

CHAPTER 5

CONCLUSION AND SUGGESTIONS

5.1. Conclusions

1. It is concluded that the mangroves species like *Avicennia marina* disperse and germinates easily in green house or artificial environment with some specific treatment measures of seawater at two different concentrations 25 and 50%, Hoagland solution and fresh water the planting of mangroves is now widely advocated as a means to increase coastline security, but planting efforts will only succeed where conditions are naturally suitable for mangrove establishment and, equally important, acceptable in the context of ongoing economic and political pressures to claim and develop valued coastal property. In fact, early evidence suggests that many post-tsunami restoration initiatives are encountering problems of this kind.
2. The further challenge is that population and related development pressures are certain to grow along many coastlines Compounding this, most climate change scenarios predict rising sea levels and increasingly frequent storm events which will damage and further squeeze the ecological distribution of mangroves in many areas human ingenuity will certainly be put to test in the coming years, but recent events have revealed that there is a great deal at stake if we fail.
3. For if past economic and environmental arguments for conserving mangroves were not viewed as synonymous with human security, it is perhaps only because we did not put a human face on those whose lives and livelihoods depend on these unique and valuable forests. Tragic as it was, the Asian Tsunami of 2004 gave us this human face and, in so doing, has redefined mangrove conservation as a human security concern. Yet, the general re-framing of issues like this will only get us so far. Successful mangrove restoration and management in the face of increasing human and environmental stress will ultimately depend on our understanding of the interactions between people and mangroves in particular contexts and the wider political and economic influences on these interactions. In this respect, the burgeoning literature on environment and security provides little concrete guidance for researchers, managers or policy makers.

5.2. Suggestions

1. Foreign investments should be evaluated taking into consideration the entire costs of potential environmental damage, especially those that may have an impact on the mangrove ecosystem. In-depth scientific investigations on the following concerns should be done in light of the complexity of the issue of biodiversity in marine ecosystems and the knowledge gathered thus far.



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