ASIA NATURE CHALLENGE 2025

EXTENSIVE FINAL REPORT

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Photo credit: *Kien Dang; Nature Play Social Policy Ecology Research Institute - HEPA Eco-farming School Learn Club Bangkok*

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INTRODUCTION

The Asia Nature Challenge (ANC) is a continent-wide citizen science initiative launched in 2024, with the objective of strengthening biodiversity documentation, ecological awareness, and community-driven conservation across Asia. Coordinated by Citizen Science Asia in collaboration with The Naturalist School, the initiative was conceived as a response to persistent gaps in biodiversity data originating from Asia despite the continent's extraordinary ecological richness.

Asia encompasses an unparalleled range of ecosystems, including tropical rainforests, alpine mountain systems, arid deserts, mangrove forests, freshwater wetlands, coastal zones, and coral reef systems. These ecosystems support an immense diversity of flora and fauna, many of which are endemic and remain poorly studied. However, despite this biological wealth, Asia remains underrepresented in global biodiversity databases.

Analysis of global iNaturalist data between July 2023 and June 2024 revealed that less than 9% of over 250 million observations originated from Asia. When normalized by population size, Asia contributes significantly fewer observations per million people than other continents. This disparity is influenced by factors such as uneven access to digital tools, limited awareness of citizen science platforms, language barriers, and lack of coordinated regional initiatives.

The Asia Nature Challenge was established to address these challenges by creating a unifying platform that encourages participation, builds capacity, and fosters collaboration among citizens, scientists, educators, and conservation organizations. By promoting ethical nature observation and scientific rigor, ANC aims to generate reliable biodiversity data while cultivating long-term environmental stewardship across Asia.

OBJECTIVES

The ANC 2025 was guided by a comprehensive set of objectives designed to address both scientific and social dimensions of biodiversity documentation.

1. Expansion of Citizen Science Participation
ANC seeks to mobilize individuals from diverse backgrounds, including students, educators, amateur naturalists, professional researchers, photographers, and community groups. By lowering barriers to participation and promoting inclusive engagement, the initiative aims to democratize biodiversity science.

2. Enhancement of Data Quality and Scientific Value
A central objective of ANC is to improve the quality of biodiversity observations submitted to global databases. Emphasis is placed on accurate documentation, proper metadata recording, and community-based verification to increase the proportion of research-grade records.

3. Addressing Geographic and Taxonomic Gaps
ANC prioritizes observations from underrepresented regions, habitats, and taxonomic groups. This focus supports a more comprehensive understanding of Asia's biodiversity and contributes to more equitable data coverage.

4. Capacity Building and Skill Development
Through structured training programmes, ANC aims to equip participants with the skills required for ethical observation, species identification, and effective use of digital platforms.

5. Strengthening Regional and Institutional Partnerships
The initiative fosters collaboration between local communities, academic institutions, NGOs, and conservation agencies to ensure sustained impact beyond the event period.

EVENT STRUCTURE AND METHODOLOGY

ANC 2025 followed a carefully designed two-phase structure that balanced accessibility with scientific rigor.

1. Observation Phase (3–6 October 2025)

During this phase, participants across Asia documented wild organisms in natural habitats using photographs and audio recordings. Observations were submitted through the iNaturalist mobile application or website, ensuring standardized data collection.

Participants were encouraged to follow ethical observation guidelines, including minimizing disturbance to organisms and habitats. Emphasis was placed on recording accurate location data, multiple angles, and ecological context.

2. Identification Phase (7–12 October 2025)

The identification phase focused on community-driven verification of submitted observations. Experienced identifiers, taxonomic experts, and knowledgeable volunteers reviewed records, provided identifications, and added annotations.

This collaborative process improved data accuracy and facilitated knowledge exchange between novice and experienced contributors.

CAPACITY BUILDING AND AWARENESS PROGRAMMES

Capacity building was a cornerstone of ANC 2025. A diverse range of workshops and training sessions were conducted to support participants at different skill levels.

1. Orientation for Collaborating Organisers

Introductory sessions were organized to familiarize collaborating organisers with ANC's objectives, workflows, and communication protocols. These sessions ensured effective coordination across regions.

2. Beginner Workshop on iNaturalist

This session introduced participants to the fundamentals of iNaturalist, including account setup, uploading observations, and basic identification techniques. Practical demonstrations addressed common challenges faced by first-time users.

[Link to the detailed summary]

3. Advanced Workshop on iNaturalist

The advanced workshop focused on best practices for documenting organisms, improving identification accuracy, and contributing to community verification. Participants were encouraged to engage in identification at levels aligned with their expertise.

[Link to the detailed summary]

4. Taxonomic Training: Odonata

An introductory session on dragonflies and damselflies covered morphology, life cycles, ecological roles, and survey methods. This training enhanced participants' ability to document freshwater biodiversity.

[Link to the detailed summary]

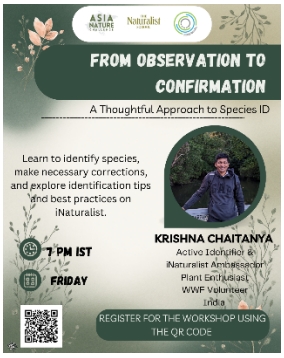
5. Moth Recording Workshop

Participants were introduced to moth diversity, nocturnal survey techniques, ethical light trapping, and annotation standards. The session highlighted the ecological importance of Lepidoptera.

