IAS WITH DR RAVI
AIM. PREPARE. ACHIEVE

APPSC PULSE — IAS with Dr Ravi

STEP 1: CURRENT AFFAIRS NOTES

25 May 2026 (Monday)

Source: The Hindu — Andhra Pradesh Edition

IAS WITH DR RAVI
AIM. PREPARE. ACHIEVE

Table of Contents

AP Environment & Ecology

1. Egyptian Vulture Crisis — Sri Sathya Sai District

Source: *The Hindu, 25/05/2026 (K. Umashanker, Puttaparthi)* | ***Subject:*** *Environment / Ecology / Biodiversity / Wildlife Conservation / Vultures / Rayalaseema*

APPSC SYLLABUS MAPPING Paper V: Environment, Ecology, Biodiversity, Wildlife Conservation, Environmental Law | Paper II: AP Geography — Sri Sathya Sai district, Rayalaseema, Wildlife | Paper III: Governance, Environmental Policy, Centre-State

◇ PRELIMS FOCUS

[ENGLISH]

1. Crisis: Endangered Egyptian Vulture approaching local extinction in rocky hill ranges of Sri Sathya Sai district, Rayalaseema. Once a prevalent sight in Rayalaseema skies — now raising significant concerns among wildlife experts and conservationists.

2. Species status: Listed as 'Endangered' by IUCN (International Union for Conservation of Nature). Protected under Schedule I of India's Wildlife (Protection) Act — highest level of legal protection. Common name: 'Nature's sanitation worker' — cleans environment by consuming carcasses.

3. Location: Ratnagiri Fort, Rolla Mandal, Sri Sathya Sai district — near Karnataka border. Rocky escarpments and semi-arid terrain = ideal nesting conditions for vultures and other raptors.

4. Survey: 2015-16, wildlife scientist + Anantapur photographer V. Jayachandra documented Egyptian Vultures at Ratnagiri Fort, reviving hopes. But sightings dropped sharply again over the last three years.

5. Researcher: Dr. V.V. Bala Subramanyam, Assistant Professor, Department of Zoology, Sri Krishnadevaraya University, Anantapur. Survey funded by Union Ministry of Environment and Forests.

6. Survey scope: Primary focus — effects of windmills on migratory birds' path. Egyptian Vulture habitat covered as co-work. Areas: Hindupur, Rolla, Roddam, Penukonda — combined Anantapur district.

7. Threats identified: (a) Habitat destruction; (b) Electrocution on high-tension power lines; (c) Shrinking food sources; (d) Accidental poisoning — livestock carcasses contaminated by veterinary drugs; (e)

Growing human interference in fragile hill ecosystems; (f) Unchecked quarrying near nesting cliffs; (g) Reckless trekking near nesting sites; (h) Expanding human activity destroying remaining refuge.

8. Poisoning crisis: Dumping of livestock carcasses contaminated by veterinary drugs (especially NSAIDs like Diclofenac — which caused catastrophic vulture decline across India in 1990s-2000s). Vulture-safe feeding zones recommended as solution.

9. Recommendations: (a) Scientific population surveys; (b) Protection of nesting micro-habitats; (c) Installation of bird diverters on hazardous power lines; (d) Creation of vulture-safe feeding zones; (e) Awareness campaigns among farmers and shepherd communities; (f) Appeals to wildlife experts and authorities at Centre and State level.

10. Ecological consequence warning: 'Disappearance of vultures could create serious ecological consequences — poor carcass disposal, increased disease risks in rural ecosystems.' — Dr. Bala Subramanyam.

11. Hope: Rayalaseema region could still protect the Egyptian Vulture species — ancient hills (Ratnagiri Fort area) surviving as natural heritage.

[తెలుగు]

1. సంక్షోభం: శ్రీ సత్య సాయి జిల్లా కొండ శ్రేణుల్లో అంతరించిపోతున్న ఈజిప్షన్ గద్ద స్థానిక అంతరించిపోవడం అంచున.

2. జాతి హోదా: IUCN 'అంతరాయ ముప్పు' జాబితా. భారత వన్యప్రాణి (రక్షణ) చట్టంలో షెడ్యూల్ I — అత్యున్నత చట్టపరమైన రక్షణ. 'ప్రకృతి సేద్య కార్మికుడు' అని పిలుస్తారు.

3. స్థానం: రత్నగిరి కోట, రొల్లా మండలం, శ్రీ సత్య సాయి జిల్లా — కర్ణాటక సరిహద్దు సమీపం. రాతి ఎత్తులు + అర్ధ-శుష్క భూభాగం = గ్రద్దలు/రాప్టర్‌లకు అనుకూల గూడు ప్రదేశం.

