**Biological richness of Gunung Slamet, Central Java, and the need for its protection**

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# Supplementary Material

NB: Information on numbers of sites have been removed for all threatened species.

# Supplementary Table 1

## (a) Average bird encounter rates across six sites on Gunung Slamet.

| Family | English Name | Scientific Name | Encounter rate | | No. of sites | IUCN Red List category1 | Endemic | Endemic Bird Area2 | Indonesian protection list |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| mean (± SE) | range  (min–max) |
| Phasianidae | Chestnut-bellied partridge | *Arborophila javanica* | 0.42 ± 0.043 | 0.30–0.56 | 5 | LC | No | Yes | No |
| Accipitridae | Javan hawk-eagle | *Nisaetus bartelsi* | 0.21 ± 0.010 | 0.19–0.22 |  | EN | Yes | Yes | Yes |
| Accipitridae | Crested serpent-eagle | *Spilornis cheela* | 0.32 ± 0.028 | 0.27–0.38 | 4 | LC | No | No | Yes |
| Accipitridae | Besra | *Accipiter virgatus* | 0.25 ± 0.032 | 0.22–0.29 | 2 | LC | No | No | Yes |
| Accipitridae | Black eagle | *Ictinaetus malaiensis* | 0.39 ± 0.057 | 0.28–0.52 | 4 | LC | No | No | Yes |
| Accipitridae | Changeable hawk-eagle | *Nisaetus cirrhatus* | 0.43 ± 0.075 | 0.28–0.51 | 3 | LC | No | No | Yes |
| Scolopacidae | Javan woodcock | *Scolopax saturata* | 0.15 ± NA | 0.15–0.15 | 1 | NT | Yes | No | Yes |
| Columbidae | Eastern spotted dove | *Spilopelia chinensis* | 0.31 ± NA | 0.31–0.31 | 1 | LC | No | No | No |
| Columbidae | Barred cuckoo-dove | *Macropygia unchall* | 0.62 ± 0.151 | 0.22–1.14 | 5 | LC | No | No | No |
| Columbidae | Ruddy cuckoo-dove | *Macropygia emiliana* | 0.27 ± 0.084 | 0.18–0.35 | 2 | LC | No | No | No |
| Columbidae | Little cuckoo-dove | *Macropygia ruficeps* | 0.27 ± 0.016 | 0.24–0.29 | 3 | LC | No | No | No |
| Columbidae | Wedge-tailed green-pigeon | *Treron sphenurus* | 0.23 ± 0.006 | 0.23–0.24 | 2 | LC | No | No | No |
| Columbidae | Pink-headed fruit-dove | *Ptilinopus porphyreus* | 0.63 ± 0.104 | 0.29–0.94 | 5 | LC | No | Yes | No |
| Columbidae | Dark-backed imperial-pigeon | *Ducula lacernulata* | 0.26 ± 0.044 | 0.20–0.35 | 3 | LC | No | Yes | No |
| Cuculidae | Sunda cuckoo | *Cuculus lepidus* | 0.58 ± 0.089 | 0.42–0.91 | 5 | LC | No | No | No |
| Cuculidae | Brush cuckoo | *Cacomantis variolosus* | 0.62 ± 0.102 | 0.34–0.97 | 5 | LC | No | No | No |
| Cuculidae | Chestnut-breasted malkoha | *Phaenicophaeus curvirostris* | 0.22 ± 0.006 | 0.21–0.22 | 2 | LC | No | No | No |
| Cuculidae | Lesser coucal | *Centropus bengalensis* | 0.27 ± NA | 0.27–0.27 | 1 | LC | No | No | No |
| Strigidae | Barred eagle-owl | *Bubo sumatranus* | 0.22 ± NA | 0.22–0.22 | 1 | LC | No | No | No |
| Strigidae | Brown wood-owl | *Strix leptogrammica* | 0.33 ± NA | 0.33–0.33 | 1 | LC | No | No | No |
| Strigidae | Javan owlet | *Glaucidium castanopterum* | 0.52 ± NA | 0.52–0.52 | 1 | LC | No | No | No |
