

Analytical framework and full list of incentives (36) developed through the MPA Governance project – Based on Jones PJS (2014) *Governing Marine Protected Areas: resilience through diversity* (www.mpag.info)

You should refer to [Jones \(2014\)](#) for a full description of the analytical framework employed in the MPA Governance (MPAG) project, including examples of its application to 20 case studies (further 29 case studies since analysed, see www.mpag.info for details) around the world and related discussions, but the framework broadly consists of the following headings, each of which should be populated for a given MPA.

Context, including metrics:

- Name of MPA
- Area of MPA
- *National government type*
- *Per capita Gross Domestic Product (GDP)*
- *GDP Growth rate*
- *Population below poverty line (these four available from [CIA World Factbook](#))*
- State Capacity – average of scores for six governance indicators for MPA country and of six percentile rankings (www.govindicators.org)
- Human Development Index (HDI)

Objectives of the MPA – legally or otherwise formally and widely recognized.

Drivers and conflicts – what factors (poverty, migration, etc) are driving incompatible uses and how do the impacts related to these uses undermine the fulfilment of the MPA's objectives?

Governance framework/approach – outline the legal, policy and participative governance structure.

Effectiveness (0-5) – assessment of the degree to which the impacts of different uses, related to conflicts that can undermine the fulfilment of objectives, have been effectively addressed:

- 0 No use impacts addressed; MPA designation may even have increased impacts by undermining previous governance institutions;
- 1 Some impacts beginning to be slightly addressed;
- 2 Some impacts partly addressed but some impacts not yet addressed;
- 3 Some impacts completely addressed, some are partly addressed;
- 4 Most impacts addressed but some not completely
- 5 All impacts from local activities completely addressed.

How the incentives detailed below have been employed and which need to be strengthened or introduced:

- Economic
- Communication
- Knowledge
- Legal
- Participation

How do the incentives interact to support each other?

Cross cutting themes, *e.g.*

Equity issues

Role of non-governmental organizations, including local groups

Role of leadership

Against this background, a given MPA can be assigned to one of four governance approach categories, based on the way in which the MPA was initiated and the key ways in which it is governed:-

<i>MPA governance approach</i>	<i>Characteristics</i>
Governed primarily by the state under a clear legal framework	Decisions are taken by the state with some deconcentration or delegation of power to lower level government and quasi-independent government organizations, which generally only consult local users and other stakeholders on decisions taken at a higher state level
Governed by the state with significant decentralization and/or influences from private organizations	Implementation is deconcentrated to lower level government, quasi-independent government and private organizations along with the delegation of some decision-making powers, with central governments maintaining some degree and form of control over implementation and decision-making
Governed primarily by local communities under collective management arrangements	MPAs instigated on a bottom-up basis by local users, often through local organizations, with most implementation and decision-making remaining delegated to local users/organizations, but often requiring some degree of state support for enforcement and therefore also involving some influence by central governments
Governed primarily by the private sector and/or NGOs who are granted with property rights and associated management rights	MPAs instigated by organisations who may, or may not, represent local users and who are granted with the majority of decision-making powers and implementation responsibilities, but often still requiring some degree of state support for enforcement, though central government influence is generally limited to conditions attached to property and associated management rights, coupled with recourse to withdraw such rights if conditions are not fulfilled

The case study MPA may also be considered as a paper park (described below) but you should still be able to assign it to one of the above categories based on how it was instigated:-

- No clearly recognizable effective governance framework in place, i.e. ‘paper parks’ – MPAs on paper only with no effective incentives to promote the achievement of MPA objectives or fulfilment of related obligations, central state and/or lower government levels often lacking the political will for effective MPAs and sometimes being involved, in partnership with the private sector, in development proposals that significantly undermine such fulfilment

The MPAG framework includes assessments of the following questions in relation to your MPA case study:-

Which of these incentives are currently applied and how are they applied?

In what ways do the incentives interact with and reinforce each other?

Are improvements in the way any of these applied incentives are implemented considered a particularly important priority in order to improve the effectiveness and equity of the MPA in achieving its conservation objectives?

Which incentives could be a particularly important priority to be introduced and could realistically be introduced in order to improve the effectiveness and equity of your MPA

These questions can be considered in relation to the following five categories of incentives:-

Economic incentives (markets): using economic and property rights approaches to promote the fulfilment of PA objectives (10)

Interpretative or communication incentives (education and awareness raising): promoting awareness of the conservation features of the PA, the related objectives for conserving them, the policies for achieving these objectives and support for related measures (3)

Knowledge incentives (collective learning): respecting and promoting the use of different sources of knowledge to better inform PA decisions (3)

Legal incentives (top down): use of relevant laws, regulations etc. as a source of 'state steer' to promote compliance with decisions and thereby the achievement of PA obligations (10)

Participative or participation incentives (bottom-up): providing for users, communities and other interest groups to participate in and influence PA decision-making that may potentially affect them, in order to promote their 'ownership' of the PA and thereby their potential to cooperate in implementation of decisions (10)

