

Building Trust, Empowering Resource Users: Efforts Underway to Educate, Encourage Participation of Fishermen in MPA Processes

Consumptive users of marine resources often do not embrace the concept of marine protected areas, particularly no-take zones. These stakeholders may distrust resource managers when confronted with the prospect of losing customary access privileges, as can be the case for commercial and recreational fishermen. Such distrust can be especially common when stakeholders are not fully involved in the planning of protected areas.

In efforts to build trust and empower resource-user groups, initiatives are underway worldwide to inform fishing communities about MPAs and the roles that fishermen can play in their planning. Several such initiatives have taken the form of workshops and meetings held by government agencies, NGOs, and fishermen themselves. This month, MPA News examines some of these meetings and how organizers have set them up.

Building better communication

In January 2002 the Pacific Marine Conservation Council (PMCC), a US-based NGO, gathered more than 150 commercial fishermen and representatives to recommend ways to improve communication on MPAs among resource managers, scientists, and fishing communities of the US Pacific coast. Concerned that the interests of fishermen were being inadequately addressed in MPA-planning processes, PMCC sponsored the "Fishermen's Forum on Marine Protected Areas" to bridge the communication gap. The forum also aimed to provide attendees with a working knowledge of MPA science and regional MPA initiatives.

Invitations to participate in the forum were first sent to fishermen, each of whom was asked to nominate another interested individual from his or her community to attend, including other fishermen, port directors, and economic development officials. PMCC Science Director Jennifer Bloeser, who helped coordinate the forum, said this technique attracted people who did not normally attend public sessions on resource management. "There is the usual group of people who attend resource committee meetings, and we wanted to get beyond that," she said. "We got a lot of people we hadn't met before, and this contributed fresh perspectives."

With support from the David and Lucile Packard Foundation, PMCC paid travel, lodging, and food expenses for attendees. Bloeser says this was necessary due to the large geographic focus of the meeting, spanning the states of California, Oregon, and Washington. "It is expensive to get to a meeting like this," she said. "Without support, fishermen would have felt left out from the beginning." Although costly (US \$125,000), the price was worth it, she said. "In addition to making the meeting affordable for participants, the financial support made them feel their views were valued," said Bloeser.

For the forum, PMCC assumed a neutral stance on MPAs. According to Bloeser, this non-advocacy role allowed fishermen to feel more comfortable in attending. "Our role was to facilitate communication and share information, not to argue the pros and cons of MPAs," she said. (The board of directors of PMCC is a diverse group of fishermen, scientists, NGO representatives, and other individuals.) PMCC has produced a CD-ROM featuring recommendations from forum participants and video footage of the science and policy presentations. It is available for US \$10 from the PMCC website (www.pmcc.org). The recommendations have been sent to state and federal resource managers, and two follow-up meetings of fishermen — independent of PMCC — have occurred in Pacific coast communities since the forum.

Learning from others' experience

In Mexico's Gulf of California this month (March 21-24), a meeting will bring together fishermen to discuss marine reserves as a tool in fisheries management. Coordinated by a team of NGOs and academics, the "Fisher to Fisher" meeting is designed to help fishermen learn from each other's experience with reserves throughout Northern Mexico.

"The goal of the meeting is to promote communication, coordination and learning among fishers from communities that share similar problems," said Hudson Weaver of Comunidad y Biodiversidad (COBI), a Mexican NGO that is co-hosting the meeting. "Like with most MPAs in the world, in Mexico there is a lot

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of misinformation and fear about what a reserve could do. [With this] meeting, fishers who have already experienced the benefits of having a reserve can share their experiences with others looking for solutions.” Similar to the Fishermen’s Forum in the US, the meeting will incorporate presentations on MPA science and processes, including plans for a community-based marine reserve in Bahía Kino, site of the meeting. The process to designate the Bahía Kino reserve was initiated by small-scale fishermen in the community.

“The act of bringing fishers together from remote communities and creating a safe place for them to discuss their questions and doubts about marine reserves should produce honest and useful results for all the communities,” said Weaver. “In Mexico there exist very few forums in which fishers can participate, discuss problems, and search for solutions. This is the first meeting of its kind in the Gulf of California.”

