

*Full Length Research Paper*

# **Review on ecotourism potentials, challenges and opportunities in Ethiopia**

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Ecotourism is defined as intentional activity to natural and cultural areas to appreciate nature. The main objective of this review was to examine ecotourism potentials, challenges and opportunities in Ethiopia. To achieve the objective, relevant published scientific literatures were used as data sources. These data were obtained from freely accessible search engines. The review paper was done using common and freely accessible search engines such as Google Scholars, Science Direct and Research Gates. The result of empirical review shows that natural resources and landscape, cultural heritage, battles (historical places), archaeological sites are among ecotourism potentials in Ethiopia. Human induced factors and demographic changes (overgrazing, deforestation, illegal hunting, uncontrolled fire, and population growth, conflicts of interest over resource use, industrialization and agricultural expansion) are the main constraints for ecotourism development in the country. Lack of facilities (such as inadequate infrastructure, financial problems, lack of accommodation, inaccessible market, and low income), poor qualities of human resources and lack of awareness and coordination among stakeholders, institutional problems, climate change, invasive species and diseases are also challenges of ecotourism in the country. The presences of natural, cultural resources, historical sites as well as policies, legal and institutional frameworks are opportunities for ecotourism development in the Ethiopia. Therefore, based on the review result, incorporating different stakeholders, implementing the established polices, legal and institutional frameworks should be made so as to make strong tourism sector in the country. The review also recommends meeting ecotourism facilities, capacity building and creating awareness for local communities and staff members, conducting different mitigation strategies should be made by concerned bodies.

**Key words:** Ecotourism, challenges, cultural heritages, opportunities, prospect, protected areas.

## **INTRODUCTION**

Tourism is one of the most important industries which provide goods and services for long term economic development of a country (Aratuo and Etienne, 2019). It

is acknowledged on a global scale as one of the most important and rapidly expanding economic sectors, and it is considered an alternative to other established

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economic sectors like industrialization for promoting economic development and reducing poverty (Meyer and Meyer, 2015). As an export category, tourism ranks fourth after fuels, chemicals and automotive products in the world (Shavkatovich and Ismailovna, 2018). Increased tourism can have a favorable impact on a country's GDP and employment possibilities, among other things (Manzoor et al., 2019). Tourism and foreign exchange earnings interact positively to induce economic growth (Manzoor et al., 2019; Seok et al., 2021; Khalid et al., 2022). In global economy, tourism contributes 9.5% of the world's GDP and 7% of jobs, 6% of the world's exports and 30% of the world's exports in services where as it generates 45% of the total exports in developing countries (Kreishan, 2015; Navarro-Drazich and Lorenzo, 2021).

For many developing countries, tourism plays a significant role in economic development (Kim et al., 2016; Khan et al., 2020). It is one of the main sources for foreign exchange income and the number one export category, creating various employment opportunities for development. For many developing countries, and not only, tourism is one of the main sources of foreign exchange income and the number one export category, creating much needed employment and opportunities for development (SMEDESCU and FÎNTÎNERU, 2013; Dwyer, 2022). It is the largest and fastest growing industry which generates many new jobs (Ranasinghe et al., 2020).

Ecotourism has not a single definition. It is a purposeful travel to natural areas that conserves the environment and sustains the well-being of local people (Eshun and Tichaawa, 2019; Alisa and Ridho, 2020). Ecotourism represents an approach to tourism that focuses on environmental and cultural preservation (Cobbinah, 2015; Chandel and Mishra, 2016; Cobbinah et al., 2017; Ramírez et al., 2019; Chai-Arayalert, 2020; Baloch et al., 2023).

The International Ecotourism Society (1990) defined ecotourism as ethical travel to unspoiled areas that enhances the welfare of locals and safeguards the environment (Bricker, 2017). Additionally, the World Conservation Union (IUCN) defined ecotourism in (1996) as a responsible travel and visitation to natural areas to experience and admire nature (as well as any related cultural features, both ancient and contemporary) that encourages conservation and invariably also has a minimal visitor impact and offers beneficially active socio-economic involvement of local peoples, enhancing their regional sustainability (Tesfaye, 2017a). Since the idea of ecotourism is relatively new, it can be challenging to explain why it has become so significant in Ethiopia (Birhan and Gebreyes, 2015). But Ethiopia is rich in mosaic culture of people, impressive geological events, scenic beauty landscape, and cradle of humankind formed by complex and old aged natural and anthropogenic factors. The rich biodiversity intriguing

landscape with unique historical events and hospitable cultures are designated for attraction of tourists and historical researchers" expedition (Geremew and Gondar, 2019; Asefa, 2020).