These 36 incentives can be listed as follows:-

Incentive Category	Incentive	Associated Governance Approach
Economic	<ol style="list-style-type: none"> 1. Payments for ecosystem services (PESs) 2. Assigning property rights 3. Reducing the leakage of benefits 4. Promoting profitable and sustainable fishing and tourism 5. Promoting green marketing 6. Promoting diversified and supplementary livelihoods 7. Providing compensation 8. Investing MPA income/funding in facilities for local communities 9. Provision of state funding 10. Provision of NGO, private sector and user fee funding 	Market approach
Communication	<ol style="list-style-type: none"> 11. Raising awareness 12. Promoting recognition of benefits 13. Promoting recognition of regulations and restrictions 	Supports all three approaches
Knowledge	<ol style="list-style-type: none"> 14. Promoting collective learning 15. Agreeing approaches for addressing uncertainty 16. Independent advice and arbitration 	Supports all three approaches
Legal	<ol style="list-style-type: none"> 17. Hierarchical obligations 18. Capacity for enforcement 19. Penalties for deterrence 20. Protection from incoming users 21. Attaching conditions to use and property rights 22. Cross-jurisdictional coordination 23. Clear and consistent legal definitions 24. Clarity concerning jurisdictional limitations 25. Legal adjudication platforms 26. Transparency and fairness 	State approach/ top-down
Participation	<ol style="list-style-type: none"> 27. Rules for participation 28. Establishing collaborative platforms 29. Neutral facilitation 30. Independent arbitration panels 31. Decentralising responsibilities 32. Peer enforcement 33. Building trust and the capacity for cooperation 34. Building linkages between relevant authorities and user representatives 35. Building on local customs 36. Potential to influence higher institutional levels 	People approach/ bottom-up

Here is a description of each of the 36 incentives to be employed in the MPAG framework:-

Economic incentives (10)

Payments for ecosystem services (PESs)

Direct payments for ecosystems services provided by the MPA through formal markets with open trading between buyers and sells, i.e. Blue Carbon payments as the marine equivalent of REDD+ payments.

Assigning property rights

Assigning or reinforcing property rights for certain areas and resources to appropriate groups of people to promote ownership, stewardship, rational self-interest in sustainable exploitation, etc.

Reducing the leakage of benefits

Measures to reduce the 'leakage' of the economic benefits of the MPA away from local people, including measures to promote the fair distribution of such benefits amongst local people, e.g. restricting incoming fishers, promoting ecotourism that maximises the income received by local people through locally operated businesses, home-stay accommodation, employing locals in tourist facilities, commercial operations run by the MPA authority itself, etc.

Promoting profitable and sustainable fisheries and tourism

Avoiding 'boom-bust' development trajectories, i.e. promoting sustainable fisheries by providing a refuge for marine organisms in no-take zones in order to safeguard and enhance harvests in adjacent fishing grounds through spill-over/export, insurance against uncertainty, along with the promotion of conventional fisheries management approaches. Promoting the development of tourism in a sustainable 'eco' manner that does not lead to the degradation of the environment to which tourists are attracted.

Promoting green marketing

Promoting the 'green marketing' of appropriate tourism, fisheries, *etc.* within the MPA to increase profits and income, including market premiums for well conserved fishery resources and tourist/diver user fees for access to the MPA or particular zones.

Promoting diversified and supplementary livelihoods

Promoting the diversification of livelihoods and supplementary options to gain more income from such livelihoods, including alternative economic development opportunities, which are compatible with the achievement of the MPA's biodiversity conservation objectives, whilst generating sustainable income for local people.

Providing compensation

Providing fair economic compensation for those users who carry costs as a result of restrictions on their activities that cannot reasonably be offset through alternative compatible opportunities, *e.g.* fisheries buy-outs, decommissioning schemes.

Investing MPA income/funding in facilities for local communities

Investing some of the income from or funding for the MPA to develop local facilities (schools, medical care, family planning, *etc.*) and infrastructure (roads and other transport links, electricity, water, *etc.*).

Provision of state funding

Ensuring that a sufficient degree of state funding is available, alongside other funding (see below), to support the governance of the MPA, particularly to enable a longer-term strategic approach, and in relation to enforcement capacity, whilst ensuring that such funding does not allow the state to 'capture' MPA governance by undermining the balance of power discussed below in relation to participation incentives.

Provision of NGO, private sector and user fee funding

Seeking corporate, NGO and private funding through endowments, donations, debt conversions, trust funds, *etc.* to support the governance of the MPA, whilst ensuring that such funders cannot 'capture' MPA governance through an inappropriate degree and type of influence, and that the MPA becomes financially

sustainable through a diversity of income sources so that it is not critically vulnerable to the withdrawal of private sector funding. Funding can also be raised through 'user fees' on individual people or businesses using the protected area for diving, recreational fishing, etc., potentially also serving to manage user numbers.

Communication incentives (3)

Raising awareness

Using social and local media, TV & radio and other approaches to overcome 'out of sight, out of mind' barriers by raising the awareness of users, local people, relevant authority officers, politicians, etc. about the aesthetic values, ecological importance and vulnerability of marine biodiversity.

