**IDENTIFICATION OF ENVIRONMETAL PROBLEMS: ISSUES AND CONCERNS**

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| **Problems/Issues** | **Causes/Sources** | **Effect/Consequences** | **Strategies/Solutions** |
| 1. LAND & PEOPLE (land use, transport)
* Unattended of astray animals (dogs, cats, goats and other domestic animals/pets)
 | Irresponsible pet owners; Lack of cages; Mal-practices of caring of pets | Cause of road accidents; animal bite – rabies; noise pollution, waste generation; digging/scattering of garbage; uncontrolled population | Vaccination of pets; regular patrolling of astray animals and increase penalties; close with PAWS Office; tagging/registration of pets; set limit in the number of pets per household with cage; IEC campaign  |
| 1. AIR (noise, vibration, emission)
* Excessive emission of marble dust (Romblon, Romblon)
* Foul odor from canals (Looc, Odiongan)
* Smoke belching from vehicles
* Illegal burning of wastes
 | Lack of facilities/process to collect marble dust; lack of training and awareness among workers to use the facilitiesDumping of garbage (plastics) and food wastes with the presence used oil and grease; Absence centralized sewage treatment; non-maintenance of septic tanks; inadequate size of canals that causes clogging; presence of informal settlers along canals and rivers; illegal dumping of animal wastes from poultry, piggeryInefficient motor vehicles (old/second hand – combustion); poor maintenanceNo collection in the area due to location (upland); Unawareness among residents | Increase in particulates; trigger respiratory illness; maximizing the utilization of marble dust/waste materials; covering vegetation and animals that stops growth (eventually die)Decrease in production of microbes (breakdown/decomposition the waste) due to the presence of used oil/grease; Health problem and economic loss especially in food business; inconvenience/annoyance in the surrounding that attracts insects/flyHealth problem; Increase of particulate (smog) which decrease air qualityIncrease of particulate; Health issues | Modernize the operation of marble production; Use sprinkler system to minimize dust in the surrounding; set-up of monitoring instrument to check the level of particulates coming the marble dust; proper training among workers and use PPEs; research on alternative use of marble dust (as additive for construction purposes)Strict implementation of RA 9003 (collection); proper disposal of used oil and grease, use oil/grease trap; conduct trainings on proper handling of food wastes; compulsory depository or collection tank/storage for poultry/piggery; regular clean-up of canals; removal of informal settlers; impose penaltiesCompulsory of smoke emission testing; Regular maintenance and phase-out of old dilapidated vehicles; Strict implementation RA 8749 (Clean Air Act); promote the use of renewable and green energyStrict implementation of RA9003 and RA8749; Practice of composting and recycling |
| 1. WATER (surface water, marine, groundwater)
* Unregulated/over fishing using traditional fish nets
* Poor maintenance of coastal area
* Clogging of canal/drainage system or waterways
* Seaweed bleaching (Looc)
 | Lack of monitoring of concerned government agenciesIrresponsible disposal practices of wastes with residentsAccumulation of plastic materials/ waste materials at the bottom of canals/waterways;Clogged pipes/leaking pipes Release of treated water from nearby fish pond that kills algae bloom and fish | Declining of fish population in the coast of Corcuera; Catch of young fish (fry) and during spawning season Water pollution/health/sanitation; Reduction of local tourismSiltation; Breeding ground of mosquitos – dengue and vector-borne diseases; contamination of waterways; flooding; water quality degradationSeaweed farms are degraded which result to economic loss;Loss of fish sanctuary  | Regular and strict implementation of the law (ordinance); Reestablishment of fish sanctuary; IEC campaign on proper fishingPenalize violators; Regular clean-up programs/drives; IEC program at the barangay levelStrict implementation of “no plastic” policy; Regular dredging or de-clogging; regular check-up or maintenance of water pipes IEC campaign for fish pond owners regarding proper wastewater utilization/disposal; Further treatment of wastewater for re-use |
| 1. WASTE (municipal, industrial, toxic waste)
* Improper waste segregation at source
* Absence of wastewater and waste management system in backyard piggery and poultry
* Lack of land fill facility