| Strigidae | Javan scops-owl | *Otus angelinae* | 0.15 ± NA | 0.15–0.15 |  | VU | Yes | Yes | Yes |
| Podargidae | Horsfield’s frogmouth | *Batrachostomus javensis* | 0.43 ± NA | 0.43–0.43 | 1 | LC | No | No | No |
| Caprimulgidae | Salvadori’s nightjar | *Caprimulgus pulchellus* | 0.41 ± 0.224 | 0.18–0.63 | 2 | NT | Yes | Yes | No |
| Apodidae | Cave swiftlet | *Collocalia linchi* | 0.24 ± NA | 0.24–0.24 | 1 | LC | No | No | No |
| Apodidae | Edible-nest swiftlet | *Aerodramus fuciphagus* | 0.21 ± NA | 0.21–0.21 | 1 | LC | No | No | No |
| Apodidae | Pacific swift | *Apus pacificus* | 0.25 ± NA | 0.25–0.25 | 1 | LC | No | No | No |
| Apodidae | House swift | *Apus nipalensis* | 0.38 ± 0.104 | 0.11–0.59 | 4 | LC | No | No | No |
| Trogonidae | Javan trogon | *Apalharpactes reinwardtii* | 0.28 ± 0.037 | 0.21–0.37 |  | VU | Yes | Yes | Yes |
| Alcedinidae | Javan kingfisher | *Halcyon cyanoventris* | 0.26 ± NA | 0.26–0.26 | 1 | LC | No | No | No |
| Alcedinidae | Collared kingfisher | *Todiramphus chloris* | 0.26 ± NA | 0.26–0.26 | 1 | LC | No | No | No |
| Megalaimidae | Brown-throated barbet | *Psilopogon corvinus* | 0.70 ± 0.128 | 0.48–0.92 | 3 | LC | No | Yes | Yes |
| Megalaimidae | Flame-fronted barbet | *Psilopogon armillaris* | 0.62 ± 0.058 | 0.41–0.71 | 5 | LC | No | Yes | Yes |
| Picidae | Rufous piculet | *Sasia abnormis* | 0.54 ± NA | 0.54–0.54 | 1 | LC | No | No | No |
| Picidae | Sunda pygmy woodpecker | *Picoides moluccensis* | 0.21 ± NA | 0.21–0.21 | 1 | LC | No | No | No |
| Picidae | Crimson-winged woodpecker | *Picus puniceus* | 0.34 ± 0.059 | 0.24–0.51 | 4 | LC | No | No | No |
| Picidae | Javan yellownape | *Chrysophlegma mentale* | 0.54 ± 0.243 | 0.24–1.26 | 4 | NT | Yes | No | No |
| Picidae | Javan flameback | *Chrysocolaptes strictus* | 0.51 ± NA | 0.51–0.51 |  | VU | Yes | No | No |
| Campephagidae | Sunda cuckooshrike | *Coracina larvata* | 0.60 ± 0.056 | 0.46–0.78 | 5 | LC | No | No | No |
| Campephagidae | Sunda minivet | *Pericrocotus miniatus* | 0.51 ± 0.065 | 0.40–0.71 | 5 | LC | No | Yes | No |
| Laniidae | Long-tailed shrike | *Lanius schach* | 0.42 ± 0.034 | 0.39–0.45 | 2 | LC | No | No | No |
| Dicruridae | Ashy drongo | *Dicrurus leucophaeus* | 0.89 ± 0.233 | 0.33–1.55 | 5 | LC | No | No | No |
| Rhipiduridae | Rufous-tailed fantail | *Rhipidura phoenicura* | 0.34 ± 0.060 | 0.20–0.55 | 5 | LC | No | Yes | Yes |
| Rhipiduridae | White-bellied fantail | *Rhipidura euryura* | 0.28 ± NA | 0.28–0.28 | 1 | LC | No | Yes | Yes |
| Paridae | Great tit | *Parus major* | 0.49 ± 0.066 | 0.30–0.64 | 5 | LC | No | No | No |
| Aegithalidae | Pygmy tit | *Psaltria exilis* | 0.28 ± NA | 0.28–0.28 | 1 | LC | No | Yes | Yes |
| Pycnonotidae | Sooty-headed bulbul | *Pycnonotus aurigaster* | 0.54 ± 0.240 | 0.30–0.78 | 2 | LC | No | No | No |
| Pycnonotidae | Orange-spotted bulbul | *Pycnonotus bimaculatus* | 0.28 ± 0.037 | 0.20–0.37 | 4 | NT | Yes | Yes | No |
