08<sup>th</sup> December 2009

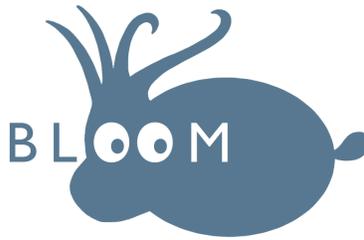
We are writing to give our support for the Hong Kong Government's proposal to ban commercial fishing in all marine parks.

- **“Overfishing represents the most serious threat to the diversity and abundance of reef fish communities in Hong Kong”, (Sadovy & Cornish, 2000).**

Waters surrounding Hong Kong used to support a huge and valuable fishery, which was beneficial to local people, in terms of economy and food security. However, decades of unregulated fishing have left our once bountiful ocean an almost empty sea. This has significantly damaged local marine environment and the livelihood of fishermen.

Over the past fifty years, there has been a steady decline in fish landings from Hong Kong waters. In 1995, the Agriculture and Fisheries Department of the Hong Kong Government commissioned a comprehensive study on the status of local fishery resources and fishing operations within Hong Kong waters (ERM, 1998). The study revealed that local catches had declined by approximately 50% and that fish fry production had also declined by almost 90% over a decade. Furthermore, yield-per-recruit analysis indicated that 12 out of the 17 commercially important fish species studied were “heavily over-exploited”, while the remaining five were categorized as “fully exploited”. The study also suggested that if fishing effort continued at its current level, local fishery production could be unsustainable.

Several decades ago, groupers, snappers and croakers were not only more abundant in Hong Kong waters, but also much larger in size. Given the intensity of fishing effort since the Second World War, there has been a significant reduction in large and highly commercially valuable fish species – such as metre-long mud/greasy grouper 泥斑

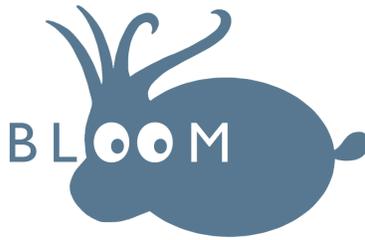


(*Epinephelus bruneus*) (Herklots & Lin, 1940), Hong Kong red grouper紅斑 (*Epinephelus akaara*), Chinese seerfish (*Scomberomorus sinensis*), Chinese bahaba 黃唇魚 (*Bahaba taipingensis*) and Lutjanidae – in local waters (ERM, 1998; Cheung, 2001; Leung, 2003; Sadovy & Cheung, 2003). The local fishery was shown to have shifted from being dominated by large, slow growing, highly commercially valuable species to being comprised of small, fast maturing, relatively less commercially valuable species including rabbitfishes (Siganidae) and mullets (Mugilidae) (Pitcher et al., 1998; Situ & Sadovy, 2004; Buchary et al., 2003), and species which were historically classified as bycatch or used as fish food in mariculture (Wilson, 1997). Nevertheless, an underwater visual census survey conducted to study fish assemblages inhabiting coral communities in Hong Kong showed that adults of commercially valuable fish species were extremely scarce (Cornish, 1999; personal observation).

In conclusion, data from both empirical and modeling (Buchary et al., 2003) have suggested that overfishing has already occurred within Hong Kong waters.

- **“There is urgently need for conservation and management of local fisheries resources”, (Sadovy, 2002).**

Banning commercial fishing in all marine parks is probably one of the best ways to protect the marine resources and the environment within Hong Kong’s marine parks. Previous studies suggest that as fishing pressure increases, larger fish may be absent, catch rates may decline and species losses may occur (DeMartini, 1993). Thus, protection from fishing could have a positive impact on fish populations. In addition to banning commercial fishing in all marine parks, it is strongly advised that recreational fishing be banned or regulated. Despite the fact that there are some 400,000 recreational fishers in Hong Kong (Morton, 2005), relatively few studies have been