[Link to the detailed summary]

6. Data Stewardship and Identification

This session emphasized the importance of data curation, annotation, and verification. Participants learned how to use platform tools to filter observations by region, taxon, and time period.



[Link to the detailed summary]

7. Concluding Session

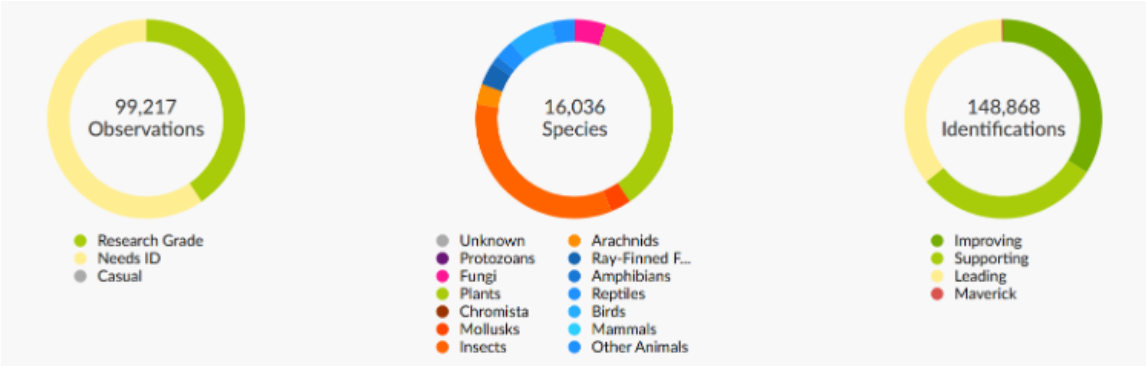
The program concluded with a review of outcomes, recognition of contributions, and discussion of future directions.

PARTICIPATION OVERVIEW

ANC 2025 achieved significant participation across Asia, reflecting growing interest in citizen science.

Total Participants: 7,340
Total Observations: 98,942
Total Species Documented: 15,985
Total Identifications: 148,193
Research Grade Observations: 40.38%

Participants represented a wide demographic spectrum, including students, educators, amateur naturalists, professional scientists, conservation practitioners, and photographers.



iNaturalist Project: [Asia Nature Challenge 2025]

TRENDS AND DATA ANALYSIS

1. Comparison with ANC 2024 demonstrates substantial growth:

- Participant numbers increased by approximately 29%
- Observations increased by 34.8%
- Species documented increased by 18%

These trends reflect improved outreach, increased awareness, and enhanced training efforts.

2. Research Grade Trends
The slight decrease in the proportion of research-grade observations is attributable to the influx of new participants. This trend underscores the importance of sustained expert engagement and mentorship.

3. Geographic Expansion
ANC 2025 saw increased participation from previously underrepresented regions, contributing to improved geographic coverage.

4. Taxonomic Breadth
The diversity of taxa documented expanded significantly, particularly among insects, plants, fungi, reptiles, and amphibians.

SPECIAL SPECIES HIGHLIGHTS

ANC 2025 documented numerous significant species records, including first platform records, endemic species, and taxa of conservation concern.

Notable highlights include newly described scorpion species, endemic reptiles, vulnerable plant species, and biogeographical range extensions. These findings contribute valuable information to regional biodiversity assessments.

1. ***Androctonus caspius*** **— Iran**

Observer: @parham_beyhaghi
Record Type: First iNaturalist Record
Nativity: Native to Iran
Notes: Newly described species (2025); multiple observations by the same observer outside ANC.
iNaturalist link: https://www.inaturalist.org/observations/318693417

2. ***Asaccus zagrosicus* — Iran**

Common Name: Zagros Leaf-toed Gecko
Observer: @kian_kaftarbaz
Record Type: First iNaturalist Record
Nativity: Endemic to Iran
iNaturalist link: https://www.inaturalist.org/observations/319241939

3. ***Clitocybula esculenta* — Japan**

Observer: @masaki_hamaguchi
Record Type: First iNaturalalist Record
Nativity: Endemic to Japan
iNaturalist link: https://www.inaturalist.org/observations/318582690

4. ***Dasineura tubularis* — Iraq**

Observer: @ibrahim_hirory
Record Type: First iNaturalist Record
iNaturalist link: https://www.inaturalist.org/observations/318705558

5. ***Gaertnera rosea* — Sri Lanka**

Observer: @nuwan
Record Type: First iNaturalist Record; Endemic
IUCN Status: Vulnerable
Nativity: Endemic to Sri Lanka
iNaturalist link: https://www.inaturalist.org/observations/319180927

6. ***Hemidactylus pseudoromeshkanicus* — Iran**

Common Name: Andimeshk Half-toed Gecko
Observer: @kian_kaftarbaz
Record Type: First iNaturalist Record
Nativity: Endemic to Iran
iNaturalist link: https://www.inaturalist.org/observations/319237218