| Pycnonotidae | Javan bulbul | *Ixos virescens* | 0.54 ± 0.092 | 0.37–0.69 | 3 | LC | No | Yes | No |
| Scotocercidae | Mountain tailorbird | *Phyllergates cucullatus* | 0.60 ± 0.140 | 0.29–1.05 | 5 | LC | No | No | No |
| Locustellidae | Striated grassbird | *Megalurus palustris* | 0.52 ± NA | 0.52–0.52 | 1 | LC | No | No | No |
| Scotocercidae | Javan tesia | *Tesia superciliaris* | 2.43 ± 0.417 | 1.37–3.57 | 5 | LC | No | Yes | No |
| Scotocercidae | Aberrant bush-warbler | *Horornis flavolivaceus* | 0.77 ± 0.279 | 0.22–1.58 | 5 | LC | No | No | No |
| Locustellidae | Sunda grasshopper-warbler | *Locustella montis* | 0.36 ± NA | 0.36–0.36 | 1 | LC | No | No | No |
| Phylloscopidae | Mountain warbler | *Phylloscopus trivirgatus* | 0.35 ± 0.079 | 0.23–0.58 | 4 | LC | No | No | No |
| Phylloscopidae | Javan warbler | *Phylloscopus grammiceps* | 0.59 ± 0.083 | 0.47–0.91 | 5 | LC | No | Yes | No |
| Pnoepygidae | Pygmy cupwing | *Pnoepyga pusilla* | 1.58 ± 0.241 | 0.99–2.25 | 5 | LC | No | No | No |
| Timaliidae | White-bibbed babbler | *Stachyris thoracica* | 0.22 ± NA | 0.22–0.22 | 1 | LC | No | Yes | No |
| Vireonidae | Pied shrike-babbler | *Pteruthius flaviscapis* | 1.01 ± 0.208 | 0.30–1.51 | 5 | LC | No | No | No |
| Vireonidae | Chestnut-fronted shrike-babbler | *Pteruthius aenobarbus* | 0.22 ± NA | 0.22–0.22 | 1 | LC | No | No | No |
| Pellorneidae | Horsfield’s babbler | *Malacocincla sepiaria* | 0.31 ± 0.083 | 0.23–0.39 | 2 | LC | No | No | No |
| Timaliidae | Chestnut-backed scimitar-babbler | *Pomatorhinus montanus* | 0.37 ± 0.089 | 0.25–0.54 | 3 | LC | No | No | No |
| Pellorneidae | Eyebrowed wren-babbler | *Napothera epilepidota* | 0.41 ± 0.030 | 0.36–0.50 | 4 | LC | No | No | No |
| Timaliidae | Crescent-chested babbler | *Cyanoderma melanothorax* | 1.02 ± 0.171 | 0.54–1.44 | 5 | LC | No | Yes | No |
| Leiotrichidae | Javan fulvetta | *Alcippe pyrrhoptera* | 0.55 ± 0.090 | 0.37–0.87 | 5 | LC | No | Yes | No |
| Leiotrichidae | Rufous-fronted laughingthrush | *Garrulax rufifrons* | 0.43 ± 0.055 | 0.26–0.48 |  | CR | Yes | Yes | Yes |
| Leiotrichidae | Spotted crocias | *Laniellus albonotatus* | 0.29 ± 0.043 | 0.23–0.37 | 3 | NT | Yes | Yes | Yes |
| Zosteropidae | Sangkar white-eye | *Zosterops melanurus* | 0.36 ± 0.113 | 0.25–0.47 |  | VU | Yes | No | No |
| Zosteropidae | Mountain white-eye | *Zosterops japonicus* | 0.26 ± 0.016 | 0.24–0.30 | 4 | LC | No | No | No |
| Zosteropidae | Javan grey-throated white-eye | *Heleia javanica* | 0.28 ± 0.057 | 0.19–0.43 | 4 | LC | No | Yes | Yes |
| Sittidae | Velvet-fronted nuthatch | *Sitta frontalis* | 0.28 ± NA | 0.28–0.28 | 1 | LC | No | No | No |
| Sittidae | Blue nuthatch | *Sitta azurea* | 0.33 ± 0.052 | 0.25–0.43 | 3 | LC | No | No | No |
| Sturnidae | Asian glossy starling | *Aplonis panayensis* | 0.46 ± NA | 0.46–0.46 | 1 | LC | No | No | No |