4. సర్వే: 2015-16లో V. జయచంద్ర ఈజిప్షన్ గద్దలు నమోదు చేశారు. కానీ గత మూడు సంవత్సరాల్లో మళ్ళీ దర్శనాలు తగ్గాయి.

5. పరిశోధకుడు: Dr. V.V. బాల సుబ్రమణ్యం, జంతుశాస్త్ర విభాగం, శ్రీ కృష్ణదేవరాయ విశ్వవిద్యాలయం, అనంతపురం. పర్యావరణ మంత్రిత్వ శాఖ నిధులు.

6. ముప్పులు: ఆవాస నాశనం + HT లైన్లపై విద్యుదాఘాతం + ఆహార వనరుల తగ్గుదల + పశువైద్య మందుల ద్వారా విషప్రయోగం + క్వారీయింగ్ + ట్రెక్కింగ్ + మానవ జోక్యం.

7. సిఫారసులు: శాస్త్రీయ జనాభా సర్వేలు + గూడు మైక్రో-ఆవాసాల రక్షణ + పక్షి మళ్ళింపు సాధనాలు HT లైన్లపై + గ్రద్ద-సురక్షిత ఆహార జోన్లు + రైతులు/కాపరుల అవగాహన.

8. హెచ్చరిక: 'గ్రద్దలు మాయమైతే పాడైన కళేబరాల పారవేయడం దెబ్బతింటుంది — గ్రామీణ పర్యావరణ వ్యవస్థల్లో వ్యాధి ప్రమాదాలు పెరుగుతాయి.' — Dr. బాల సుబ్రమణ్యం.

◇ MAINS FOCUS

[ENGLISH]

Context

An ecological crisis is unfolding in the rocky hill ranges of Sri Sathya Sai district — the endangered Egyptian Vulture (Neophron percnopterus), once prevalent in Rayalaseema skies, is approaching local extinction. Research by Dr. V.V. Bala Subramanyam (Sri Krishnadevaraya University, funded by MoEF) documented sharp decline in sightings at Ratnagiri Fort, Rolla Mandal over the last three years. Threats: habitat destruction, power line electrocution, food source poisoning (veterinary drug-contaminated carcasses), quarrying near nesting cliffs, and human encroachment. Recommendations include vulture-safe feeding zones, bird diverters on power lines, and nesting micro-habitat protection.

Background

The Egyptian Vulture (Neophron percnopterus) is one of the oldest-evolved vulture species — fossil records going back 3.5 million years. It is the smallest of the Old World vultures and is uniquely intelligent — one of the few tool-using bird species (uses stones to break eggs). Called 'nature's sanitation worker' because it consumes carcasses that other species cannot access, performing a critical ecosystem service: preventing disease spread from rotting carcasses. India witnessed a catastrophic vulture population collapse in the 1990s-2000s — estimated 99% decline in Gyps vultures (White-rumped, Long-billed, Slender-billed) across the subcontinent. The primary cause: Diclofenac, an NSAID anti-inflammatory drug used in cattle — vultures consuming carcasses of Diclofenac-treated cattle developed fatal kidney failure. India banned veterinary Diclofenac in 2006. However, other NSAIDs (Ketoprofen, Aceclofenac, Nimesulide) remain in use and continue to pose vulture poisoning risks. The Egyptian Vulture's Indian population is estimated at fewer than 4,000 individuals — making every nesting site like Ratnagiri Fort critical for species survival. Sri Sathya Sai district's Ratnagiri Fort area (near Karnataka

border) represents one of the last remaining viable breeding habitats for Egyptian Vultures in Rayalaseema.

Key Dimensions

1. IUCN Endangered + Schedule I — Legal Architecture: The Egyptian Vulture's IUCN 'Endangered' classification means the species faces a very high risk of extinction in the wild. Schedule I of India's Wildlife (Protection) Act 1972 provides absolute protection — hunting, capturing, or harming Schedule I animals is a non-bailable offence with up to 7 years imprisonment. The combination of international (IUCN) and national (Schedule I) protection should theoretically provide maximum conservation. The gap between legal protection and actual conservation reflects implementation failures: quarrying permits near Schedule I species habitats, power line construction without bird impact assessments, and absence of veterinary drug monitoring near vulture habitats.

2. Diclofenac Legacy + Ongoing Poisoning Threat: India's 1990s-2000s vulture collapse (99% decline) was one of the fastest wildlife population crashes in recorded history — caused entirely by one human activity (using Diclofenac in cattle). The 2006 Diclofenac ban was a successful conservation policy intervention. However, the Diclofenac lesson has not been fully learned: alternative NSAIDs (Ketoprofen, Aceclofenac) with similar vulture toxicity remain in veterinary use. The 'vulture-safe feeding zones' recommendation addresses this: designated areas where farmer and shepherd communities are provided carcasses from animals not treated with vulture-toxic drugs — ensuring a safe food source while removing the contamination pathway. This is a practical, community-based conservation intervention.

