





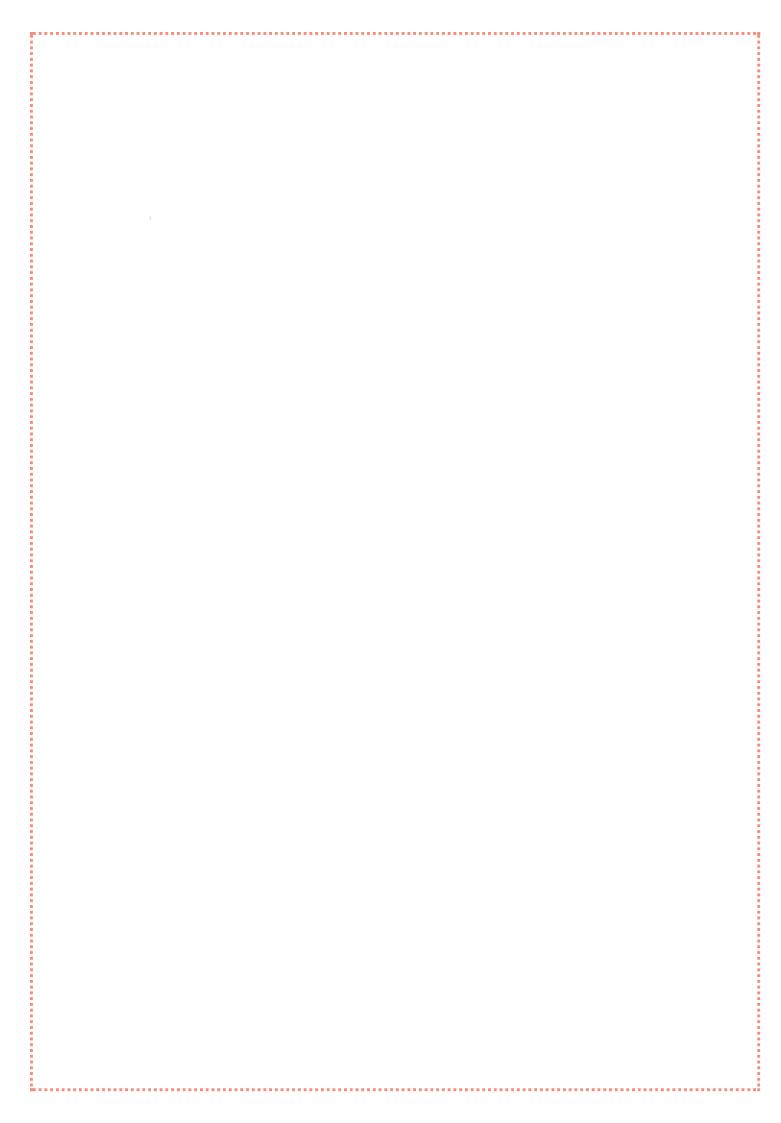


Kaas Plateau: UNESCO World Natural Heritage

ANNUAL REPORT CARD 2019- 2020



'How the local communities around World Natural Heritage sustained the unprecedented attack of pandemic'



ABOUT THE REPORT

TERRE Policy Centre, coordinated the organization of this annual report card 2019 & 2020 and was instrumental in supporting the Government of India in getting UNESCO's inscription of the Western Ghats with its 39 serial sites as World Natural Heritage. Kaas Plateau is the northernmost and the smallest of the 39 sites. It is also the most distinct among all the other 'World Natural Heritage Sites' around the world because of its unique and outstanding universal value exhibited through the endemic wildflowers that grow annually in an extraordinary ecosystem.

TERRE Policy Centre has also been providing regular mentorship, guidance and consultation to the local community and the Government authorities for the preservation of the plateau without any external monetary support.

The Annual Report Card is an important document that tracks the progress of the management of the site by the community and the Joint Forest Management Committee. More importantly, it provides recommendations with the help of experts to conserve the site in the upcoming year.

The report recognizes the collective, collaborative and cumulative efforts of the stakeholders i.e. Joint Forest Management Committee, Forest Division of district Satara of State Government, local community, researchers, experts, journalists and responsible as well as concerned tourists.

