showed previously that …' should be replaced with 'previous studies have shown that …'. Just because a work comes from a well-known and reliable laboratory does not necessarily mean that it is standard too. Nonetheless, to overcome the issues raised[2], the option of preliminary check should remain with the editor and the editorial team who anyway have access to author details and affiliations to check for anonymity, reliability and suitability of the work before passing it on to the double-blind reviewers.

In the times of peer-review scams[3,4], the real concern is to be wary about the selection of right reviewers and ensure that publication standards are maintained. The central issue thus is to identify the right kind of reviewers who are competent enough to do justice to the assigned task. It is desirable that more

and more journals adopt a double-blind peer review system for a fair evaluation of research, and to improve the quality of scientific publications.

Some reputed Indian scientific journals have already implemented double-blind peer review method in the process of publication. We encourage that all Indian scientific journals should adopt the same; this will go in a long way to improve the quality of scientific publications in the country. Major Indian scientific publishers should take a lead in this direction so that their journals follow this method of peer review process.

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TANUJ KANCHAN[1,*]
KEWAL KRISHAN[2,*]

[1]*Department of Forensic Medicine and Toxicology,*
All India Institute of Medical Sciences,
Jodhpur 342 005, India
[2]*Department of Anthropology,*
Panjab University,
Chandigarh 160 014, India
*e-mail: kewalkrishan@pu.ac.in;
gargkk@yahoo.com

Opportunities for forest landscape restoration in Uttarakhand, India using ROAM

Land degradation is a global problem caused by a variety of factors or processes which include soil erosion by water/wind, deterioration in physical, chemical and biological properties of soil and loss of its productive potential. Worldwide about 2 billion hectare of degraded lands has opportunities of restoration[1]. Estimates of degraded land in India vary from 30 to 175 million hectare (m ha) (ref. 2). Among the Indian States, Uttarakhand, a predominantly mountainous State, ranks 20th in terms of area under wasteland, which has 23.91% area under degraded land[3]. The Bonn Challenge is a global effort to bring 150 m ha of deforested and degraded land into restoration by 2020 and 350 m ha by 2030, contributing to the international commitments on climate change, biodiversity conservation and land degradation[4]. India was one of the first countries in Asia to commit to the Bonn Challenge, pledging to bring under restoration 13 m ha land by 2020 and another 8 m ha land by 2030 at COP21 of UNFCCC in Paris.

ROAM (Restoration Opportunities Assessment Methodology) provides a flexible and affordable framework for countries to rapidly identify and analyse areas that are primed for forest landscape restoration (FLR) and to identify specific priority areas at a national or subnational level (Figure 1)[5]. ROAM has been used in countries such as Rwanda, Uganda, Mexico, etc.[6]. Realizing the urgent need for restoration in India, IUCN in partnership with G. B. Pant National Institute of Himalayan Environment and Sustainable Development, Kosi-Katarmal, is using ROAM in priority FLR areas through a sub-national assessment in Uttarakhand. While broad restoration opportunities and appropriate interventions are being identified at the State level, districts of Pithoragarh and Garhwal (Pauri) have been taken up for intensive studies. To make this participatory process representative, 11 consultations were held in 2017 among stakeholders such as Van Panchayats, Gram Sabha, NGOs, State line departments, etc. across block and district headquarters in Garhwal and Pithoragarh. Also, historical data of the past 1–2 decades on restoration activities carried out by various departments and other related agencies were collected.

During the consultation process the following drivers of land degradation (both natural and anthropogenic) were identified in order of priority: (i) increasing frequency of forest fire, (ii) invasion of alien plants (e.g. *Lantana*), (iii) livestock grazing, (iv) landslides and soil erosion, (v) pressure on forests for fodder/fuel wood, and (vi) increasing apathy of people towards agriculture and forest management. The ecological and socioeconomic consequences of land degradation were reported as follows: (i) drying up of springs/streams, (ii) soil erosion and downstream flooding, (iii) human–wildlife conflict, (iv) declining natural resources and livelihood options, and (v) increasing out-migration. Thus a vicious cycle among land degradation, diminishing natural resource-based livelihood options and out-migration is discernible as a consequence of land degradation.