3. Windmill-Vulture Collision — Renewable Energy Tension: Dr. Bala Subramanyam's survey was originally commissioned to study windmill effects on migratory birds — and Egyptian Vulture monitoring was added as co-work. This reveals a critical tension in AP's development strategy: AP is aggressively expanding renewable energy (wind farms in Rayalaseema/Anantapur — among India's windiest areas) while simultaneously being home to endangered migratory and resident raptors whose flight paths overlap with wind turbine rotor zones. Wind turbines are documented killers of eagles, vultures, and raptors globally — the blade strike mortality rate is significant. Bird Impact Assessments are required under MoEF's environmental clearance process for wind farms — but compliance is inconsistent.

4. Ratnagiri Fort — Micro-habitat Conservation: Ratnagiri Fort's value to Egyptian Vultures is specific: towering rocky escarpments providing nesting ledges inaccessible to terrestrial predators; rocky semi-arid terrain supporting lizards, insects, and small mammals (food sources); proximity to

agricultural areas where livestock mortality provides carcass food. This specific micro-habitat (rocky fort + semi-arid landscape + livestock farming) is disappearing across Rayalaseema — quarrying destroys the rocky escarpments; conversion of semi-arid land to agriculture reduces foraging range; modernisation of livestock farming (stall-feeding, rapid carcass disposal) reduces food availability. Protection of Ratnagiri Fort and surrounding rocky terrain as a declared Critical Wildlife Habitat or Eco-Sensitive Zone is the most effective single conservation measure.

5. Ecological Services — Economic Valuation: Vultures provide a measurable economic service: a single vulture consumes approximately 1 kg of carcass per day, preventing putrefaction, odour, and pathogen spread. India's estimated pre-decline vulture population consumed ~12 million tonnes of carcasses annually. Post-collapse, this service shifted to feral dogs and rats — leading to documented increases in rabies cases, anthrax, and other zoonotic diseases in areas of vulture decline. The 'increased disease risks in rural ecosystems' warning from Dr. Bala Subramanyam is not rhetorical — it is economically quantifiable. Restoring vulture populations prevents disease outbreaks that cost rural healthcare systems far more than conservation investment.

6. Power Lines — Infrastructure-Wildlife Conflict: Electrocution on high-tension power lines is a leading cause of large bird mortality in India. Egyptian Vultures, with their wingspan (1.5-1.7 m), are particularly vulnerable to wire collision and electrocution at transformer/pylon structures. The recommendation for 'bird diverters on hazardous power lines' — simple, inexpensive spiral or flag-type markers that make wires visible to flying birds — is a proven, cost-effective intervention. PGCIL (Power Grid Corporation of India) and state transcos are mandated to install bird diverters in identified bird-sensitive areas. Enforcement near Ratnagiri Fort's known vulture habitats is a straightforward administrative action that AP's forest and energy departments can take immediately.

7. MoEF Funding — Research Architecture: The survey being funded by the Union Ministry of Environment and Forests (MoEF) signals Central government's awareness of the Egyptian Vulture's crisis. However, as Dr. Bala Subramanyam notes, paucity of funds prevented completing the full research scope. India's conservation research funding is chronically underfunded relative to the biodiversity it seeks to protect. Scaling up MoEF's vulture research funding — particularly for population surveys, satellite tagging, and poisoning incident investigation — is a national policy imperative, not just a local conservation concern.

8. Rayalaseema Landscape — Cultural and Natural Heritage: Ratnagiri Fort is not merely a wildlife site — it is a historical monument (medieval fort near Karnataka border) in a culturally and archaeologically significant landscape. The coexistence of historical built heritage (Ratnagiri Fort) and

natural wildlife heritage (Egyptian Vulture nesting site) in the same location represents an integrated conservation opportunity: heritage tourism anchored at Ratnagiri Fort can simultaneously generate revenue for conservation and raise public awareness about the Egyptian Vulture — converting a distant conservation concern into a locally owned cultural responsibility.

Critical Analysis

The Egyptian Vulture's crisis in Sri Sathya Sai district illustrates a fundamental contradiction in AP's development strategy: the same Rayalaseema landscape that is being developed for defence manufacturing (AMCA Puttaparthi — the commissioning was at Puttaparthi, same district), clean energy (wind farms, solar), and agriculture intensification is also the last refuge for Schedule I endangered species like the Egyptian Vulture. Development and conservation are not inherently incompatible — but they require integrated planning that AP's current project-by-project clearance approach does not provide.