The organizers — COBI, Conservation International-Mexico, the University of Rhode Island Coastal Resources Center (US), and Prescott College (US) — expect 70 attendees, the majority of them fishermen. Travel expenses for fishermen will be paid through grants from multiple sources. In addition to securing funding, said Weaver, one of the biggest challenges associated with the meeting has been to communicate effectively with fishermen to notify them of the opportunity. Most fishermen in Northern Mexico do not have telephones or e-mail in their homes. “COBI has created a strong support team of many organizations — both NGOs and governmental — willing to help coordinate and communicate with these remote locations,” said Weaver. COBI has also worked with the small community of Bahía Kino, which has no conference facilities or hotels, to prepare for the gathering, she said. “Bahía Kino provides a modest and relaxed atmosphere which we are hoping will set a good tone for the meeting.”

Taking charge of resource management

The North Atlantic Responsible Fishing Council (NARFC), a consortium of commercial fishermen and resource managers from the European Union, Canada, and the northeastern US, is preparing to host its third conference this June 9-11 in Yarmouth, Nova Scotia (Canada). Similar to the council’s first two conferences, the meeting will encourage greater involvement of fishermen in stock assessments and promote the development of more conservation-oriented fishing gear and practices. MPAs will be a topic of discussion.

Jean Guy D’Entremont, a Canadian fisherman and co-chair of the NARFC steering committee, says MPAs are a sore spot for commercial fishermen because of their use by some interests to exclude the industry from certain areas. “However, MPAs can be whatever you decide that they be: no-take zones, partial access, etc.,”

he said. “In Canada, we have had a seasonal closed area since the early 1970s for spawning haddock. This area is presently the most productive groundfish fishing area in Atlantic Canada and boasts the healthiest haddock stock.”

D’Entremont credits that seasonal closure for its role in protecting the stock, but points out that other management measures — including a recent reduction in catch quotas — have also played a part. MPAs should be considered as one tool for encouraging responsible fishing, he says, along with moderate harvest rates, selective fishing, dependable scientific assessments, and reduced resource wastage. “Fishermen will be quicker to endorse MPAs as a tool for responsible fishing when they are not imposed on them simply to remove them from an area or fishery,” he said. “Fishermen will soon realize that MPAs can provide a test area to monitor the effects of fishing on stock health, [in contrast to] the effects of natural environmental changes.”

In arranging the NARFC conferences, D’Entremont has had to convince fishermen to take time off from the immediate concerns of running their businesses and “chasing” management and science meetings to attend a meeting that deals largely with the future. Attendees must pay their own way. “Some fishermen still believe that the government owes them,” said D’Entremont. “However, it is becoming increasingly evident that it is up to us to take care of our own, and that we should put our money where our mouths are.”

MPA orientations, public consultations

In the Philippines, where hundreds of community-based MPAs are managed by fishermen’s organizations, village councils, or multi-sectoral groups, “cross-visits” by managers from one MPA to another are not unusual. Such visits allow individuals from different communities to observe and learn from one another. The Coastal Conservation and Education Foundation (CCEF), a Filipino NGO devoted to coastal resource management, facilitates cross-visits and the use of other techniques to inform stakeholders about MPAs in the country’s Visayan region.

For communities unfamiliar with marine protected areas, CCEF provides orientations and public consultations targeting large stakeholder groups, including fishermen. The meetings introduce the concept of MPAs, how they can contribute to coastal resource management, and how sites may be selected. The orientations and consultations also provide a venue to address concerns and questions raised by locals. Ultimately, each community must decide whether or not to implement MPAs as a management strategy.

Should a community decide in favor of designating a protected area, CCEF provides further training for site identification, management planning, and monitoring. In addition, the foundation trains managers and interested fisherfolk to assist in the patrol and surveillance of MPA sites. The latter training is coordinated with the national Bureau of Fisheries and Aquatic Resources.