According to Getahun and Yeshanew (2016), Woldu (2018) and Gebreyesus (2022), despite having abundant tourism resources, the country has not fully benefited from this sector in terms of attracting international tourists and generating foreign earnings. Several authors have tried to conduct researches on area of ecotourism potentials, challenges and opportunities in Ethiopia. But from the search of different literatures, the documentation of the natural, cultural, heritage sites are lacking. The conducted researches mainly concentrated to natural tourist attraction area with a little consideration of cultural heritage, historical, archeological sites. There are still untouched potentials of natural, cultural, heritages, archeological sites in the country. The management of these resources didn't get much attention and most of them are under threat. Therefore, this review highlights examining potentials, challenges and opportunities of ecotourism in Ethiopia. This review has various significances. It helps the researchers and professional relevant to this field as a data sources for their research. It also helps policy makers to plan different development activities in tourism sectors in the country. The review of this paper also helps the whole community by creating job opportunities, employment and also contributes nation's GDP by attracting tourists and travelers who visit the area.

## **Objective of the review**

### **General objective**

The main objective of this review paper was to examine potentials, challenges and opportunities of ecotourism in Ethiopia.

### **Specific objectives**

- 1) To assess major natural and cultural resources of ecotourism potentials in Ethiopia
- 2) To assess the existing challenges for ecotourism development in Ethiopia.
- 3) To assess the existing opportunities for ecotourism development in Ethiopia.

## **METHODOLOGY DATA SOURCES**

This review work was mainly organized by searching of relevant published empirical findings of different scientific literatures. Based on the review objectives, secondary sources and works of various scholars published journal articles were reviewed. The review paper was done using common and freely accessible search engines such as Google Scholars, Science Direct and Research Gates. Key

words those are relevant to ecotourism, challenges, opportunities, prospect, and protected areas were used. Most of the literatures reviewed were concentrated to the recently cited materials.

## RESULTS

This part of the study presents the finding of the reviewed paper presents potentials, challenges and opportunities of ecotourism development in Ethiopia. The major ecotourism potentials identified in this section are natural resources and landscape which include different biosphere reserves, national parks, protected areas, flora and fauna and water bodies. Cultural heritage, battles historical places, archaeological sites were also ecotourism potentials identified. Human induced factors, lack of ecotourism facilities, poor qualities of human resources, climate change, invasive species, diseases and other factors such as weak formal institution, weak environmental protection law were among ecotourism challenges identified by this review. The existence of abundance potentials of natural and cultural, historical resources, policy, regulation and institutional framework were presented as opportunities for ecotourism development in the country.

## DISCUSSION

### Major ecotourism potentials in Ethiopia

According to Economic Commission for Africa of 2011, ecotourism is one of the most growing global tourism industries, which contributes environmental conservation, socio-economic development and cultural objectives by providing livelihoods improvement for local communities (ONDICHO, 2018; Strydom et al., 2019). Ethiopia has enormous ecotourism potentials because of its unique characteristics in biodiversity, topographic features and cultural resources, cultural, archaeological and natural resources (Bushy and Kumar, 2020; Tesfaye, 2017a). Ethiopia's mountains, lakes, fauna, flora, colorful ethnic groups, historical and man-made sites, unusual geological features, local arts and artifacts of the country are among the major ecotourism potential resources (Fakana et al., 2019).

### Natural resources and landscape

Ethiopia is a country blessed with biosphere reserves, protected areas, national parks, natural forests, game reserves and wildlife sanctuaries (Tefera, 2014). The Simien National Parks is one of the tourist spots of the country which contains the tourist spots of the country endemic biodiversity specie (Teshome, 2018; Admasu, 2020; Teshome et al., 2021; Teshome et al., 2023). Some of the animal species found in this area are Gelada, Ethiopian Wolf, Walia ibex, Mountain nyala,

hyena and baboons. Asefa (2020) stated that diversities of plant and animal species are found in Gorgora particularly, Northern shore of Lake Tana attract visitors.