The windmill-vulture collision dimension is particularly urgent. AP's renewable energy expansion (targeting Rs 10 lakh crore in green energy investments) includes substantial wind energy in Rayalaseema/Anantapur — India's windiest region. Without species-specific Bird Impact Assessments (not just generic EIA compliance) for all wind farms in the Anantapur-Sri Sathya Sai corridor, renewable energy expansion could accelerate the Egyptian Vulture's extinction in the very region that is its last Rayalaseema stronghold. This is an irony that AP's policymakers must consciously address.

Going forward: AP Forest Department should immediately declare Ratnagiri Fort and surrounding rocky escarpments (5 km radius) as a Protected Area under Wildlife Protection Act or at minimum an Eco-Sensitive Zone; APTRANSCO should install bird diverters on all high-tension lines within the mapped Egyptian Vulture habitat (Hindupur, Rolla, Roddam, Penukonda); AP's wind energy clearance process should include mandatory Egyptian Vulture population survey as a pre-condition for Anantapur-Sri Sathya Sai wind projects; establish vulture-safe feeding zones in 5 mandals (Rolla, Roddam, Penukonda, Hindupur, and one more) in partnership with local shepherd communities; scale up MoEF research funding for Dr. Bala Subramanyam's team for satellite tagging and continuous population monitoring.

VALUE ADDITION Constitutional & Legal: Art 48A (Protection of environment and wildlife — DPSP) | Art 51A(g) (Fundamental Duty — protect natural environment) | Wildlife (Protection) Act 1972 — Schedule I (Egyptian Vulture — highest protection, non-bailable offence) | Environment Protection Act 1986 | Forest Conservation Act 1980 | Biological Diversity Act 2002 | EIA Notification 2006 (wind farm Bird Impact Assessment requirement) || SDGs: SDG 15 (Life on Land — Target 15.5: protect threatened species, halt biodiversity loss) | SDG 3 (Good Health — vulture ecosystem service prevents zoonotic disease) | SDG 13

(Climate Action — but renewable energy must not harm biodiversity) || Species Facts: Egyptian Vulture (Neophron percnopterus) | IUCN: Endangered | Schedule I: Wildlife Protection Act | Wingspan: 1.5-1.7 m | India population: fewer than 4,000 | Tool-user: uses stones to break eggs | Diclofenac ban: 2006 (India's most successful conservation intervention) || Cross-ref: AMCA Puttaparthi (Sri Sathya Sai district, 15-16 May) — same district, development-conservation tension | SAEL 600 MW Solar Kadapa (23 May) — renewable energy-wildlife conflict | AP Poorvodaya DPR (23 May) — Rayalaseema landscape pressures || Institutions: IUCN | MoEF (Ministry of Environment and Forests) | Wildlife Institute of India (WII) | Sri Krishnadevaraya University (Dr. Bala Subramanyam) | AP Forest Department | PGCIL + APTRANSCO (bird diverters) | Bombay Natural History Society (BNHS — vulture research)

[తెలుగు]

సందర్భం

శ్రీ సత్య సాయి జిల్లా కొండ శ్రేణుల్లో పర్యావరణ సంక్షోభం: అంతరాయ ముప్పులో ఉన్న ఈజిప్షన్ గద్ద (Neophron percnopterus) స్థానిక అంతరించిపోవడం అంచున. Dr. V.V. బాల సుబ్రమణ్యం (శ్రీ కృష్ణదేవరాయ విశ్వవిద్యాలయం) పర్యావరణ మంత్రిత్వ శాఖ నిధులతో నిర్వహించిన సర్వే. రత్నగిరి కోట, రొల్లా మండలం — రాయలసీమ చివరి ఆవాసాల్లో ఒకటి. ముప్పులు: ఆవాస నాశనం + విద్యుదాఘాతం + విష ప్రభావం + క్వారీయింగ్ + క్రెక్కింగ్.

ముఖ్య అంశాలు

1. IUCN అంతరాయ ముప్పు + షెడ్యూల్ I — చట్టపరమైన నిర్మాణం: IUCN అంతరాయ ముప్పు = అడవిలో విలుప్తత అపాయం. షెడ్యూల్ I = జమానత్ లేని నేరం, 7 సంవత్సరాల జైలు. చట్టపరమైన రక్షణ ఉన్నా అమలు వైఫల్యాలు: క్వారీయింగ్ అనుమతులు, పక్షి ప్రభావ మూల్యాంకనాలు లేకుండా పవర్ లైన్లు.

2. డైక్లోఫెనాక్ వారసత్వం + కొనసాగుతున్న విష ముప్పు: 1990లు-2000లు: డైక్లోఫెనాక్ వల్ల 99% గద్దలు అంతరించాయి — మానవ కార్యకలాపం వల్ల రికార్డు సమయంలో వన్యప్రాణి పతనం. 2006 నిషేధం విజయవంతమైన పరిరక్షణ విధాన జోక్యం. కానీ ఇతర NSAIDs ఇంకా వాడుతున్నారు. గ్రద్ద-సురక్షిత ఆహార జోన్లు = ఆచరణాత్మక పరిష్కారం.