7. ***Jansenia vestiplicatica* — India**

Observer: @sharanv
Record Type: First iNaturalist Record
Nativity: Native to India and Sri Lanka
iNaturalist link: https://www.inaturalist.org/observations/318906439

8. ***Protaetia vietnamosinica* — Vietnam**

Observer: @huanlai-autumn
Record Type: First iNaturalist Record; Endemic
iNaturalist link: https://www.inaturalist.org/observations/318853986

9. ***Androctonus barahoeii* — Iran**

Common Name: Zagros Fat-tailed Scorpion
Observer: @kian_kaftarbaz
Record Type: Second iNaturalist Record
Nativity: Native to Iran
Notes: Newly described species (2025)
iNaturalist link: https://www.inaturalist.org/observations/319021575

10. ***Cryptocoryne elliptica* — Malaysia**

Observer: @ooiqie
Record Type: Second iNaturalist Record
IUCN Status: Vulnerable
Nativity: Malaysia
Notes: Prior observations exist but are private
iNaturalist link: https://www.inaturalist.org/observations/318596613

11. ***Pseudosesia cambodialis* — Malaysia**

Observer: @zicky
Record Type: First Country Record
Notes: Renamed from *Paranthrene cambodialis*; relatively common species
iNaturalist link: https://www.inaturalist.org/observations/319125949

12. ***Sargus bipunctatus* — Georgia**

Common Name: Twin-Spot Centurion Fly
Observer: @deniskitel
Record Type: First iNaturalist Record in Asia
Notes: Common species in Europe; newly documented in Asia
iNaturalist link: https://www.inaturalist.org/observations/319161182

MEDIA COVERAGE AND PUBLIC ENGAGEMENT

ANC received media coverage in regional outlets, including environmental publications in Iran. Social media campaigns amplified outreach, facilitating participant recruitment and public engagement.

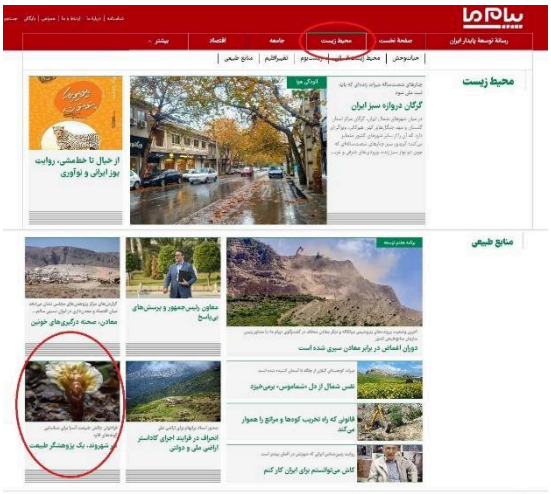


Figure: *A snapshot of the article published in Payamema*

IMPACT AND OUTCOMES

1. Scientific Impact
ANC generated high-quality biodiversity datasets that support research, conservation planning, and environmental assessments.

2. Educational Impact
Participants gained practical skills in field observation, taxonomy, and data management.

3. Community Impact
The initiative strengthened networks of nature enthusiasts and conservation advocates.

4. Policy Relevance
Data generated through ANC provides baseline information for biodiversity management and conservation decision-making.

CHALLENGES AND LIMITATIONS

Despite its success, ANC faced several challenges:
- Unequal access to technology
- Language barriers
- Limited availability of expert identifiers
- Variability in regional participation

RECOMMENDATIONS FOR FUTURE EDITIONS

- Establish regional coordination hubs
- Expand multilingual training resources
- Strengthen mentorship networks
- Increase institutional partnerships
- Develop offline and low-bandwidth participation tools

CONCLUSION

The Asia Nature Challenge 2025 represents a significant advancement in citizen science engagement across Asia. Through collaborative participation, structured capacity building, and sustained outreach, ANC strengthened biodiversity documentation while fostering environmental stewardship.

The success of ANC 2025 demonstrates the power of participatory science to generate meaningful ecological data and inspire conservation across diverse communities.

HOSTING ORGANIZATIONS

- CitizenScience.Asia
- The Naturalist School

SUPPORTING ORGANISATIONS

- iNaturalist
  Twitter | LinkedIn | YouTube | Facebook | Instagram
- City Nature Challenge
  Instagram
- WWF-India
  Twitter | LinkedIn | YouTube | Facebook | Instagram
- GBIF
  Twitter | LinkedIn | YouTube | Facebook

- GigaScience Press
  Twitter | YouTube | Facebook | Instagram
- National Geographic Society (unofficially)
  Twitter | LinkedIn | YouTube | Facebook | Instagram
- IUCN (unofficially)
  Twitter | LinkedIn | YouTube | Facebook | Instagram - Red List | Instagram - Congress

DIGITAL PLATFORMS

- Facebook Facebook Page
- Instagram: @AsiaNatureChallenge
- Threads: @asianaturechallenge
- X: @AsiaNatureChal
- LinkedIn: LinkedIn Page
- WhatsApp Channel and Group: WhatsApp Channel