The information shared in this report card was collated and compiled by TERRE Policy Centre during various communications and the visits undertaken to Kaas Plateau and the villages in 2021.

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Foreword



By Rajendra Shende, Chairman TERRE Policy Centre, former Director UNEP and IIT Alumnus

"Nature is declining globally at rates unprecedented in human history — and the rate of species extinctions is accelerating, with grave impacts on people around the world", warned a landmark new report from the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), 6 months back.

Annual Report Card that TERRE Policy Centre is preparing for the Kaas Plateau on wildflowers since it's an inscription by UNESCO as part of the 39 serial nominations of the World Natural Heritage has shown a similar trend.

UNESCO's World Natural Heritage Sites (WNHS) are making gallant efforts to arrest that trend. They comprise around 8% of the total surface areas covered by more than 245,000 terrestrial and marine protected areas worldwide. Climate Change (over 80 sites), invasive species (around 70 sites) and the negative impact of tourism (close to 50 sites) are currently the most significant threats to World Natural Heritage site, according to IUCN (the official advisory body on nature under the World Heritage Convention). However, Climate Change is now the fastest evolving threat to WNHS, with the number of sites highly threatened by climate change almost doubling in the last decade.

Coral Reefs and glaciers are among the most affected ecosystems. The World Heritage Convention brings together almost all countries of the world around a common objective of conserving the most exceptional natural and cultural sites. The key task of the UNESCO World Heritage Centre is to monitor the conservation

of sites, which include providing technical assistance, and building capacity through a series of projects on the ground that enable the governments, local communities and indigenous people, the private sector and many other stakeholders to come together. Engaging local communities and the private sector are key to securing broader and longer-term support in the management and sustainable development of WNHS.

Both nature and its contributions to people are vital for human existence and good quality of life. Since people are being supplied with more resources than ever before, it is purely at the expense of all the other contributions from nature towards the man. The biosphere, upon which humanity depends, is being altered to an unparalleled degree across all spatial scales. Biodiversity – the diversity within the species and the interrelationship between species within the ecosystems – is declining faster than at any time in human history.

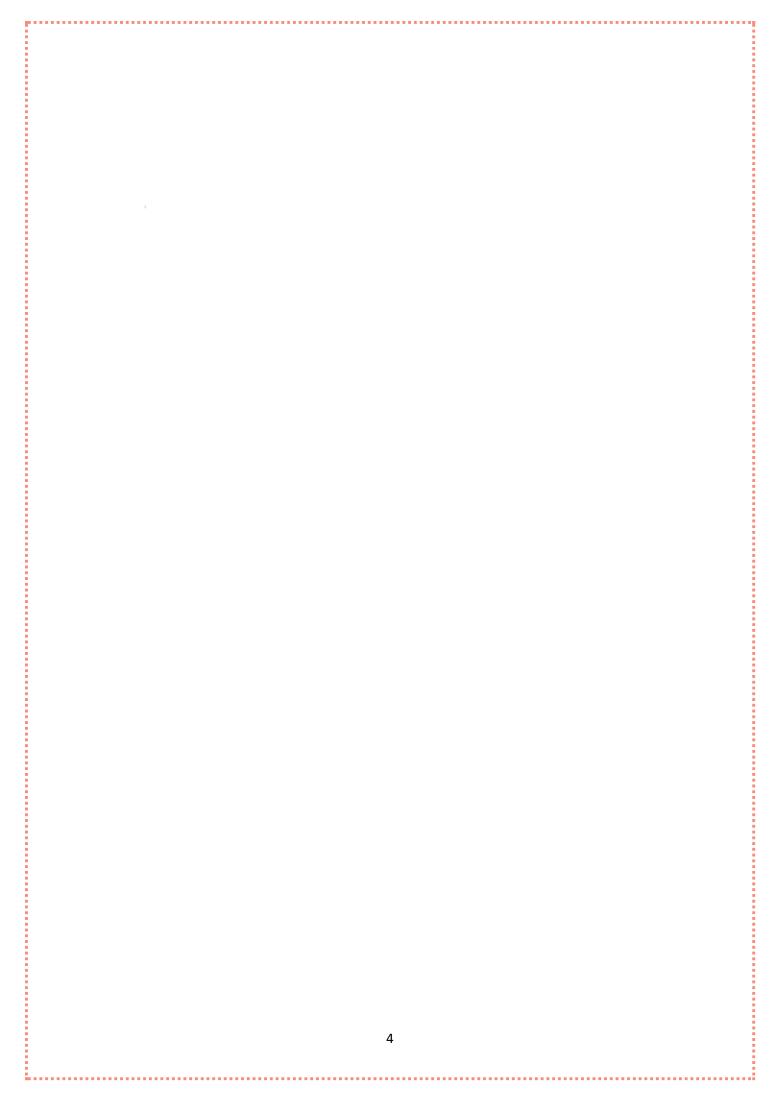
Nature can be conserved, restored and used sustainably while other global societal goals are simultaneously met through urgent and concentrated efforts fostering to transformative change.