3. పవన విద్యుత్-గద్ద ఘర్షణ — పునరుత్పాదక శక్తి ఉద్రిక్తత: AP పవన శక్తి విస్తరణ (రాయలసీమ/అనంతపురం = భారతదేశంలో అత్యంత గాలి ప్రాంతాలు) vs అంతరాయ ముప్పు రాష్ట్రాలు.

AMCA పుట్టపర్తి (అదే జిల్లా, 15-16 మే) + SAEL సౌర (23 మే) = అదే ప్రకృతి దృశ్యంలో అభివృద్ధి vs సంరక్షణ ఉద్రిక్తత.

4. రత్నగిరి కోట — మైక్రో-ఆవాస సంరక్షణ: రాతి ఎత్తులు + అర్ధ-శుష్క భూభాగం + పశువుల మరణాలు = ఈజిప్షన్ గద్ద నిర్దిష్ట ఆవాస అవసరాలు. క్వారీయింగ్ రాతి ఎత్తులు నాశనం చేస్తోంది. కట్టుబడిన వన్యప్రాణి ఆవాసం లేదా పర్యావరణ-సున్నిత జోన్ ప్రకటన = అత్యంత ప్రభావవంతమైన ఒకే సంరక్షణ చర్య.

5. పర్యావరణ సేవలు — ఆర్థిక విలువ: గ్రద్దలు లేకపోతే: అడవి కుక్కలు + ఎలుకలు పాడైన కళేబరాలు తినడం = రేబీస్, ఆంత్రాక్స్, జూనోటిక్ వ్యాధులు పెరుగుతాయి. పర్యావరణ సేవల ఆర్థిక విలువ = రోగ నివారణ ఖర్చులు కంటే పరిరక్షణ పెట్టుబడి చాలా తక్కువ.

విమర్శనాత్మక విశ్లేషణ

AP అభివృద్ధి వ్యూహంలో మూలభూత వైరుధ్యం: AMCA పుట్టపర్తి + పవన శక్తి + వ్యవసాయ ఇంటెన్సిఫికేషన్ కోసం అదే రాయలసీమ ప్రకృతి దృశ్యం = ఈజిప్షన్ గద్ద చివరి ఆశ్రయం. అభివృద్ధి + సంరక్షణ అంతర్గతంగా వ్యతిరేకం కాదు — కానీ AP ప్రస్తుత ప్రాజెక్ట్ వారీ క్లియరెన్స్ విధానం అందించని సమీకృత ప్రణాళిక అవసరం. రత్నగిరి కోట సంరక్షిత ప్రాంతం + APTRANSCO పక్షి మళ్ళింపు సాధనాలు + అనంతపురం-SSS జిల్లాలో పవన శక్తి ముందస్తు జాతి-నిర్దిష్ట BIA = తక్షణ చర్యలు.

Value Addition కోసం English సెక్షన్ చూడండి

AP Agriculture & Intellectual Property

2. GI Tag Application — 'Ananthapuramu Lemon'

Source: *The Hindu, 25/05/2026 (In Brief)* **|** ***Subject:*** *GI Tag / Geographical Indication / Agriculture / Horticulture / Intellectual Property / Anantapur*

APPSC SYLLABUS MAPPING Paper IV: AP Economy, Agriculture, Horticulture, GI Tags, Intellectual Property | Paper II: AP Geography — Anantapur, Agriculture, Citrus | Paper III: Governance, IPFC, Institutional Support

◇ PRELIMS FOCUS

[ENGLISH]

1. GI tag application filed for: 'Ananthapuramu Lemon' — a citrus variety grown in parts of Anantapur district.

2. Filed by: Madanapalle Institute of Technology and Science (MITS). Announced by Vice-Chancellor C. Yuvaraj.

3. Facilitated by: Intellectual Property Facilitation Centre (IPFC) of MITS.

4. Growing areas: Peddapappur, Peddavadugur, Tadipatri, and Yadiki mandals of Anantapur district.

5. Distinctive features of Ananthapuramu Lemon: (a) Uniform size; (b) Bright colour; (c) High juice content; (d) Balanced acidity; (e) Strong aroma; (f) Longer shelf life.

6. What is a GI tag: Geographical Indication tag — a sign used on products with specific geographical origin and qualities/reputation linked to that origin. Governed by GI of Goods (Registration and Protection) Act 1999. Registered with Geographical Indications Registry, Chennai.

7. AP GI context: AP has several GI-tagged products — Tirupati Laddu, Banganapalle Mango, Guntur Sannam Chilli, Kondapalli Toys, Etikoppaka Toys, Dharmavaram Silk Sarees, Uppada Silk Sarees, Venkatagiri Sarees, Srikalahasti Kalamkari, Bobbili Veena, among others.