The Bale Mountains National Park is one of the protected areas of Ethiopia containing the largest Afro-alpine habitat in the continent consists of 78 mammal species (22 are endemic) and 278 bird species (16 are endemic) is ecotourism attraction area (Gashaw, 2015; Lavrenchenko and Bekele, 2017; Wondirad and Ewnetu, 2019; Shafi, 2020; Mekonnen et al., 2022). The Danakil Depression which is situated under sea level which is located in the Northern Afar (Mohammed, 2020; Teshome et al., 2022; Getahun and Yoseph, 2022) is the deepest area in Ethiopia. Erta Ale Volcano (a basaltic shield volcano) is also found in this area (Zelenski et al., 2013). Tis Abay fall (the source of Blue Nile) and Lake Tana are famous tourist destination in northern Ethiopia, attracting both domestic and international visitors (Tamrat and Addis, 2016; Tessema et al., 2021; Wubalem et al., 2022).

Water bodies such as Lake Burey (unique natural lake found in Majang zone), Lake Nyimulu, Lake Thatha, Lake Wahigan, Baro Akobo River, Gilo River, Alwero River, Deretek Waterfall, Dike Waterfall, Jay Waterfall, Waki Waterfall), Jebebe, natural bridges, caves, valleys, landscapes, fauna and flora are Various natural tourism potentials (Fakana and Mengist, 2019; Menbere and Menbere, 2018; Bareke, 2018; Choudhary et al., 2021). Fakana et al. (2019) study also shows that Gambella National Park and Majang Forest Biosphere are enormous natural tourism potential of fauna and flora, water bodies (waterfalls, rivers, and lakes). Bishangari Eco-Logde, Village Ethiopia, and Wonchi Crater Lake are good potential for tourist attraction areas (Beyene, 2016; Tesema and Berhan, 2019; Geda, 2020). Plants and animals diversity of Dharti Walal National Park found in the Western Ethiopia is one of ecotourism potentials (Shanko et al., 2018) Central Ethiopia Rift Valley lakes are potentials of natural resources for ecotourism attraction (Amare, 2015; Getahun and Yeshanew, 2016; Menbere and Menbere, 2018; Haile, 2022a). There are abundance and diversities of bird, scenic landscape, ostrich farm, hot springs, attractions and some hotels or lodges at nearby areas were identified in and Around Abijata-Shala Lakes National Park (Gobena, 2008; Worku, 2018). Getahun and Yeshanew (2016) stated that the Awash National Park which is found in the Eastern parts of Ethiopia endowed with wildlife resources, hot spring water and tourist facility and services.

### Cultural heritage, battles (historical places)

The Gumi Goyo (the general assembly of Borana Oromo) Kubi Corraa, Gumi Dibe, Futo, Adola, Hora Sama, Oda Dogi, Oda Bisil, Oda Bultum, Oda Nabe are the indigenous knowledge of Oromo people in the Gada System (Chimdesa, 2016; Mumina, 2018; Abeshu and

Baissa, 2019; Negari, 2018; Regassa et al., 2019). Jimma which is the origin of Coffee Arabica and its surrounding (Alemu, 2012; Bushi and Kumar, 2020), Ilu Abbaa Bora (the birth place of Abba Gammachis (Onesimos Nasib or Hika) who translated Holy Bible in to Oromo Language (Afan Oromo) is a beauty area which attracts ecotourism (Tolessa, 2012; Gerbi, 2017). The Oromo music dance and folklores, handcrafts, festivities and market places (Haile, 2022b), Palaces and museums (Kumsa Palace, Abba Jifar Palace, Jimma Museum, Wollega Museum, Addis Alem Mariyam Museum, small museums at Debre Libanos and Tullu Gudo in Ziway), the spiritual and traditional worship places (Irrecha, monasteries, churches, mosques, shrines, (Dirre Sheikh Hussein, Sheikh Umar; Qulubi, Ziquala, Adadi, Itisa, also others like Mendida Mariam, Duber Gebreal, Washa Michael, Melka Kunture, Sof Omer, are some of ecotourism attraction areas in Ethiopia (Mohanty, 2017; Kelkay et al., 2019; Worku Tadesse, 2023; Senbeto, 2022; Semu, 2022; Tola and Brimblecombe, 2022; Yazezew, 2022; Altamura et al., 2020; Beyene, 2016).