Kaas Plateau, the northernmost natural heritage site in the Western Ghats, is in the close vicinity of high mountains. The climate change associated with extreme weather events and the potential danger of indiscriminate human intervention under the shadow of development; also poses the perils that menace the sustainable living of the local communities.

TERRE Policy Centre, recognising these threats have been tracking the progress of the sustainable management (or lack of it) of the site and publishing the Annual Report Cards (ARC) right from 2013. The methodology adopted by TERRE in preparing such ARCs is transparent, inclusive and consultative. At the core of the consultation is the local community and Joint Forest Management Committee (JFMC) mentored by the Government's Forest Department.

Led by a young team of research experts and interns, Atharva Prabhune, Sourav Dutta and Divyanshu Pawar; and guided by biodiversity experts, this ARC tracks the trends of over the last 9 years. It recognises the efforts of the hard-working JFMC and local communities along with Forest Department, underlines the growing threats and makes well-thought-out recommendations.

I hope this Annual Report Card, prepared by TERRE, without any external financial help and with full voluntary contribution, would help in providing the early warning signals and SWOT (Strength, Weaknesses, Opportunities and Threats) analysis for the sustainable living of the Kaas Plateau communities.



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1. Background of Kaas Plateau

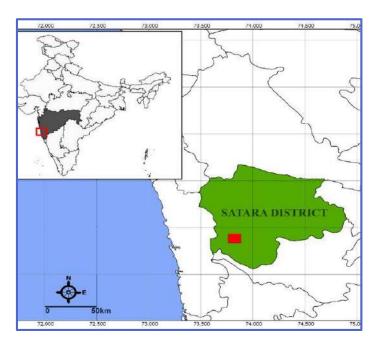
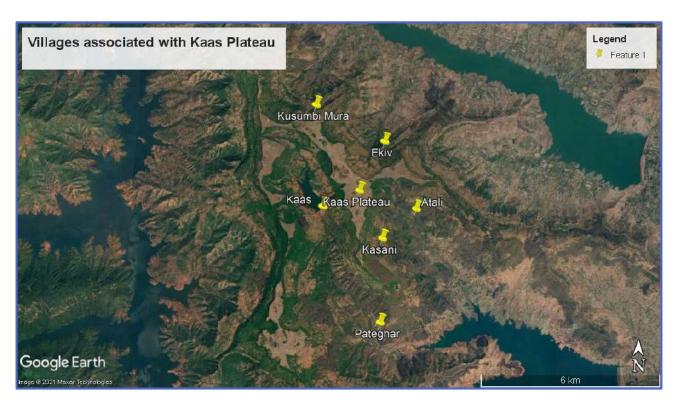


Figure 1: Figure credit - Uploaded by Zeeshan A Mirza



Located in the Satara district of Maharashtra state in India, Kaas Plateau (or Kaas Pathar, as it's locally known) is part of India's **Western Ghats**, hotspot for Biodiversity Heritage. Western Ghats, also called as Sahyadri, sprawls about 1600 kms in length and spreads across 140,000 square kilometres in total.