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Meetings for recreational fishermen

In the US and Australia, MPAs have increasingly drawn the attention of national sportfishing groups that have questioned the closure of accustomed angling areas when there is little definitive proof of impacts by recreational fishing. The US National Marine Fisheries Service (NMFS), which manages sportfishing in federal waters, offered a forum for the nation's recreational fishing community to discuss a range of issues three years ago ("RecFish 2000"). Based on feedback from attendees of that conference, NMFS scheduled a follow-up meeting this year — RecFish II — to be devoted largely to MPAs and their implications for anglers, including the general involvement of sportfishermen in MPA planning.

Although the meeting, originally scheduled for February 2003, has been postponed, a NMFS official told MPA News the agency hopes to reschedule it for later in 2003. "[NMFS] managers believe that the widest discussion of MPAs, including varying points of view,

would benefit everyone interested in the issue," said the official. One reason for the postponement was to allow time to expand the agenda to include non-MPA issues.

"As was discovered at RecFish 2000, there is great value in a national forum in which the [recreational fishing] community can gather to discuss issues of common interest," said the official. "NMFS benefits directly from such a forum by being involved in deliberations with key constituents on their concerns and expectations as they relate to NMFS programs."

In May 2002, the 3rd World Recreational Fishing Conference in Darwin, Northern Territories (Australia), offered a forum for stakeholders to discuss issues relevant to the sustainable management of recreational fishing, including marine protected areas. One focus of the meeting was the development of an international code of practice for recreational fishing. Theme speakers included several individuals active in MPA science and planning. For more information on the conference, visit <http://www.wrfc3.com>. 

Notes & News

New Zealand approves marine reserve around terrestrial World Heritage site The New Zealand government has approved plans to designate a 4840-km² marine reserve around the Auckland Islands, about 460 km south of the South Island of New Zealand. A formal gazetting process is to come. The upcoming designation, to include a ban on extractive activity, will provide a level of protection equal to that of the islands' uninhabited terrestrial environment, already designated as a UN World Heritage area and national nature reserve. In recent years, little commercial or recreational fishing has occurred in the reserve's waters, home to several rare marine mammal and sea bird species. The new MPA, stretching 12 nm from shore and protecting ecosystems as deep as 3000 m, will be the second largest marine reserve in New Zealand waters after the 7450-km² Kermadec Islands Marine Reserve. Conservation Minister Chris Carter said he hoped to announce several more marine reserve approvals by the end of 2003. To view the government's official application for marine reserve status for the Auckland Islands, visit <http://www.doc.govt.nz/Conservation/Marine-and-Coastal/Marine-Reserves/Auckland-Islands-Marine-Reserve-Application.asp>.

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International workshop plans development of high-seas MPAs In January, experts on international law, biophysical science and marine management met in Málaga, Spain, to craft plans for the development of a global network of MPAs on the high seas, outside national jurisdictions. A consolidated action plan based on the workshop's findings is expected to be released in

April 2003. The workshop was financed by the J.M. Kaplan Fund and held under the auspices of the IUCN, its World Commission on Protected Areas, and WWF. Attendees agreed the target date for designation of a high-seas MPA network would be 2012, the same target set by last year's World Summit on Sustainable Development to establish a global system of MPAs (MPA News 4:3). "As the high seas cover 50% of the Earth's surface, a global representative network would by necessity have to include the high seas," said workshop coordinator Kristina Gjerde. **For more information:** Kristina Gjerde, IUCN/WCPA/WWF High Seas Project Coordinator, ul. Piaskowa 12c, 05-510 Konstancin-Chylice, Poland. Tel: +48 22 754 1803, E-mail: kgjerde@it.com.pl. Charlotte Breide, Solicitor, Senior Legal Advisor-High Seas, WWF International, Avenue du Mont Blanc, 1196 Gland, Switzerland. E-mail: cbreide@wufint.org.

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Proceedings available from MPA economics conference Papers presented at the June 2000 "Economics of Marine Protected Areas" conference held in Vancouver, British Columbia (Canada), have been published. Two special issues of the research journal *Natural Resource Modeling* (Volume 15, Nos. 3 and 4) contain five papers apiece from the conference. Five additional papers appear in Vol. 30, No. 2 of *Coastal Management* journal, a separate publication. Both journals are available only to subscribers. Non-subscribers may wish to read the lead article in the August 2000 issue of MPA News, which described much of the research (<http://depts.washington.edu/mpanews/MPA11.htm>).