| Muscicapidae | Javan whistling-thrush | *Myophonus glaucinus* | 0.63 ± 0.097 | 0.40–0.96 | 5 | LC | Yes | No | No |
| Muscicapidae | Blue whistling-thrush | *Myophonus caeruleus* | 0.11 ± NA | 0.11–0.11 | 1 | LC | No | No | No |
| Turdidae | White’s thrush | *Zoothera aurea* | 0.34 ± 0.003 | 0.33–0.34 | 2 | LC | No | No | No |
| Turdidae | Island thrush | *Turdus poliocephalus* | 0.20 ± 0.054 | 0.15–0.26 | 2 | LC | No | No | No |
| Muscicapidae | Lesser shortwing | *Brachypteryx leucophris* | 0.60 ± 0.088 | 0.30–0.78 | 5 | LC | No | No | No |
| Muscicapidae | Javan shortwing | *Brachypteryx montana* | 0.42 ± 0.111 | 0.24–0.62 | 3 | LC | No | No | No |
| Turdidae | Javan cochoa | *Cochoa azurea* | 0.51 ± 0.065 | 0.28–0.66 |  | VU | Yes | Yes | Yes |
| Muscicapidae | Sunda blue robin | *Myiomela diana* | 0.26 ± 0.070 | 0.19–0.33 | 2 | LC | No | Yes | No |
| Muscicapidae | Sunda forktail | *Enicurus velatus* | 0.22 ± 0.038 | 0.18–0.26 | 2 | LC | No | Yes | No |
| Muscicapidae | White-crowned forktail | *Enicurus leschenaulti* | 0.23 ± NA | 0.23–0.23 | 1 | LC | No | No | No |
| Muscicapidae | Asian brown flycatcher | *Muscicapa dauurica* | 0.22 ± NA | 0.22–0.22 | 1 | LC | No | No | No |
| Muscicapidae | Snowy-browed flycatcher | *Ficedula hyperythra* | 0.74 ± 0.087 | 0.57–1.07 | 5 | LC | No | No | No |
| Muscicapidae | Little pied flycatcher | *Ficedula westermanni* | 1.22 ± 0.252 | 0.56–1.99 | 5 | LC | No | No | No |
| Muscicapidae | Indigo flycatcher | *Eumyias indigo* | 0.56 ± 0.111 | 0.27–0.90 | 5 | LC | No | No | No |
| Stenostiridae | Grey-headed canary-flycatcher | *Culicicapa ceylonensis* | 0.37 ± 0.037 | 0.25–0.48 | 5 | LC | No | No | No |
| Dicaeidae | Crimson-breasted flowerpecker | *Prionochilus percussus* | 0.31 ± NA | 0.31–0.31 | 1 | LC | No | No | No |
| Dicaeidae | Orange-bellied flowerpecker | *Dicaeum trigonostigma* | 0.50 ± 0.193 | 0.31–0.70 | 2 | LC | No | No | No |
| Dicaeidae | Blood-breasted flowerpecker | *Dicaeum sanguinolentum* | 0.39 ± 0.078 | 0.20–0.60 | 5 | LC | No | No | No |
| Nectariniidae | White-flanked sunbird | *Aethopyga eximia* | 0.31 ± 0.064 | 0.17–0.54 | 5 | LC | No | Yes | No |
| Nectariniidae | Little spiderhunter | *Arachnothera longirostra* | 0.55 ± 0.072 | 0.31–0.70 | 5 | LC | No | No | No |
| Nectariniidae | Long-billed spiderhunter | *Arachnothera robusta* | 0.29 ± 0.072 | 0.22–0.36 | 2 | LC | No | No | No |
| Estrildidae | Tawny-breasted parrotfinch | *Erythrura hyperythra* | 0.18 ± NA | 0.18–0.18 | 1 | LC | No | No | No |
| Estrildidae | Pin-tailed parrotfinch | *Erythrura prasina* | 0.17 ± NA | 0.17–0.17 | 1 | LC | No | No | No |
| Estrildidae | Javan munia | *Lonchura leucogastroides* | 0.38 ± NA | 0.38–0.38 | 1 | LC | No | No | No |
| Motacillidae | Grey wagtail | *Motacilla cinerea* | 0.29 ± NA | 0.29–0.29 | 1 | LC | No | No | No |
| Fringillidae | Mountain serin | *Chrysocorythus estherae* | 0.20 ± NA | 0.20–0.20 | 1 | LC | No | Yes | Yes |