In 2012, World Heritage Committee meeting in Saint Petersburg in Russia inscribed the Kaas Plateau as UNESCO World Natural Heritage Site among 39 other serial sites.

It is situated on the plateau, where the grasslands lie on the volcanic soil layer of few, centimetres which turns into a 'plateau of flowers' during monsoon season, particularly from August to early October.

Geographically located at 17°42' - 17°45'N and 73°47' - 73°56'E, in the Satara district of Maharashtra, it is situated at an altitude of 1200 metres and is approximately 10 sa. km in area.

Kaas plateau is a "Rock Outcrop". Outcrop, in geological terms, is a portion of naturally formed bedrock or any other landform protruding through the soil level. It supports unique vegetation and has abundant endemic species.

Kaas Plateau has been recognized as part of the Western Ghats -one of the hotspots of biodiversity, due to its unique ecosystem and high degree of endemism, which is sensitive to external threats.

The threats arise not only because of insensitive tourism but also due to the indiscriminate development activities undertaken without proper environmental impact assessment. Poaching and biotic invasion due to excessive traffic, especially during the flowering season has endangered the natural habitat of the plateau, air pollution due to unregulated construction and increased traffic that impacts the pollination of the flowers. The climate change and extreme weather events add to these threats that are now becoming existential.

Unfortunately, the villages surrounding this plateau are financially underprivileged and the literacy level is comparatively low. Though they have been aware of the World Natural Heritage Site status, they have recently started to develop more understanding about the threats to their natural assets that directly or indirectly contributes to their livelihood.

TERRE Policy Centre, Pune, along with the Forest Department of Satara District and Joint Forest Management Committee (JFMC) undertook the initiative of holding the community dialogue at local level to assess the progress in developmental activities within the gamut of the UNESCO guidelines and plans to conduct various activities related to nature conservation and community development.

2. Biodiversity Heritage of Kaas

There are few stories related to Plateau that needs explanation: why the plateau is named as 'Kaas'? The name for the plateau Kaas is attached to the Kaasa tree (Elaeocarpus glandulosus), which is found in thick forests around the plateau. In the regional language, Kaasa also means a lake. The major lake on the plateau could have been one of the reasons for the place to be named as 'Kaas'.

The flora and fauna of Kaas is unique and endemic to the region. More than 850 species of flowering plants are reported in Kaas Plateau, out of which 624 species have been entered in the Red Data Book, wherein 39 species are endemic to Kaas Region only.

The unique flora of this Plateau, includes white Habenaria (ground orchids), bright yellow sonki (Senecio grahamii), Mickey mouse shaped Smithia, Utricularia (Seeta`stears) and purple Aponogetansatarensis(Y-Tura). Aponogetansatarensis species is endemic to the Western Ghats region. Topali Karvi (Pleocaulusritcheie) is found in abundance on the edge of the forests & the cliff. Karvi has 250 species, out of which 46 are found in Western Ghats. Fauna of Kaas include, variety of amphibians, reptiles (Rat Snake -Dhaman), insects, butterflies (White Orange Tip, Common Silver Line, Blue Pancy) and mammals (Small rats to enormous gaur are among the most common and important mammals of Kaas).



Figure 2: Flora of Kaas Plateau

3. Role of TERRE Policy Centre in Kaas Plateau inscription as UNESCO World Natural Heritage Site

2012: The workshop on Community Dialogue was organized by TERRE Policy Centre (Pune-based NGO) and Ranwata (Satara-based NGO) in Satara city, not far from the Kaas Plateau. It included local village heads, forest officers, government representatives, experts from UNESCO, Bombay Natural History Society (BNHS) and number of NGOs and media agencies. Series of meetings by the forest committee and the local communities to develop the plan of actions were held, even before the inscription by UNESCO for the Kaas Plateau, particularly on conservation techniques, monitoring the tourists and inclusive management by the local communities. UNESCO later inscribed the Kaas plateau as World Natural Heritage along with 39 serial sites in the Western Ghats. Subsequent to the dialogue, TERRE took the summary to the World Heritage Committee (WHC) meeting in Russia and represented the kaas's local community while informing to WHC. The WHC was pleased to hear local community's views and approved the inscription.