In order to offer R&D-based restoration opportunities, three physiographic zones were identified in the target districts. In the high-altitude region restoration of degraded land due to natural hazards (such as landslides) needs to be handled with priority through bioengineering methods[7] using fast-growing and soil-binding species such as (*Alnus, Salix, Hippophae*, etc.). In the mid- and
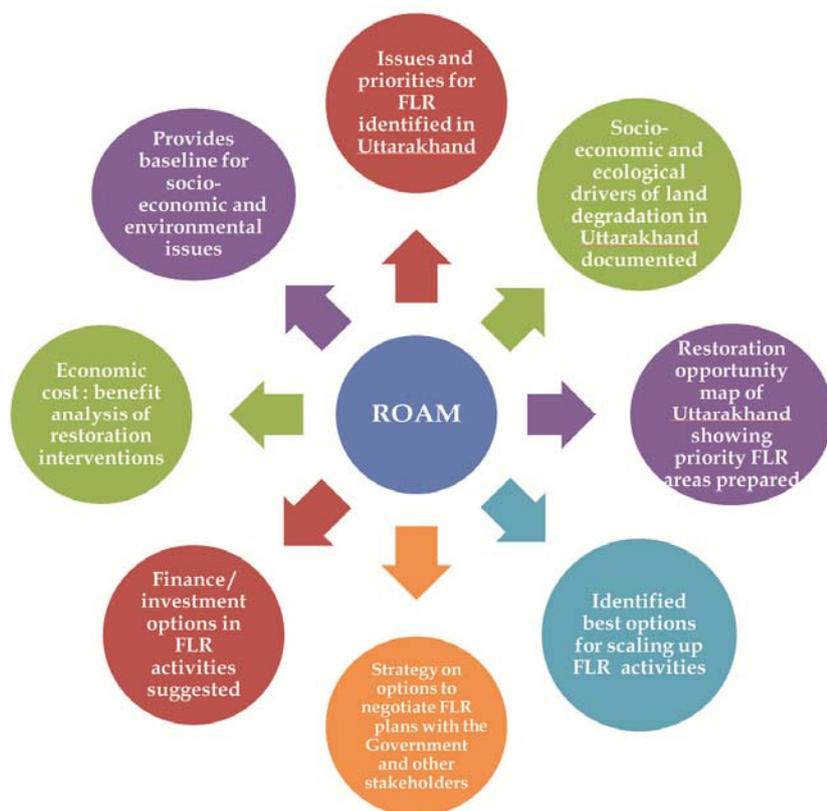
Figure 1. Output of ROAM.

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BHASKAR CH. JOSHI[1]
G. P. PANDE[1]
G. C. S. NEGI[1,*]
R. S. RAWAL[1]
RAJESH JOSHI[1]
SUBRAT SHARMA[1]
D. S. RAWAT[1]
ANUSHREE BHATTACHARJEE[2]

[1]G.B. Pant National Institute of
   Himalayan Environment and
   Sustainable Development,
Kosi-Katarmal,
Almora 263 643, India
[2]International Union for Conservation of
   Nature,
New Delhi 110 049, India
*e-mail: negigcs@gmail.com

low-altitude areas the interventions could be: (i) minimizing forest fire, (ii) promotion of agri-horticulture, cultivation of medicinal, and aromatic plants, silvi-pasture promotion using multipurpose tree species for livelihood, and (iii) linking sacred groves/sites and Van Panchayats with people's livelihoods, such as eco-tourism. These measures are likely to enhance community participation in the effective treatment of degraded land. It is expected that this comprehensive approach of FLR using ROAM would prove more pragmatic over the traditional approach of sectoral treatment of degraded land in Uttarakhand.

Female gynandromorphy – a rare biological event in DABA bi-voltine *Antheraea mylitta* D. ecorace

The *Antheraea mylitta* D. (Lepidoptera: Saturniidae) is an important wild silk-moth endemic to India and distributed in diversified ecological and geographical regions ranging from 12°N to 31°N lat. and 72°E to 96°E long., accordingly 44 eco-races have been reported[1]. DABA bivoltine race has been reared extensively by the >3 lakh tribal and rural communities as a livelihood practice. The larvae of *A. mylitta* are polyphagous but, majorly it has been reared on *Terminalia tomentosa*, *T. arjuna* and *Shorea robusta* in the forest patches and block plantations commercially.

A. mylitta is an oviparous insect which reproduces by laying fertilized eggs. Embryonic development occurs after oviposition and it requires about 8–9 days for the eggs to hatch under normal conditions. During embryogenesis, the cells divide mitotically and produce two daughter cells with identical copies of DNA from the parents. Any deviation in the distribution of chromosomes from normal results in sexual mosaics. Unlike in other insects, the gynandromorph is also observed in the natural as well as semi-domesticated *A. mylitta*[2,3]. Various factors like temperature, ultraviolet light, viral infections, mutations, nuclear power plant disaster and interspecific hybrid crosses are associated with the development of such irregularities[4,5]. The present correspondence is on such a report on gynandromorphy in *A. mylitta*.

We have reported the female gynandromorphy in semi-domesticated DABA bivoltine race to an extent of 0.000012%.