## 1LC, Least Concern; NT, Near Threatened; VU, Vulnerable; EN, Endangered; CR, Critically Endangered.

## 2Java and Bali Forest Endemic Bird Area.

## (b) Encounter rates of mammals recorded on camera traps across six sites on Gunung Slamet.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Order | Family | Scientific Name | English Name | IUCN Red List category1 | Encounter rate | | No. of sites | Indonesian protection list |
| Mean | SD |
| Pholidota | Manidae | *Manis javanica* | Sunda pangolin | CR | 5.00 | NA |  | Yes |
| Scandentia | Tupaiidae | *Tupaia javanica* | Horsfield’s treeshrew | LC | 5.73 | 0.94 | 4 | No |
| Primates | Cercopithecidae | *Presbytis comata* | Javan surili | EN | 5.26 | NA |  | Yes |
| Carnivora | Mustelidae | *Melogale orientalis* | Javan ferret badger | LC | 5.26 | 0.00 | 2 | No |
| Carnivora | Mephitidae | *Mydaus javanensis* | Sunda stink-badger | LC | 15.53 | 6.38 | 4 | No |
| Carnivora | Viverridae | *Paradoxurus hermaphroditus* | Common palm civet | LC | 27.14 | 18.18 | 2 | No |
| Carnivora | Prionodontidae | *Prionodon linsang* | Banded linsang | LC | 5.80 | 1.17 | 3 | Yes |
| Carnivora | Felidae | *Panthera pardus* | Leopard | VU | 52.63 | NA |  | Yes |
| Carnivora | Felidae | *Prionailurus bengalensis* | Leopard cat | LC | 10.53 | 7.44 | 2 | Yes |
| Cetartiodactyla | Cervidae | *Muntiacus muntjak* | Southern red muntjac | LC | 7.56 | 2.79 | 3 | Yes |
| Rodentia | Sciuridae | *Lariscus insignis* | Three-striped ground squirrel | LC | 11.80 | 6.84 | 4 | No |
| Rodentia | Muridae |  | Rat (unidentified) | LC | 8.21 | 4.45 | 5 |  |
| Rodentia | Hystricidae | *Hystrix javanica* | Sunda porcupine | LC | 5.26 | 0.00 | 2 | Yes |

## 1LC, Least Concern; VU, Vulnerable; EN, Endangered; CR, Critically Endangered.

## (c) Reptiles and amphibians recorded across six sites on Gunung Slamet.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Class | Order | Family | Scientific Name | English Name | IUCN Red List  category1 | Endemic |
| Reptilia | Squamata | Gekkonidae | *Cyrtodactylus marmoratus* | Clouded bent-toed gecko | LC |  |
| Reptilia | Squamata | Scincidae | *Eutropis multifasciata* | Common mabuya | LC |  |
| Amphibia | Anura | Bufonidae | *Duttaphrynus melanostictus* | Asian common toad | LC |  |
| Amphibia | Anura | Bufonidae | *Phrynoidis asper* | Asian giant toad | LC |  |
| Amphibia | Anura | Microhylidae | *Microhyla achatina* | Javan chorus frog | LC |  |
| Amphibia | Anura | Microhylidae | *Microhyla palmipes* | Palmated chorus frog | LC |  |
| Amphibia | Anura | Megophryidae | *Leptobrachium hasseltii* | Hasselt’s litter frog | LC |  |
| Amphibia | Anura | Megophryidae | *Megophrys montana* | Horned frog | LC |  |
| Amphibia | Anura | Dicroglossidae | *Fejervarya cancrivora* |  | LC |  |
| Amphibia | Anura | Dicroglossidae | *Limnonectes kuhlii* |  | LC |  |
| Amphibia | Anura | Dicroglossidae | *Limnonectes macrodon* | Fanged river frog | LC |  |
| Amphibia | Anura | Ranidae | *Chalcorana chalconota* | White-lipped frog | LC |  |
| Amphibia | Anura | Ranidae | *Huia masonii* | Javan torrent frog | LC |  |
| Amphibia | Anura | Ranidae | *Odorrana hosii* | Hose’s frog | LC |  |
| Amphibia | Anura | Rhacophoridae | *Nyctixalus margaritifer* | Pearly tree frog | LC | Yes |
| Amphibia | Anura | Rhacophoridae | *Philautus aurifasciatus* | Java bubble-nest frog | LC |  |
| Amphibia | Anura | Rhacophoridae | *Rhacophorus margaritifer* | Java flying frog | LC | Yes |