4. Timeline of Kaas Plateau since its inscription as World Natural Heritage:

2013: Implementation Plan was prepared by the local forest committees and village Panchayats in consultation with TERRE. An interactive event, first of its kind after the inscription by UNESCO, was focused on encouraging active participation between the villages and the Forest department. As a result of this dialogue, the local community benefitted by installation of solar Lamps, LED street lights, water heaters, LPG gas connections, halogen bulbs and computers in the villages surrounding the plateau. The resources were from the earlier revenues till 2012-2013 tourism, which increased due to UNESCO's inscription of Kaas Plateau as World Natural Heritage.

2014: The 2014 Community Dialogue was a continuation of the established participatory process and bottom-up approach. The dialogue was focused on 'how ecotourism could be leveraged' for the development of local community. With active participation of Maharashtra Tourism Development Corporation (MTDC), the concept of 'home stays' was introduced to the locals. They were given guidelines and professional training on management of

homestays, skill-building, education, and concepts on sustainable living was prioritized.

2015: TERRE, along with representatives from the Forest department, other NGOs, MTDC and the local community, assessed the progress and reflected upon the discussions that took place in 2014 and took actions to follow up action.

The overall objective of this event was to evaluate the progress and efforts undertaken for the conservation of Kaas as World Natural Heritage site and plan for future activities with active involvement of organizations working at the grass root, state, national and international levels. Setting up of an information center, medical center and basic transport infrastructure were some of the civil issues discussed. Biodiversity conservation, maintenance of the cleanliness, continued agricultural productivity in the area through enhanced pollination, nutrient cycle and biodiversity, and Development of the communities around the Kaas plateau remained at the heart of the discussions.

The villagers showed their anxiety for the loss of their agricultural land that may have happened due to expansion of Kaas Lake, which was in the planning stage.

2016: Joint Forest Management Committee (JFMC) was formed. Committee comprising of representatives from four member-villages of Kaas, Ekiv, Atali and Kasani, and an office bearer from the Forest Division of Satara were identified as the anchor-engines for Kaas Management. JFMC has been responsibly contributing the most in preserving the plateau since then. Community continued to discuss the impact of increasing the level of Kaas Lake on the sustainable livelihood of the villages.

For the first time the fees structure for the tourists was made. For the tourists above 12 years of age, the entry fee for maximum three hours on weekends and public holidays were decided as INR 100 per individual, and on week days as INR 50. In addition, the Committee also decided to apply vehicular fee of INR 10 for two wheelers, INR 50 for four wheelers and INR 100 for all Loaded vehicles including, mini-buses and trucks, for minimum four hours of parking. *1 USD ~ INR 70.

2017: JFMC witnessed structural and democratic inclusive reforms with majority poll that allowed the inclusion of two more villages' i.e. Pateghar and Kusumbimura as members of the committee. Thus, the number of members increased from 11 to 18, with 3 members representing each member village. A president and a chairperson were elected democratically within the members

of JFMC. In order to maintain gender balance and provide equal opportunities within the community, JFMC decided to include at least one female representative from each of the six villages.

The committee also ensured that local communities achieve a sustainable livelihood from the tourism activities around the plateau. The JFMC, in association with several other organizations and local residents, organized capacity building initiatives like training for tour guides, waste management camps, tourist's carrying capacity management and parking arrangements to maintain the serenity of the plateau throughout the year. A decision was taken to increase the water level of Kaas Lake to supply more water to Satara city.

2018: The famous Kaas plateau which was once filled with the sprawling beds of colourful flora of wild flowers, started witnessing less bloom in 2018. Additionally, due to rapid forest fire incidents in the month of December and January, significant damage was caused to the fragile wild flora. Sunlight and rain are the two influencing factors for flowering. Lack of one or both of these necessities lead to less blooming of flowers in the year 2018 and the blooming season delayed from August to September second week. However, despite the delay, visitors were flocking the site, especially during weekends.