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MPA Perspective: Integrity in Management

By Graeme Kelleher, former Chairman and Chief Executive, Great Barrier Reef Marine Park Authority

The most important attribute of an MPA manager is integrity. It may seem strange that I cite this principle as the most important, because it is much less technical than most of the general rules that are applied to management. However, it is given prominence here because the competitive nature of humans in general and managers in particular seems to lead most managers to dispense with integrity when it suits them. Many managers have made the mistake of believing that they can fool some of the people all of the time and all of the people some of the time. The consequence of this is that the manager appears to win a series of battles, but he or she loses the war because of the accumulation of loss of trust. This eventually leads to failure (Idechong and Graham 1998; Pearson and Shehata 1998; Tanzer 1998; Kelleher 1999).

One of the areas in which this principle of operating with integrity was deliberately applied was in the development of the Great Barrier Reef Marine Park. This MPA started small — the first section covering only 12,000 km² — in a typically controversial atmosphere. Government in general and the new Great Barrier Reef Marine Park Authority in particular were looked on with suspicion, based on a litany of broken political and administrative promises. This situation prevails in most, perhaps every country. While the legislation that established the Authority provided for wide public consultation, the public as well as most major interest groups expected the Authority to carry out “pretend” consultation. This expectation was well-founded in experience because we all know of agencies and people who deliberately seek to exclude from consultation those who oppose their objectives. As well, managers often delay consultation until a plan has been formulated. We all know how we ourselves react when treated this way.

In this context, we [the Authority] made the deliberate decision to involve meaningfully from the start those who saw the idea of an MPA as contrary to their interests. Of course, the commercial and recreational fishing interests fell into this group. Initially, we attended dramatic meetings with the commercial fishermen, when we were subject to gross insults and the implied threat of physical violence. We deliberately refrained from verbal retribution and concentrated on finding out from the fishermen what they knew of the ecosystems in which they operated and where their principal fishing grounds were.

On the basis of this and other information we formulated our first draft zoning plan, which we released for


public comment. The Queensland Commercial Fisherman’s Organisation (QCFO) and individual fishers came to us and said, “Look! You’ve closed one of our best fishing grounds.” Our response was, “But you told us that you didn’t fish there!” They then responded, “But surely you didn’t expect us to tell you where our best fishing grounds were!”

We then modified the zoning plan so that we were able to protect the target habitat type without closing the particular area that the fishers regarded as “theirs”. From this start, the trust between our organizations improved to the extent that the Chairman of the QCFO, his officers and individual fishers worked with the Authority in developing all the zoning plans. Eventually, the Chairman, Ted Loveday, recommended to other areas around Australia that they adopt the Authority’s management approach.

In order to ensure real consultation, we used an iterative approach where we discussed every proposed change in a zoning plan with every interest group in a pro-active manner. We sought them out rather than requiring them to come to us. Sometimes this meant that a new zoning plan took two years to come into effect, rather than the short time specified in the legislation. But the additional effort involved in this approach was repaid many times when the zoning plans were in operation. All groups were sure that their interests had been dealt with to a satisfactory degree.

I have no doubt that in the absence of the trust that our approach generated, the GBR Marine Park would never have expanded to cover its existing 350,000 km².

Incidentally, this example also illustrates one of the benefits of multiple-use MPAs. In these, specific provision can be made for the interests of every interest group. The initial plan is not seen as the thin edge of a wedge that will be expanded forever.

I and others could cite many, many other examples of the benefits of the application of integrity. The articles by the authors cited in the first paragraph above appear in the June 1998 edition of *Parks*, the journal published by the IUCN. [That edition of *Parks* is available online in PDF format at http://www.iucn.org/themes/wcpa/pubs/pdfs/PARKS/Parks_Jun98.pdf.] 

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How much influence should community stakeholders have in planning an MPA?

The perspective piece on this page by Graeme Kelleher and the letter on the opposite page by Graham Edgar both address the issue of community participation in MPA processes, drawing upon each writer’s experience. MPA News welcomes reader feedback: Do you agree or disagree with their viewpoints? We will print responses.