The Abune Yosef Massif of Northern Ethiopia (Takele, 2019; Mazengiya, 2022) and the Rock Hewn churches of Lalibela and Tigray (Klyuev, 2020), the Gondar of Emperor Fasilades (Wubneh, 2021), Ruins of Axum (Teshale, 2020), the Wolled city of Harar Medievales (Thomas and Asrat, 2018; Ziyenge, 2021), the Konso cultural landscapes (Kasho et al., 2022), Negash Mosque (Arefayne and Kindeya, 2017) are also potential tourism areas. Tiya, Debre Libanos, Gorgora, Debre Damo, Yeha, Adigrat, Mekele, Gedeo Cultural Landscape, Sacred Landscapes of Tigray, Adowa, Makdela, Boru Meda, Ankober, Alamata Road, Woldia, Dessie, Kombolcha, Hayk, Debre Berhan are most interesting sites for history loving Eco tourists (Alam and Mishra, 2013; Asefa, 2020; Hagos, 2011; Kabthyemer, 2008; Menbere and Admassu, 2020; Amanuel, 2023; Nigatu and Tegegne, 2021).

Ethiopian Epiphany and Christmas, the finding of the True Cross, colorful traditional festivals (Bayih, 2018; Bayih, 2019; Geda, 2020; Tessema and Haile, 2022; Mekonnen and Mekonen, 2023) are celebrated in Ethiopia. Thanksgiving of the Oromo Supreme God called Irecha, Sidama Nation New Year Festival called Fiche Cambala, Ashenda in Tigray, and Ashura in Harar, cultural music, dancing, clothes and dresses, artifacts style are potential cultural and historic resources are potentials of ecotourism attraction areas in Ethiopia (Semu, 2016; Bulo, 2021; Abate, 2022; Tasisa and Flores, 2022; Akbaba and Ahmed, 2021). The archeological sites of Hadar (where Lucy was discovered), Late Stone Age anthropological site, Chorora formation, the attractive culture, local handicrafts, ethnic groups of Karayu, Ittu and Afar and their indigenous knowledge and accommodation facilities are potential resources for sustainable ecotourism development (de la Torre et al., 2014; Getahun and

Yeshanew, 2016; Kappelman et al., 2016).

## Challenges of ecotourism in Ethiopia

### *Human induced challenges*

Human induced challenges for ecotourism development in Ethiopia include overgrazing, deforestation, population growth, illegal land marketing, uncontrolled fire, illegal hunting, conflicts of interest over resource use, industrialization (Beyene, 2016; Tesfaye, 2017b; Menbere and Menbere, 2017; Tesfaye, 2017a; Menbere and Menbere, 2018) (Teshome et al., 2020; Aseres and Sira, 2021; Mekonnen and Mekonen, 2023). Bogale (2015) result indicates that extensive farming and deforestation are the major problems affecting biodiversity of the Bahir Dar Nile River Millennium Park contributing to land degradation by exposing the soil to various agents of erosion which in turn greatly affects agricultural productivity directly affected the agrarian livelihood.

Getahun and Yeshanew (2016) finding indicates that agriculture and nomadic activities, population growth, loss of biodiversity and incompatibility among stakeholders are serious threat for the sustainability of Awash National Park.

Wondirad (2018) study shows that due to the exposure of the natural environment to various threats from different actors including private sector's poor environmental attitude, pressure from surrounding communities, and poorly planned government projects, the ecological diversity and richness are deteriorating in the South Nations and Nationalities. Land degradation, shortage of animal forage, low fertility of the soil, scarcity of cultivable land and absences of off-farm activities are among the critical socio-economic problems of the local community pose pressure on the park in the Borana Saynt Park (Amogne, 2010).