8. MITS role: Madanapalle Institute of Technology and Science, Madanapalle, Chittoor district — filing GI tags for regional agricultural products demonstrates university's role in rural economic development through intellectual property.

[తెలుగు]

1. GI ట్యాగ్ దరఖాస్తు: 'అనంతపురం నిమ్మకాయ' — అనంతపురం జిల్లాలో కొన్ని భాగాల్లో పెరిగే సిట్రస్ రకం.

2. దాఖలు చేసినవారు: మదనపల్లె ఇన్‌స్టిట్యూట్ ఆఫ్ టెక్నాలజీ అండ్ సైన్స్ (MITS). VC C. యువరాజ్ ప్రకటన.

3. IPFC (ఇంటెలెక్చువల్ ప్రాపర్టీ ఫెసిలిటేషన్ సెంటర్) సహకారంతో దాఖలు.

4. సాగు ప్రాంతాలు: పెద్దపాపూరు, పెద్దవడుగూరు, తాడిపత్రి, యాడికి మండలాలు.

5. విశిష్ట లక్షణాలు: ఏకరీతి పరిమాణం + ప్రకాశవంతమైన రంగు + అధిక రసం + సమతుల్య ఆమ్లత్వం + బలమైన సువాసన + ఎక్కువ నిల్వ జీవితం.

6. GI ట్యాగ్ అంటే: నిర్దిష్ట భౌగోళిక మూలం + ఆ మూలంతో అనుసంధానించబడిన గుణాలు కలిగిన ఉత్పత్తులపై చిహ్నం. GI of Goods Act 1999. GI Registry, చెన్నై.

◇ MAINS FOCUS

[ENGLISH]

Context

A GI (Geographical Indication) tag application has been filed for 'Ananthapuramu Lemon' — a distinctive citrus variety from Peddapappur, Peddavadugur, Tadipatri, and Yadiki mandals of Anantapur district. Filed by Madanapalle Institute of Technology and Science (MITS) through its Intellectual Property Facilitation Centre (IPFC). Distinctive features: uniform size, bright colour, high juice content, balanced acidity, strong aroma, longer shelf life. This follows AP's existing portfolio of GI-tagged products and demonstrates university-agriculture linkage for rural intellectual property development.

Background

Geographical Indication (GI) tags are a form of intellectual property right granted to products with a specific geographical origin that possess qualities, reputation, or characteristics essentially attributable to that place. India enacted the Geographical Indications of Goods (Registration and Protection) Act 1999

and Rules 2002. The GI Registry (under DPIIT, Ministry of Commerce) is located in Chennai. India's first GI tag was granted to Darjeeling Tea (2004). AP has one of India's richest GI portfolios — Tirupati Laddu, Banganapalle Mango, Guntur Sannam Chilli, Etikoppaka Toys, Kondapalli Toys, Dharmavaram Silk, Uppada Jamdani Silk, Venkatagiri Sarees, Srikalahasti Kalamkari, Bobbili Veena, Nellore Cloth Toys, and others. Anantapur district is known for groundnut (India's largest groundnut-producing district) and horticulture — mangoes, bananas, vegetables. The Ananthapuramu Lemon from specific mandals (Tadipatri, Yadiki particularly) has distinctive agronomic characteristics attributable to the region's semi-arid climate, specific soil type, and traditional cultivation practices. MITS (Madanapalle, Chittoor district) has an Intellectual Property Facilitation Centre (IPFC) — one of India's university-level IP support institutions established under DPIIT's IP awareness programmes. Filing GI applications for local agricultural products is exactly the kind of university-rural economy linkage that MITS's IPFC was created to enable.

Key Dimensions

1. GI Tag — Economic and Legal Protection: A GI tag provides: (a) Legal protection against misappropriation — others cannot falsely claim their product is 'Ananthapuramu Lemon'; (b) Premium pricing — GI-tagged products typically command 20-30% price premiums in domestic and international markets; (c) Export market access — GI tags facilitate EU, Japan, and US market access where origin labelling matters; (d) Community benefit — the tag benefits all legitimate producers in the designated area, not just a single company (unlike trademarks). For Anantapur farmers growing lemons in the 4 mandals, GI certification converts their product's geographical distinctiveness into a commercially recognised and legally protected identity.

2. Anantapur Lemon — Agroclimatic Basis: Anantapur district's semi-arid climate (600-700 mm rainfall, high temperature, well-drained red laterite soils) creates specific agronomic conditions for citrus cultivation. The 'balanced acidity' and 'high juice content' characteristics of Ananthapuramu Lemon are attributable to: (a) slow maturation in dry conditions (concentrating sugars and acids); (b) specific soil mineral profile (red laterite soils influence citrus flavour); (c) low humidity reducing fungal disease = longer shelf life. These are place-specific characteristics that satisfy the 'qualities attributable to geographical origin' requirement under GI Act 1999.

