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| **Template 3B: Understanding how human activities and actors relate to ecosystem services (examples from Kochi, India)** |
| **Which activities help to protect ecosystems and to ensure a sustainable provision of ES? (by conserving biodiversity or managing ecosystems)Who are the stewards?** | **Which activities use or depend on ES?Who are the beneficiaries that have an interest in ES provision?** | **Which activities pollute ecosystems and/or deplete or harm the provision of ES?Who are the degraders?**  |
| activities | actors | activities | actors | activities | actors |
| * mangrove management
 | * coastal zone authority / Indian coast guard / navy (national)
* protected areas managed by forest department
 | * fishing (mangrove for breeding and nursery)
 | * fisherman and communities consuming fish
* fishing industry
* boat tour operators
 | * Cochin shipyard port activities
* Kochi LNG (liquid natural gas) terminal construction for offshore storage and transport destroy mangroves
 | * households with sewage
* constructors
* Indian navy (dredging)
* Indian coast guard (dredging)
* Indian national railways (cut down mangroves
 |
| * Management and protection of Mangalavanam
 | * Kerala Forest Department
* Kochi Municipal Corporation
 | * Leisure trips, including boat tours (for pleasure, recreation, physical & Mental Health)
 | * Public visitors
* Tourism operators
* morning walkers
 | * Incompatible land use in surrounding area (with high buildings)
 | * Corporation GCDA
* Railway
* Developers
* High court
* KMC
* Govt. of Kerala
* Private builders
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| * Eco-friendly tourism
 | * DTPC
* Private Agencies
 | * Nature Camps and education activities
 | * Students
* general public
* neighborhood
* KFD
 | * Light and noise pollution in surrounding area
 | * Local public and households
* high court building
* traffic
 |
| * Research
 | * KFRI
* CUSAT
* SACON
* Colleges
 | * Climate protection efforts
 | * Agencies responsible for climate protection
* Global community
 | * Improper drainage system and destruction of natural drainage
 | * Govt. bodies
* Local bodies
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| * Buffer zone protection
 | * Kerala State
 | * birdwatching
 | * bird watchers
* tourism operators
 | * Introduction of exotic plants and predators
 | * Forest Department
* Natural invasion
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