## 1LC, Least Concern.

Supplementary Table 2

## Numbers of occurrence records and evaluation results for species distribution models.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Family | Scientific Name | English Name | No. of records used in model | AUC | |
|  | Mean | SE |
| **Threatened and Near Threatened birds (> 10 records)** | | | | |  |  |
|  | Leiotrichidae | *Garrulax rufifrons* | Javan laughingthrush | 38 | 0.82 | 0.004 |
|  | Trogonidae | *Apalharpactes reinwardtii* | Javan trogon | 26 | 0.77 | 0.007 |
|  | Turdidae | *Cochoa azurea* | Javan cochoa | 63 | 0.85 | 0.011 |
|  | Leiotrichidae | *Laniellus albonotatus* | Javan crocias | 13 | 0.77 | 0.023 |
|  | Pycnonotidae | *Pycnonotus bimaculatus* | Orange-spotted bulbul | 14 | 0.73 | 0.022 |
|  |  |  |  |  |  |  |
| **Terrestrial mammals of conservation importance** | | | | **74** | **0.76** | **0.013** |
|  | Manidae | *Manis javanica* | Javan pangolin | 1 |  |  |
|  | Hylobatidae | *Hylobates moloch* | Javan gibbon | 7 |  |  |
|  | Cercopithecidae | *Trachypithecus auratus* | Javan lutung | 4 |  |  |
|  | Cercopithecidae | *Presbytis comata* | Javan surili | 19 |  |  |
|  | Mustelidae | *Melogale orientalis* | Javan ferret badger | 4 |  |  |
|  | Prionodontidae | *Prionodon linsang* | Banded linsang | 3 |  |  |
|  | Felidae | *Prionailurus bengalensis* | Leopard cat | 7 |  |  |
|  | Felidae | *Panthera pardus* | Leopard | 18 |  |  |
|  | Cervidae | *Muntiacus muntjak* | Southern red muntjac | 9 |  |  |
|  | Hystricidae | *Hystrix javanica* | Sunda porcupine | 2 |  |  |