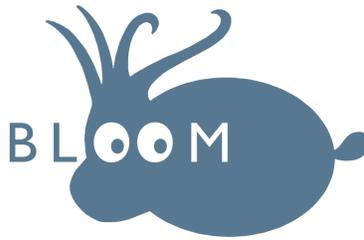


carried out to investigate the potential effects of recreational fishing on local fish populations and beyond, whilst previous researches have indicated that recreational fishing could reduce the targeted fish populations, making them vulnerable to overfishing (Westera, 2003) and exert a significant influence on the species composition between the recreational fishing area and no-take area (Westera et al., 2003; Coleman et al., 2004).

The benefits from a no-take marine protected area (MPA) could be significant. Worldwide, most no-take MPAs show great potential for managing multi-species fisheries and habitats (Roberts & Polunin, 1993; Bohnsack, 1998). There are successful examples of this in Africa, Asia, New Zealand, Europe, United States of America and the Pacific Islands (Jennings et al., 1995; McClanahan & Kaunda-Arara, 1996; Wantiez et al., 1997; Russ & Alcala, 1998; PISCO, 2007).

The review of the application of MPAs in relation to fisheries has shown that MPAs can have the following positive effects (Bohnsack, 1998; PISCO, 2007; Cudney-Bueno et al., 2009):

1. Provide refuge from harvest, and in particular, protect spawning stocks and juvenile species, which could enhance and/or restore population size;
2. Restore community composition in terms of species and diversity;
3. Increase the biomass (size) and/or abundance of commercially valuable species within MPAs;
4. Create opportunities for wilderness experiences;
5. Reduce overfishing or fishing pressure of vulnerable marine species;
6. Provide long-term undisturbed sites which could facilitate scientific researches;

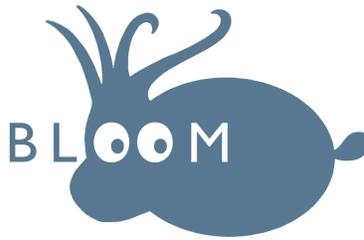


7. Protect habitats from fishing gear, as gill netting, which is one of the most common fishing practice in local waters, can damage coral communities when fishing takes place;
8. Enhance the net migration of fish across no-take MPA boundaries and larval dispersal, which might, in turn, improve the fishing outside the no-take MPAs.

Moreover, a local study that was conducted in 2002 to compare the fish data between recreational fishing sites and core areas (no-take areas) within the Tung Ping Chau Marine Park, found that the mean fish abundance was significantly higher in the no-take zones than in the recreational fishing areas (Ang et al., 2004). Results from economic modeling analyses indicated that the more no-take MPAs in Hong Kong waters that there are, the higher the potential for economic benefit (Buchary et al., 2003).

Fishery resources are one of Hong Kong's biggest assets. Without them, Hong Kong might not have been able to become what it is today. The government's involvement in enforcement and regulation is seen as a key element to the success of fisheries management. Banning all commercial fishing within marine parks must therefore be regarded as an initial step towards achieving a long-term comprehensive and effective fisheries policy that is in line with the Agriculture, Fishery and Conservation Department's (AFCD) ultimate goal to conserve fisheries resources in local waters and promote the sustainable development of the fisheries industry.

We look forward to supporting you in your proposal to carry through with this plan.



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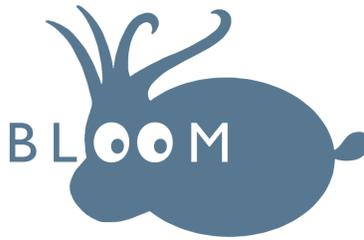
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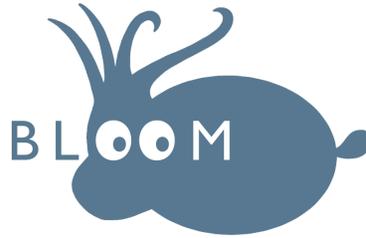
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