Graeme Kelleher is former Chairman and Chief Executive of the Great Barrier Reef Marine Park Authority, and has edited and authored several MPA-related publications, including IUCN’s *Guidelines for Establishing Marine Protected Areas* (1999).

Graham Edgar was Head of Marine Research and Conservation for the Charles Darwin Research Station in the Galápagos Islands, Ecuador, from 2000-2002.

Letter to the Editor

Dear MPA News:

I was interested to read comments published in MPA News Vol. 4, No. 7 (February 2003) on process and achievements associated with the new Victorian MPA system, particularly the recognition that an exceptional system of MPAs could be achieved without consensus amongst stakeholders. The need for an appropriate education campaign in this situation was stressed.

During the past decade, much has been spoken and written about the importance of consensus and “bottom up” approaches when formulating successful MPAs, authoritative “top down” approaches being largely discredited. However, I would like to see this contention being rigorously re-examined. I suspect that education and the active prevention of poaching play much larger roles in the success or otherwise of MPAs, and that prolonged search for consensus may in fact be harmful in many cases. In my experience, the most successful MPAs (Leigh in New Zealand; Great Barrier Reef Marine Park; Maria Island in Tasmania) were declared in the face of opposition from local resource users, but over time the benefits of these MPAs have become self-evident and they now attract enthusiastic local support.

Undoubtedly the greatest achievement for consensus politics has been the Galápagos Marine Reserve (GMR), with ~20% of the total coastal area agreed unanimously amongst stakeholders as “no-take” tourism and sanctuary zones. Nevertheless, this MPA has yet to be fully accepted by local fishers and its success remains to be properly gauged after residents come to terms with the pronounced social shift from a virtually lawless situation to one managed by participatory decision-making.

The Galápagos case does, however, indicate the importance of enforcement. During the lucrative 2002 sea cucumber season, no policing occurred over a three-week period following a contractual dispute and the withdrawal of navy support to patrolling by the Galápagos National Park Service. (Naval presence is required by law.) Despite agreements by all GMR stakeholders to respect sanctuary zones, illegal fishing occurred openly in closed zones during this time, devastating protected stocks.

Certainly, MPAs derived by consensus represent the ideal condition, all else being equal — particularly when this translates to a sense of local ownership and pride, with safeguards against poaching. However, negatives associated with MPAs agreed by consensus can include the time required for the negotiation process to reach conclusion, the generally small areas finally agreed to, and lack of any protection for resource-rich regions and

habitats. Community decisions about MPAs should reflect regional, not just local, opinion.

My views on this issue have no doubt been colored by the situation in my home state of Tasmania, where four MPAs were declared in 1991 without support from the fishing industry. The leader of the recreational fishing lobby in fact stated that there would be “blood on the water” if an MPA were to be declared at Maria Island, and compromises were made during each round of negotiation that reduced its conservation value (ultimately resulting *inter alia* in reef gill-netting by both recreational and professional fishers being permitted off 5 of the 12 km of coastline within the Maria Island “marine reserve”). Lack of industry support notwithstanding, the Tasmanian community quickly concluded that the Maria Island sanctuary zone was a great success with rapidly increasing numbers of large rock lobsters and fishes, and two years later a network of MPAs for the state was agreed in principle by all local political parties. However, the larger network has progressed little over the past decade — and net fishing continues in much of the Maria Island reserve — as the search for consensus amongst stakeholders continues.

For Galápagos, final consensus on boundaries was only reached by locking away all stakeholder representatives on a cruise of the islands (locally referred to as “the love boat cruise”), with instructions to the captain to stay at sea until agreement was reached.

Clearly, the declaration of MPAs ultimately depends on political criteria, which are not necessarily the same as the scientific and social criteria required for effectiveness. We cannot ignore the fact that MPAs will generally alienate part of a politician’s constituency — either resource users who feel “locked out” of an area, or conservationists who feel that the MPA is too weak. An unfortunate consequence is that a politician’s interest is normally best served by deferring a decision but appearing active. A common way of doing this is an illusive search for consensus involving ongoing consultations, committee meetings, strategies, background documents, briefings, discussion papers, draft reports, etc. If this process is not concluded within a term of government, then it can slip back to the start. To me, this may be the pre-eminent reason why the best-designed MPA in the world, justifiable for all the right social and scientific reasons, often seems to go nowhere.