### *Lack of ecotourism facilities*

Different constraints have been identified for ecotourism development in Ethiopia. Lack of infrastructure, low level of accommodation facility and hospitality, financial administration and profit sharing problems, marketing and promotion problems, lack of stakeholders' collaboration, lack of developmental activities like road, electricity and telecommunication networks are among the main challenges encountered in the Yosef Massif, of northern Ethiopia (Lema, 2016; Meniga and Ousman, 2017; Tesfaye, 2017b; Teshome et al., 2020; Wondirad, 2020; Ambecha et al., 2020). The study conducted by Menbere and Menbere (2017) shows that inadequate infrastructure and lack of accommodation were the main ecotourism facility problems. Lack of marketing and promotion

activity, low level of knowledge and attitudes of local community towards community based ecotourism, lack of cooperation among stakeholders, absence of professional guides, lack of major infrastructure and facilities such as accommodation, electricity, and clean water supply are barriers identified in the Meqdela Amba community based ecotourism (Teshome et al., 2020).

### **Poor qualities of human resources**

Ecotourism is constrained by the absence of qualities of human resources. Lack of skilled human resources is a bottleneck for ecotourism development (Mekonnen and Mekonen, 2023). Poor qualification of the staff, lack of park managers, shortage of tourism professionals and tourism experts in culture and tourism offices, lack of market and promoting expert are among constraints for community based ecotourism (Tesfaye, 2017a; Tesfaye, 2017b; Morrison, 2023).

### **Climate change and intensive species**

Climate change has increasingly becoming a major threat affect essential resources on which ecotourism depends (Hornoiu, 2015). Climate change and invasive species are the two main threats for both plant and animal species. The consequences of climate change are range shifts that may cause the species to move out from the range of protected areas (Mengist, 2020). Climatic factors specially rainfall altered the species composition of semi-arid areas and it had positive relationships with plant species diversity, richness, and a groundcover of rangeland types in the semi-arid area of Ethiopia (Asfaw et al., 2020). The wetlands in the country are impacted by a combination of social, economic, development related and climatic factors that lead to their destruction in Ethiopia (Menbere and Menbere, 2018).

Asmamaw et al. (2019) stated that climate change is a major threat to National Park Conservation and Management in Ethiopia. Land use Land Cover Change contributed to 32% of climate change on Lake Dandi, Ethiopia (Dega et al., 2022). Invasive alien species are non- native species of plant and animal origin, and widely recognized among the greatest threats to ecosystem biodiversity and productivity. According to (Cole and Landres, 1996; CBD, 2005), cited in (Temesgen and Warkineh, 2018) these non-native or alien species pose a significant threat to protected areas by their direct and indirect impacts to native species, and by their effects on broader scale ecological patterns and processes.

Water hyacinth, *Eichhornia crassipes* (Martius) (Pontederiaceae), which is a one of the free moving marine herb, is currently a major problem in and its increase hunk inhibits ship travel, disorderly trade, fishing and recreational activities of Lake Tana (Abera, 2018).

Goshu and Aynalem (2017) study shows that soil and water degradation manifested in different forms: sedimentation, clearing of wetland, canalization of the tributaries, increased trend of eutrophication, toxigenic cyano bacteria, occurrence of invasive species like water hyacinth (*Eichornia crassipes*) are major problems of the Lake Tana.

### **Other challenges**

Fast growing construction, weak formal institution, weak environmental protection law, socio-economic, cultural, legal and environmental and institutional problems are constraints for community based development in Ethiopia (Tesfaye, 2017a; Bantider et al., 2023). Teressa (2015) study revealed that there is lack of social network, norms and social trust in the Wenchi community based ecotourism. Instability, terrorism in the Horn Africa, drought and famine incompatibility of interest among stakeholders, challenges related to cultural sustainability, lack of security and safety were the main challenges for community based ecotourism development (Asmare, 2016; Abdel-Latif and Mokeddem, 2016; Shaw, 2016; Gottert, 2016; Wondirad et al., 2020).

Disease posed another challenge. During the COVID-19 crisis in 2019, tour operators in Addis Ababa were found to have implemented crisis management practices to a lesser extent. The absence of tourists, lack of preparedness, and economic and marketing challenges were identified as factors contributing to the limited implementation of these practices among tour operators in Addis Ababa during the COVID-19 pandemic (Tekalign, 2023). Ayalew (2021) stated that however marketing practices of tourism in Addis Ababa during COVID-19 place, price, people, process, partnership and promotion were found to be practiced well, the product, programming, physical evidence and packaging exhibited inferior insufficient during COVID-19. Poor positioning strategy was found in terms of its tourism strategy. Ambaw et al. (2022) study shows that about 60.9% of the heritage sites in the study area were closed, 71.7% of staff who worked in the conservation area, and 71.7% of staff who worked in the conservation and custodian were not able to work during the pandemic. COVID-19 pandemic has also affected by delaying heritage conservation projects works especially in Lalibela, Dessie Museum, and Mereho Palace.