Promoting recognition of benefits

Promoting recognition of the potential resource benefits of the conserved areas in terms of spillover/export benefits for wider fisheries, insurance/resilience, etc., whilst being realistic about such potential benefits and not 'over-selling' them.

Promoting recognition of regulations and restrictions

Promoting recognition of and respect for the MPA's regulations and restrictions, including the boundaries

Knowledge incentives (3)

Promoting collective learning

Promoting mutual respect amongst local people and scientists for the validity of each other's knowledge and promoting collective learning and the integration of different knowledges through partnership research, research/advisory groups, participative GIS, participative workshops, etc

Agreeing approaches for addressing uncertainty

Explicitly recognising the challenges raised by scientific uncertainty and agreeing approaches to address such challenges, e.g. ground rules for the interpretation and application of the precautionary principle, decision-making under uncertainty, and adaptation in the light of emerging knowledge.

Independent advice and arbitration

Seeking independent advice and/or arbitration in the face of conflicting information and/or uncertainty.

Legal incentives (10)

Hierarchical obligations

International-regional-national-local legal obligations that require effective MPA conservation, including the potential for top-down interventions.

Capacity for enforcement

Following the principles of decentralisation, ensure that sufficient government capacity, political will, surveillance technologies and financial resources are available to ensure the equitable and effective

enforcement of all restrictions on all local and incoming users, including related pressures from fisheries and tourism market forces.

Penalties for deterrence

Effective judicial system for proportionately penalising illegal resource users in a way that provides an appropriate level of deterrence and helps address conflicts that would otherwise undermine marine conservation objectives.

Protection from incoming users

Providing for a degree of legal protection from incoming users, particularly non-local fishermen, as well as tourism operators, recognising that exploitation by incoming users often poses a major threat to local biodiversity and resources.

Attaching conditions to use and property rights

Agreeing performance standards, conditions, criteria and requirements related to the MPA's conservation objectives and attaching them to user and property rights, licences, participatory governance structures, *etc.*

Cross-jurisdictional coordination

Legal or other official basis for coordination between different authorities, and between conservation and other government agencies/law enforcement units, to address cross-jurisdictional and cross-sectoral conflicts in order to support the achievement of MPA objectives, e.g. watershed management by pollution authority, fish stock management by the fisheries authority, forestry management by the forestry authority, recognising that the environment authority with responsibility for PAs often does not have direct jurisdiction over other sectoral activities that can impact the PA's conservation features.

Clear and consistent legal definitions

Clarity and consistency in legally defining the objectives of MPAs, general and zonal use restrictions, jurisdictional boundaries, roles and responsibilities of different authorities, *etc.*

Clarity concerning jurisdictional limitations

Promoting clarity and openness concerning the jurisdictional limitations of the MPA legislation, *i.e.* recognising which driving forces, activities and impacts cannot be directly addressed by the MPA legislative framework and exploring alternative means of addressing such factors.

Legal adjudication platforms

Employing legal, customary law and other formal and widely respected decision-making platforms to address and regulate conflicts, when required.

Transparency and fairness

Establishing legal provisions to ensure transparency and fairness in MPA management processes, *e.g.* statutory requirements for public access to information, appeals, public hearings, *etc.*

Participation incentives (10)

Rules for participation

Clear rules on participation from different groups and the representation of all user groups in participation processes in a manner that minimises the undue influence of particular vested interests.

Establishing collaborative platforms

Developing participative governance structures and processes that support collaborative planning and decision-making, *e.g.* user committees, participative planning workshops, *etc.*, including training to support such approaches

Neutral facilitation

Bringing in neutral facilitators to support governance processes and negotiations.

Independent arbitration panels

Employing neutral and locally respected panels to arbitrate on issues and recommend decisions.

Decentralising responsibilities

Decentralising some roles, responsibilities and decision-making authorities to local organisations through a clear management structure, whilst maintaining an appropriate degree of authority by higher level state organisations in order to ensure that strategic conservation objectives are effectively met, being open and realistic about the degree of autonomy and influence that local people can expect

Peer enforcement

Providing for participative enforcement, *e.g.* peer enforcement, community rangers/wardens, and promoting the potential for cooperation and peer enforcement through the development of a sense of ownership of the MPA and respect for related decisions.

Building trust and the capacity for cooperation

Building trust amongst individuals through transparency, face-to-face discussions, equity promotion, *etc.*, promoting cooperation and confidence that this will be reciprocated amongst MPA users.

Building linkages between relevant authorities and user representatives

Developing and strengthening linkages amongst relevant government authorities and key user representatives, including mutual trust, in order to promote the fulfilment of legal conservation objectives and build resilient governance structures.

Building on local customs

Promoting consistency with and respect for local traditions, customs, norms and practices, in so far as they are compatible with and contribute towards the fulfilment of legal conservation objectives, including scope for flexibility, negotiations and compromises.

Potential to influence higher institutional levels

Promoting recognition & realisation of the potential for the participative governance of a given MPA to influence the higher-wider statutory framework, processes and obligations, *i.e.* that local people can have an influence on higher level institutions as well as being influenced by them in a co-evolutionary manner.