committee members responsibilities.

To inform the residents as soon as possible,

This aspect is in general fundamental to raise awareness among population on hydropower development projects, whatever their size. Informing residents usually facilitates the project success.

If hold by a steering committee member, the role and the mission of communicator is to inform the general public on the ideas and the actions of the steering committee, through meetings and press.

Depending on the project size, this person could also be in charge of publications and if possible of the production and co-production of video recordings and of editorial co-ordination of the Web site dedicated to the project.

To associate the industrialists and the companies to the programme objectives during the consultation and the projects implementation,

This idea is complementary to the one above mentioned.

Regarding participative approach, the involvement of industrialists and companies appears to be crucial when the project takes shape (technical offer and project implementation).

It is of high importance to associate, when possible, the project stakes to the reflection and the possible contributions of the industrialists and contractors.

For the company wishing to adopt a “qualified” approach, it is the occasion to cover a subject, propose a specific methodology to the project, to reduce deadlines, to appropriate key technologies, to improve its performances, to ensure an economic and technological watch... which corresponds to a strong stake for its activities, but which often cannot be internally carried out, because of a lack of availabilities.

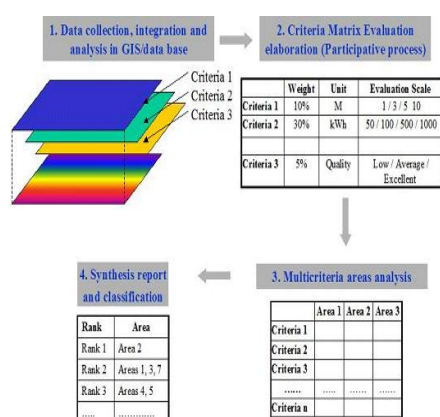
To set up multicriteria analysis tools covering all thematics linked to project development

At projects beginning, multicriteria analysis tools can be of various forms: either the hydropower sites are filtered through a GIS (Geographic Information System) by eliminating for example the non-acceptable zones on the basis of the sole regulatory or institutional measures (Splash/Irish approach) or on the basis of a other more technical constraints (Splash/Portugal); or by preparing balanced charts founded on a sufficiently tight squaring to identify the zones of effective research, and while transposing these charts on charts representing the river system to analyze by means of a multifactorielle analysis (Splash/Grèce)

To carry out a multicriteria analysis (or multicriteria method for decision-making assistance), France usually use three concepts: (1) fields of analysis and aspects considered in these fields (criteria), (2) a notation system applied to these criteria and (3) a weighting system applied to this notation.

This method is a logical approach deeply advised for a linear resource (river).

The “downward” approach includes the following main stages:



- Identification of assessment criteria (by fields)
- The fields can be for example: hydrological resources, the regulatory framework, land constraints, environmental aspects, infrastructures (access, possibility of connection to the power supply network...), etc....
- Data collection and adjustment of the criteria,
- Integration and analysis in a Geographical Information system (GIS)
- Multicriteria analysis through:
 - Development of the multicriteria impact matrix,
 - Criteria Notation,
 - Notation weighting with the steering committee,
 - Simulation, analyses and result

the weighting system is checked upstream by experts and regional and national authorities before being applied by the steering committee, which can still adapt it. It generally follows from priorities of the moment and from the period during which the territorial plan is developed.

“The acceptability” of the project is directly linked to the system and to the various weighting coefficients. The question is: are the measurement system, the criteria and their respective weighting legitimate and respected? From this point of view, the French system, which had been through a consultation process and detailed setting up, is fully recommended.

The result of this approach is a plan which identifies the zones where small hydropower can be objectively considered, and those where it would be possible but with major constraints, or even unacceptable.

To associate universally recognised independent experts to your choices

The association of universally recognized experts to strategic choices of a hydropower development project is also a guarantee of its success.

The subjects on which the independent experts can intervene are obviously numerous. But no matter these subjects are technical, administrative, legal or that they cover sensitive subjects, the devolution of a reflection and a proposal to a third-expert is often a pledge of serenity.

The reasons which cause the choice, at a particular time of the project, to entrust a particular task to a recognized independent expert, must be ambitious, as will be the method he will be suggesting..

Whatever the entrusted subject, this method, necessarily turned towards a collective objective, (and therefore turned towards collective wellbeing), will be more ambitious than if the expertise was restricted to a local technical phenomenon or should be of interest to only an individual or a given company.

The expertise, to be fully recognized, should open up to outside world and be systemic, dynamic in time and comparative in the description of the scenarios.

The main objectives of this expertise are to highlight the persistent uncertainties and to prepare non settled but iterative decisions, allowing revisable explorations and measurements.

Finally, the work of the expert is not to predict the future but rather to work out scenarios, which often describe the political consequences of options. In that it will be listened.

This brochure has been co-ordinated by Geoffroy du Crest from IED (F) associated to Sara Gollessi from APER (I)
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