### **Opportunities of ecotourism development**

#### **Abundance potentials of natural and cultural, historical resources**

Several studies indicate that there are diversities of wildlife, large wild mammals, bird, scenic landscape, hot

springs, natural, cultural, traditions, and historical places, of ecotourism resources in different parts of Ethiopia (Amare, 2015; Yilma et al., 2016; Menbere and Menbere, 2017; Nino et al., 2017; Teshome, 2018; Ambecha et al., 2020; Teshome et al., 2023). There are amazing physical landscape and various natural resources, rich biodiversity, cultural and archaeological resources are some of the opportunities for ecotourism development (Eyassu and Chekole, 2018; Haddis, 2018; Mohammed, 2020).

### ***Policy, regulation and institutional framework***

For the development of ecotourism policies and policy implementation frameworks, several key documents have played a significant role, including the Growth and Transformation Plan (Tamene and WONDIRAD, 2019), the Environmental Policy of Ethiopia in 1997 (Bekele, 2008; Tesfaye et al., 2015), and the Millennium Development Goal (Gabay, 2015).

Tourism development strategy, destination development plan, standardization and quality grading of hospitality industry, support and prioritization of the tourism industry are opportunities of ecotourism development in Ethiopia (Robinson and Jonker, 2016; Mehret, 2019), Tourism Transformation Council made by Prime Minister (Mohammed, 2016; Robinson and Jonker, 2016; Gebreyesus, 2017; Degarege and Lovelock, 2019; Tessema and Haile, 2022), Tourism Board and Tourism Organizations policies, legal and institutional frameworks are opportunities of ecotourism in Ethiopia (Tamir, 2015; Ayalew, 2016; Degarege and Lovelock, 2019). Presence of various conservation organizations, local communities' enthusiasm for ecotourism, presence of ample labor force, existence of higher education institution, scientifically valuable areas and economic growth, development, and existence of infrastructural advancement are ecotourism opportunities (Menbere and Menbere, 2017).

### **Conclusion**

This paper aims to examine potentials, challenges and opportunities of ecotourism development in Ethiopia. The result of the review identified noticeable natural, cultural, historical, and archaeological ecotourism potentials in Ethiopia. The natural resources (land scape, the National Parks, the wild life protected areas, lakes, rivers, the diversity of plants and animals), the cultural heritages, the battles, historical sites are tourist attraction areas in the country. Even though the country has abundant ecotourism resources, it is constrained by different factors. Most of the ecotourism potential areas are threatened by anthropogenic factors. Overgrazing, deforestation, population growth, agricultural expansion, illegal land marketing, uncontrolled fire, illegal hunting) are human induced factors identified. Additionally, lack of

facilities (inadequate infrastructure, financial problems, lack of accommodation, market problems, poor qualities of human resources, low income), lack of awareness, weak institution and coordination are among challenges of ecotourism development identified by this paper. The review also examined the presences of abundance potentials of natural, cultural, historical resources, the existence of policy, regulation and institutional framework as opportunities for ecotourism development in the country.

### **Recommendations**

Based on the review result, the following recommendations were made.

- 1) Local communities are the key actors in the ecotourism development. Incorporating them in the planning to implementation, awareness creation, and educating them can enhance the sustainability of the ecotourism.
- 2) The established policies, legal and institutional frameworks should be implemented by responsible bodies.
- 3) Meeting ecotourism development facilities such as roads, electricity and telecommunication, market access and tourism offices should be full filled for sustainable ecotourism development in the country.
- 4) Capacity building for staff members, managers and employing tourism expert in the tourism industry should be done.
- 5) Implementation of different mitigation strategies should be carried out to reduce the adverse effect of climate change.
- 6) The government should have to give more attention to the tourism sector practically.
- 7) This review is only confined to only some potentials, challenges and opportunities of ecotourism development in Ethiopia. Therefore, investigating and promoting the huge natural and cultural tourist attractions of the country to the world community is essential to join ecotourism development stakeholders from different corners of the world.

### **CONFLICT OF INTERESTS**

The authors have not declared any conflict of interests.

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