Graham Edgar

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Manager Profile: Ashraf Saad Al Cibahy

This month, MPA News commences a new feature — the Manager Profile — to introduce readers to MPA managers around the world and the challenges they face.

Position: Head of Marine Protected Areas (since 2001), Environmental Research and Wildlife Development Agency (ERWDA) of Abu Dhabi Emirate, United Arab Emirates.

Age: 38

Background:

- Served as Deputy Manager of South Sinai Protected Areas (marine and terrestrial) of the Egyptian Environmental Affairs Agency, and was Egypt's national representative for MPAs to the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA).
- Has taught courses on environmental management, protected-area management and networking, and wetland management to practitioners from throughout the Arabian Peninsula and eastern Africa.
- Holds M.Sc. in application of remote sensing and

geographic information systems (GIS) for environmental studies from Alexandria University.

- Is a PADI Advanced Diver with more than 700 dives.


Responsibilities:

- Manages the 5561-km² Marawah Marine Protected Area (see box), the first designated MPA in what is expected to become a network of marine protected areas within Abu Dhabi Emirate by 2007.
- Recommends sites for establishment of new MPAs.
- Communicates with local people to raise awareness of protected areas.
- Develops and promotes MPAs as ecotourism destinations and environmental education centers.

Challenges he faces:

- Managing conflicts among stakeholder groups, including fishermen, oil/transport industries, coast guard, municipal officials, and the general public.
- Building the capacity of rangers, whose career is fairly new in the Arabian Gulf region.
- Directing research and monitoring programs to benefit and support MPA management decisions.

Lessons learned, according to Al Cibahy:

- Lesson 1. Gain adequate social and political support before applying management decisions. “Always avoid abrupt decisions since they are dangerous and will not be accepted by the community.”
- Lesson 2. Prove the benefits of MPA management to people inside and outside the MPA. “Theoretically, all target user groups receive economic benefits from the MPA and its components. Practically, it is the role of management to emphasize these values. The direct economic value is obvious for some stakeholders, while for others the indirect or intrinsic value of the MPA must be explained. An explanation could start with questions such as ‘What is the value of conserving a mangrove tree?’, ‘What is the value of its shade and shelter?’, ‘What are the links between this tree and the fish stocks, birds’ nests, water quality, etc.?’”
- Lesson 3. Introduce the law gently. “Do not apply legal approaches to enforce regulations unless public awareness has been developed and alternatives have been provided. Before enforcing a no-anchoring regulation, for example, you should provide mooring buoys or an anchorage area and clearly define this to the public.” 

Marawah Marine Protected Area

Year designated: 2001

Location: In the Arabian Gulf at the western end of Abu Dhabi Emirate (UAE), about 150 km from Abu Dhabi City. (The Arabian Gulf is known as the Persian Gulf in many Western nations.)

Description: Includes habitats of national and regional significance (seagrass beds, mangroves, coral reefs), as well as islands and a 160-km coastline.

Socioeconomic importance: More than 700 individuals of about 107 families possess inherited rights to fish in the waters of Marawah MPA. The MPA is estimated to supply more than 2700 metric tons of fish per year to local communities.

Restrictions on human activities:

- Commercial fishing is forbidden, except by local artisanal fishermen using traditional gear. Fishing must occur at least seven nautical miles from shore.
- Catch of dugongs, turtles, and marine mammals is forbidden.
- Any new building, dredging, filling, or other shore-based development activity is strictly controlled.

Threats: Oil spills are the main threat as Marawah MPA is located within the world's foremost petroleum production region, the Arabian Gulf. ERWDA has classified all Abu Dhabi marine and coastal areas according to their sensitivity and priority for protection in the case of a spill; Marawah MPA is considered a high-priority area. The emirate has conducted spill-response exercises and trained ERWDA staff and other authorities on response tactics and planning. Discussions to formulate a national oil spill contingency plan are underway.

Other threats include development-related impacts, discarded fishing gear, boat anchors, litter, and coral bleaching.

Estimated 2003 budget: 5 million DH (about US \$1.4 million)

For more information

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