3. MITS IPFC — University-Agriculture Linkage: Madanapalle Institute of Technology and Science's Intellectual Property Facilitation Centre filing this GI application demonstrates a productive university-rural economy linkage. Universities in India have historically been disconnected from local agricultural economies. IPFC model (DPIIT-supported) enables universities to: identify locally distinctive agricultural

products; build the documentation base for GI applications (historical production records, quality analysis, agronomic surveys); and file and prosecute GI applications on behalf of farming communities. This is NEP 2020's 'university in service of local community' principle in practice.

4. AP GI Portfolio — Competitive Advantage: AP's existing GI portfolio spans: handicrafts (Kondapalli, Etikoppaka, Bobbili Veena), textiles (Dharmavaram, Uppada, Venkatagiri), food (Tirupati Laddu, Banganapalle Mango, Guntur Chilli), and art (Kalamkari). Adding 'Ananthapuramu Lemon' expands AP's horticultural GI portfolio. For export markets — particularly Middle East (where Indian lemons have large demand) and EU — GI certification enables premium positioning and formal trade channels that commodity lemon sales cannot access.

5. Rayalaseema Horticulture Hub Linkage: The Ananthapuramu Lemon GI application connects directly to AP's Rayalaseema Horticultural Hub DPR (23 May edition — Rs 25,884 crore, 36 irrigation projects). The DPR's horticultural logic: complete irrigation infrastructure → enable horticulture expansion in semi-arid Rayalaseema. GI tags for distinctive Rayalaseema horticultural products (lemons from Anantapur, mangoes from the region) create the premium market access that justifies the irrigation infrastructure investment. Without GI-based product differentiation, Rayalaseema farmers selling in commodity markets cannot capture the full value of their distinctive produce.

6. TRIPS Agreement — International Dimension: India's GI law implements its obligations under TRIPS (Trade-Related Aspects of Intellectual Property Rights) Agreement — Article 22-24. TRIPS mandates WTO member states to provide legal means for interested parties to prevent GI misuse. India's GI Act 1999 is the TRIPS-compliant domestic implementation. International GI recognition — particularly in EU (which has the world's most developed GI system — Protected Designation of Origin/PDO, Protected Geographical Indication/PGI) — requires separate bilateral negotiations. The Ananthapuramu Lemon GI application under domestic law is the first step; bilateral recognition in EU/Japan markets requires subsequent diplomatic-trade engagement.

Critical Analysis

The Ananthapuramu Lemon GI application is a small but significant step in AP's horticultural intellectual property development. The MITS IPFC model — university as IP facilitator for rural agricultural communities — is replicable across AP's other distinctive agricultural products. Many Rayalaseema and Uttarandhra agricultural products with place-specific characteristics (Chittoor mangoes, Nellore rice varieties, Srikakulam turmeric, East Godavari banana varieties) likely qualify for GI tags but lack institutional support for filing.

The critical challenge is post-registration enforcement. India has over 400 registered GI tags, but most are commercially ineffective because: (a) there is no mechanism to certify that farmers are using the GI tag on their products; (b) there is no supply chain traceability from farm to consumer; (c) there is no GI-premium marketing infrastructure. For Ananthapuramu Lemon to generate the 20-30% premium that GI status enables, AP's horticulture department must build: certified GI-mark licensing for individual farmers in the 4 mandals; a supply chain aggregation model (FPO-based) that maintains GI integrity from farm gate to export; and an export promotion strategy targeting Middle East and EU markets where GI-certified Indian citrus commands premium. Going forward: AP Horticulture Department should immediately issue GI Producer Group licences to lemon farmers in the 4 mandals; establish Anantapur Lemon FPO (Farmer Producer Organisation) as the GI mark custodian; develop export marketing strategy in partnership with APEDA (Agricultural and Processed Food Products Export Development Authority); and commission MITS IPFC to identify and file GI applications for 5-10 other distinctive Rayalaseema agricultural products.