* Absence of Material Recovery Facility (MRF)
* Improper disposal of special waste (household), including medical wastes (clinic, centers, hospitals); slaughter house
 | Lack of trash bins/cans without proper labelNo fund to install wastewater/waste management system; No sanitary permit; Limited water supplyNo available land for developing a land disposal facilityUnaware of the regulations; No fund and available lot; Unaware of the regulations RA9003/RA6969; No available registered collector due to geographic location | Unsegregated wastes; Proliferation of pest (flies, rats, cockroaches); Foul odor; Presence of insects (flies, rats, etc.); Health and sanitary problems; water pollutant – receiving water bodies; resulting to poor water qualityImproper waste collection; Illegal dumping of wastes; Burning of wastesUnsegregated; Illegal dumping of wastes; Burning of wastes; No recycling; Breeding of pets and stray animals Piling of special wastes; uncontrolled temporary storage facility; health and sanitation issues; contamination of waterways | Provision of trash bins/cans with proper label in all designated areas/all houses and public placesImplement affordable treatment system; Strict regulation in terms of location – proximity to residential areas or sensitive areas (near bodies of water); Secure proper permits; PPEsProvide landfill facility; Implement RA9003Full implementation RA9003; IEC campaignFull implementation of RA9003 and RA6969; IEC campaign; Strict monitoring and penalties to offenders |
| 1. FOREST /BIODIVERSITY
* Cutting of trees for charcoal making without securing permit from DENR (Looc)
* Illegal charcoal making and trading (San Andres)
* Restrict practice of kaingin system in remote areas/forested areas (Libertad)
 | Poverty/Lack of source of income; Cost of securing permit and time of processing; unaware of requirementsPoor living condition/Lack of source of income; in demand of the product; lucrative income; proximity of the raw material; no monitoring from the governmentFor easy clearing of land for agricultural use (corn, root crops, vegetables)Less labor cost and other expenses (equipment) | Fines/penalties; ImprisonmentLandslide and soil erosion;Health problem – respiratory diseases (Refer to Air)Landslide and soil erosionContribution to carbon emissionLoss of habitat and displacement | Strict implementation and regular monitoring of the law (Refer to Municipal Ordince/DAO); Regular IEC campaign among residents/farmersSame as aboveThe government should introduce alternative source of income/livelihoodIf not avoided, then practice reforestation or government introduce reforestation program (tree planting of native species of trees)Alternative agricultural planting techniques (hydroponic, aeroponic, or backyard farming) |
| 1. MINING/QUARRYING/RESOURCE EXTRACTION
* Illegal utilization of mercury for extraction of precious metals (gold) (Magdiwang)
* Uncontrolled mining of marble (Romblon) including mountain feeble and slate (sedimentary rock)
* Presence of air-borne and respiratory (asthma, tb) Refer to AIR
* Unregulated sand quarrying (Corcuera)
 | Easy and cheaper process of extraction; less machinery/operation; availabilityLack of implementation (and monitoring) in terms of volume to be extractedMode of operation/processing that creates dust; Uncontrolled collection of marble dustLack of monitoring of the operation; Failure to implement the ordinance on sand quarrying (Corcuera); | Contamination of water Intoxication of surface water that cause organism to die; soil erosion; Non- compliance to Municipal Ordinance 1-2014 (Magdiwang)Landslide and soil erosion; Uncollected due taxes from operators/ownersIncrease of mortality rateIncrease of air pollutant (particulate) Coastal erosion; reduction of natural protective barrier along the coastal area | Proper affordable water treatment system with proper maintenance of tailing (pond) prior to dischargePlanting of trees (water lily, kangkong) to extract mercury from soil or prevent it to flow into the groundwater; Alternative chemicals for processing/extraction; setting of allowable limit (local ordinance) for volume of mercury to be used in the process (volume of ores vs volume of mercury)Regular inspection – as per ECC compliance; Tree plantingInstall dust collection system by the operators; Proper PPEs; Sprinkling system near the vicinity area to minimize dust generation; IEC program including check-up (mandatory among workers); regular inspection of the workplace (child labor)Strict monitoring of the ordinance |