

Conclusions and recommendations

At present, severe environmental concerns facing GIWA region 57 Indonesian Seas include most of those considered by GIWA; Freshwater shortage, Pollution, Habitat and community modification and Unsustainable exploitation of fish and other living resources. These concerns are also having severe socio-economic impacts in large parts of the region. Thus, the overall present situation and future prognosis for Indonesian Seas is that:

- The human population is growing rapidly, with an expected 300 million people by 2020, most in Sunda - with widespread religious and cultural traditions fostering large family sizes, exacerbated by inadequate policy focus towards developing and implementing population stabilisation strategies.
- Millions of coastal people are living near or below the poverty level and rely on subsistence level fishing for survival.
- There is widespread continued use of inappropriate technologies and clear evidence of impending collapse in ecological sustainability.
- Most national and provincial laws and regulations are either not known or not well accepted by local populations, with significant inter-provincial differences in the application of national legislation.
- There are also significant differences in international waters concerns among different areas, requiring definition and assessment of three GIWA sub-systems: Sunda, Wallacea and Sahu.
- There are already severe environmental and socio-economic impacts within these sub-systems, with Sunda being worst affected, Wallacea being intermediately affected and Sahul being least affected.
- There is inadequate enforcement of the relevant regulations, including corruption across the various enforcement and legislative agencies.
- Most of the environmental impacts are expected to worsen over the next 20 years, other than in the few well-managed MPAs (e.g. Komodo National Park), where strong surveillance, enforcement, education/awareness and AIG programmes are already being implemented.
- There may be some stabilisation and improvement in the socio-economic indicators.
- There is a pressing need to better integrate international water-related sectors in policy, with linkages among food security, poverty, natural resources, environment pressures, market forces and governance.
- It may be possible to slow down the rate of increase of impacts although at present environmental concerns are of less importance than development pressures, many of which have inappropriate environmental effects.
- There are major opportunities for improvement in the political situation and from private sector and national/international NGOs.
- Local to large-scale interventions by government and NGOs (e.g. MCREP, COREMAP, WWF Wallacea Bioregion programme, TNC Komodo programme and others) have the potential to slow the rate of deterioration significantly, provided these continue to receive adequate political, fiscal and logistic support.
- A 'critical mass' of expertise and frameworks for change are developing, involving science, policy, people, private sector and government.
- There is misallocation of significant amounts of local and international funds, with major opportunities for better allocation and use.
- The rapidly changing global situation will continue to cause changes in international funding priorities.
- There is a pressing need for better allocation of local funds and continued international donor funds to alleviate the present situation and to work towards improving future scenarios.

The Indonesian Seas region, with its neighbouring Sulu-Sulawesi Sea and South China Sea, lies at the centre of the world's marine biodiversity, supports a rapidly growing, generally poor, human population and has rapidly deteriorating riverine, coastal and marine ecosystems with possible collapse of many of its international water resources.

Indonesian Seas are of central global importance in terms of International Waters, global climate (ENSO) and Biodiversity, and these three universal attributes are under extreme threat, as posed by the complex combination of socio-political factors identified above. Addressing the severe impacts and threats through the identified policy options will require real commitment from much of civil society, and place major responsibilities on governments, non-governmental organisations, educational institutions and the private sector. The challenge of gathering the cooperation necessary for the sustainable development of this critical region is great, but not insurmountable (PEMSEA 2002). In recognition of this, the GIWA Task team suggests that the Indonesian Seas Region, with its neighbours Sulu-Celebes (Sulawesi) Seas and South China Sea, be afforded the highest priority by the Global Environment Facility.