VALUE ADDITION Constitutional & Legal: Art 300A (Property rights) | GI of Goods (Registration and Protection) Act 1999 | GI Rules 2002 | TRIPS Agreement Art 22-24 (WTO — GI protection) | IPR Policy India 2016 (National IPR Policy — DPIIT) || SDGs: SDG 2 (Zero Hunger — farmer income, agricultural value addition) | SDG 8 (Decent Work — rural economic value) | SDG 9 (Innovation — IP as innovation enabler) | SDG 17 (Trade partnerships — GI enables export access) || AP GI Portfolio (selected): Tirupati Laddu | Banganapalle Mango | Guntur Sannam Chilli | Kondapalli Toys | Etikoppaka Toys | Dharmavaram Silk | Uppada Jamdani Silk | Venkatagiri Sarees | Srikalahasti Kalamkari | Bobbili Veena | NOW: Ananthapuramu Lemon (application filed) || Cross-ref: Rayalaseema Horticulture Hub DPR Rs 25,884 cr (23 May) — irrigation + GI = complete value chain | Pillale Sampada (17-18 May) — rural economic revitalisation attracts families back || Institutions: MITS (Madanapalle) IPFC | GI Registry Chennai (DPIIT, MoC) | APEDA (export promotion) | AP Horticulture Dept | DPIIT (IP policy) | WTO TRIPS Council

[తెలుగు]

సందర్భం

అనంతపురం జిల్లా పెద్దపాపూరు, పెద్దవడుగూరు, తాడిపత్రి, యాడికి మండలాల్లో పెరిగే 'అనంతపురం నిమ్మకాయ'కు GI ట్యాగ్ దరఖాస్తు దాఖలు. MITS (మదనపల్లె) IPFC సహకారంతో VC C. యువరాజ్ ప్రకటన. విశిష్ట లక్షణాలు: ఏకరీతి పరిమాణం + ప్రకాశవంతమైన రంగు + అధిక రసం + సమతుల్య ఆమ్లత్వం + బలమైన సువాసన + ఎక్కువ నిల్వ జీవితం.

ముఖ్య అంశాలు

1. GI ట్యాగ్ — ఆర్థిక + చట్టపరమైన రక్షణ: చట్టపరమైన రక్షణ: ఇతరులు 'అనంతపురం నిమ్మకాయ' తప్పుగా పేర్కొనలేరు. ప్రీమియం ధర: GI ట్యాగ్ ఉత్పత్తులు సాధారణంగా 20-30% ఎక్కువ ధర పొందుతాయి. ఎగుమతి మార్కెట్ ప్రాప్యత: EU, జపాన్, US మార్కెట్లలో. సమాజ ప్రయోజనం: 4 మండలాల్లోని అందరు రైతులకు ప్రయోజనం.

2. రాయలసీమ ఉద్యాన హబ్ అనుసంధానం: అనంతపురం నిమ్మకాయ GI + రాయలసీమ ఉద్యాన హబ్ DPR (23 మే — ₹25,884 కోట్లు) = పూర్తి విలువ గొలుసు. నీటిపారుదల మౌలి → ఉద్యాన విస్తరణ → GI ట్యాగ్ → ప్రీమియం మార్కెట్ ప్రాప్యత. GI లేకుండా రైతులు వస్తువు మార్కెట్‌లో విక్రయిస్తారు = వారి విశిష్ట ఉత్పత్తి యొక్క పూర్తి విలువ పొందరు.

3. MITS IPFC — విశ్వవిద్యాలయం-వ్యవసాయం అనుసంధానం: IPFC మోడల్ (DPIIT మద్దతు): విశ్వవిద్యాలయాలు స్థానిక వ్యవసాయ సమాజాల IP సహాయకులుగా. NEP 2020 'స్థానిక సమాజ సేవలో విశ్వవిద్యాలయం' సూత్రం అమలు. రాయలసీమ + ఉత్తరాంధ్రలో అనేక విశిష్ట వ్యవసాయ ఉత్పత్తులకు GI ట్యాగ్ అవకాశం.

4. అమలు సవాలు: భారతదేశంలో 400+ GI ట్యాగ్లు కానీ చాలావరకు వాణిజ్యపరంగా నిష్ప్రభాలు — ధృవీకరణ యంత్రాంగం లేదు, సరఫరా గొలుసు గుర్తింపు లేదు, GI ప్రీమియం మార్కెటింగ్ మౌలి లేదు. AP తోటపని విభాగం FPO-ఆధారిత అగ్రిగేషన్ మోడల్ + ఎగుమతి వ్యూహం నిర్మించాలి.

విమర్శనాత్మక విశ్లేషణ

అనంతపురం నిమ్మకాయ GI దరఖాస్తు = AP ఉద్యాన IP అభివృద్ధిలో చిన్న కానీ ముఖ్యమైన అడుగు. MITS IPFC మోడల్ AP లో ఇతర విశిష్ట వ్యవసాయ ఉత్పత్తులకు పునరావృతమవుతుంది. క్లిష్టమైన సవాలు: నమోదు తర్వాత అమలు. GI ప్రీమియం గ్రహించాలంటే: FPO + సరఫరా గొలుసు గుర్తింపు + మధ్య ప్రాచ్య/EU ఎగుమతి ప్రమోషన్ (APEDA సహకారంతో) అవసరం.

Value Addition కోసం English సెక్షన్ చూడండి