# Supplementary Table 3

## Categories of protected areas relevant to Gunung Slamet, with designation criteria, aims and management responsibility.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Designation category  (IUCN classification)  [Indonesian category name] | Designation criteria | Aims | Management responsibility | Comments with respect to Gunung Slamet |
| Protection forest (VI?)  [Hutan Lindung] | 1. Forest area located on critical land (determined by slope conditions, forest intensity, sensitivity to erosion, soil type). | Maintain hydrology / water system and prevent flooding and erosion, as well as maintain soil fertility, both in the forest and in the surrounding area of influence. | Perum Perhutani | Current designation of majority of Gunung Slamet’s forest |
| Nature Recreation Park (III)  [Taman Wisata Alam] | 1. Has natural attractions in the form of plants, animals or landscapes, natural phenomena and unique geological formations. 2. Has sufficient area to ensure the preservation of natural potential and attractions to be used for tourism and nature recreation. 3. Surrounding environmental conditions support the development of nature tourism. | Categorized as a Nature Conservation Area (Kawasan Pelestarian Alam / KPA) which is primarily used for the benefit of nature tourism and recreation | BKSDA (Natural resources and Conservation Agency) | This category applies to a 2 ha reserve, Guci, on the north flank. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Designation category  (IUCN classification)  [Indonesian category name] | Designation criteria | | Aims | Management responsibility | Comments with respect to Gunung Slamet |
| Nature Reserve (III)  [Cagar Alam] | 1. Has a diversity of wild plants and/or animal species incorporated in an ecosystem type 2. Has natural conditions, both wild plants and/or animals in pristine condition, without disturbance 3. Presence of rare and/or endangered plant and/or animal communities, ecosystems 4. Has certain biota formations and/or constituent units 5. Has sufficient area and shape that can support effective management and ensure natural ecological processes 6. Has a characteristic potential and can be an example of an ecosystem whose existence requires conservation efforts | | Categorized as a Sanctuary Reserved Area (Kawasan Suaka Alam / KSA) which has the main function of preservation of plants, animals, ecosystems and also as a life support systems area. | BKSDA (Natural resources and Conservation Agency) | Current resource and recreational use on Gunung Slamet may conflict with criteria of this category.  This category applies to a small reserve (Telogo Dringo) on west flank (48.5 ha), but isolated from main block of forest. |
| National Park (II)  [Taman Nasional] | 1. Has unique biological natural resources and ecosystems that are still intact and natural as well as unique natural phenomena 2. Has one or more intact ecosystems 3. Has sufficient area to ensure the continuity of natural ecological processes 4. An area that can be divided into several zones (Core zone, Utilization zone, Wilderness zone/ ‘Zona Rimba’, and/or other zones as needed) | | Categorized as a KPA which functions for the preservation of plants, animals, ecosystems and as a life support systems area; and sustainable use of living natural resources and ecosystems | Balai Taman Nasional / National Park Agency | Gunung Slamet meets the criteria to be designated as a National Park. In addition, use of existing water resources should not be disturbed after establishment of a National Park as this resource use still fulfills the objectives of the National Park itself (utilization). |
| Designation category  (IUCN classification)  [Indonesian category name] | Designation criteria | Aims | | Management responsibility | Comments with respect to Gunung Slamet |
| Essential Ecosystems (?) [Kawasan Ekosistem Esensial (KEE)] | Areas with important ecosystem values outside a Sanctuary Reserve Area (Kawasan Suaka Alam / KSA) or Nature Conservation Area (Kawasan Preservation Alam / KPA)  Can be designated within different typologies, for example High Conservation Value Areas (HCVA), or for conservation of endangered plant species in situ or ex situ (Taman kehati).  However, the ministerial regulation that will regulate KEE governance does not yet exist in Indonesia. | 1. Protect and conserve biodiversity and ecosystem types outside KSA / KPA that have high conservation value to ensure the sustainability of ecological functions 2. Enable the use of biological and ecosystem resources and the use of environmental services in a sustainable manner 3. Increase the participation of related agencies in the management of biological resources and ecosystems based on the duties and functions of each agency 4. Improve the welfare of communities living in the surrounding area | | Pemerindah Daerah (Provinsi/Kabupaten)  Local Government at provincial and regency level | Gunung Slamet meets the requirements to be defined as KEE, within the HCVA typology.  Baturraden Botanical Garden, on Gunung Slamet’s south slope, was designated as a KEE (within the Taman Kehati typology).  There is an opportunity for the private sector to be able to manage KEE, so in this case Perum Perhutani as a rights-holder could manage the area if areas of Gunung Slamet were designated as a KEE. |

Sources:

1. Peraturan Pemerintah Nomor 28 Tahun 2011 Tentang Pengelolaan Kawasan Suaka Alam dan Kawasan Pelestarian Alam

[Government Regulation Number 28 Year 2011 as amended by Republic of Indonesia Government Regulation Number 108 Year 2015 concerning Management of Nature Reserve Areas and Nature Conservation Areas]

2. Surat Keputusan Menteri Pertanian Nomor 837/Kpts/Um/11/1980 Tentang Kriteria dan Tata Cara Penetapan Hutan Lindung

[Ministry of Agriculture Decree No. 837 Year 1980 on Criteria for Gazettement of Protection Forest]

3. Peraturan Direktorat Jendral Nomor P.15 Tahun 2016 Tentang Pedoman Penentuan Areal Bernilai Konservasi Tinggi sebagai Kawasan Ekosistem Esensial

[Directorate General of KSDAE Regulation No.15 Year 2016 concerning Guidelines for the Determination of Areas with High Conservation Value as Essential Ecosystem Areas]