Restricting visitors' access through fencing, managing traffic, setting discipline through penalties and effective land-use management (95% of the land is under conservation and only 5% to be used as a public zone) are some of the efficient steps taken by JFMC in the Kaas Plateau. There is also the engagement of the local community to make these conservation efforts sustainable.

5. Overview of year 2019 & 2020

5.1. Community Development- Residents of Ekiv village



Ekiv Village is a part of the Joint Forest Management Committee (JFMC) of Kaas Plateau since 2012. The village is benefited from the revenue generated from the tourism activity at the plateau. Individuals from the village are involved in patrolling and as local guides, thus providing them employment. The villagers expressed grief about the on-going activities on Kaas Plateau. They put forth a request for transparency in the whole process of activities happening on the Kaas Plateau. As informed by the village authority, currently, they get a share of 26.5 % of the total revenue generated from tourism for developmental activities, although the village has demanded more share from the revenue generated each year. The villagers said that the land given by Ekiv Village for Kaas tourism is privately-owned by the villagers, on the contrary to the remaining villages from the committee who do not own the land. It has been acquired by the Forest Department and the village has not been equally compensated.

The residents have asked for compensation for the loss caused to them due to the low share of the percentage since inception in 2012. The committee has given the compensation to the village but due to some technical barriers, the process couldn't be completed. The forest department is aware of the situation and has taken the cognizance to resolve the issues faced by Ekiv village.



The villagers feel that the fencing has restricted the movement of grazing animals, which may have resulted in the reduction of flowers during the blooming season. This however cannot be fully agreed, as the committee has ensured that grazing is not completely restricted on the plateau.

5.2. Interaction with the local Individuals

i. R.S.Pardeshi – Range Forest Officer, Satara



R.S Pardeshi is the current Range forest officer of Medha region of Satara Forest Department. He is responsible for the smooth functioning of activities at Kaas Plateau and is the representative of Forest Department at the Kaas Plateau.

According to him, Kaas pathaar witnesses increased number of tourists every year and the crowd management has become a complicated task. Fine was imposed on the Tourists entering the flowering area based on the rules of the department. Furthermore, the cleaning activities in the region became hard to manage due to increased tourism in the peak season owing to inexperienced local communities and staff.

ii. Snehal Singhade – Forest Guard, Kaas

"It's been six months since I have been appointed as Forest guard at Kaas Plateau. I have been working with JFMC along with forest department over here to protect the world heritage site, day and night. Since 2012, after Kaas was declared as UNSECO's World Heritage site, the JFMC, jointly with Forest Department are working towards awareness on the local biodiversity and conservation activities which are done through programs arranged at Kaas Plateau for the residents of the surrounding villages. JFMC has started employment opportunities for the local residents who are involved in every scope of work. They also act as guides to tourists for educating them about local flora and fauna species."

iii. Somnath Jadhav - Former JFMC President



Somnath Jadhav, gave crucial insights about Kaas and its involvement in various developmental activities like Employment of about 150 people that has been done till date, under Joint forest management committee (JFMC). He informed that they are trying to create more opportunities for people who are into agriculture and who are facing human – wildlife conflict as its after-effect is the destruction of the crop. So JFMC is taking measures to involve them into non-

farming activities which will become a source of alternate income to them. The JFMC committee is managing well in collaboration with Forest department particularly when officials are in tune with local issues. We, therefore, are also engaged in the efforts to popularise Kaas Plateau and nearby places as a yearlong tourism destination.

iv. Meera Prakash – Atali Village

We interviewed Meera Prakash Atali, from the Atali village, who is currently associated in teaching the nursery kids (Anganwadi). She gave us insights about the support provided by the JFMC during the Covid-19, by providing them basic stationary items, School bags and clothes. Women have been an integral part of these activities and are involved in various kinds of jobs in the JFMC committee.

v. Govind Ganpati Badhapure – Kaasani Village



Mr. Govind Badhapure is one of the active members of the JFMC committee from Kasani village who provided us with his insights on the Kaas tourism, village development in future and his planned initiatives for the future of Kaas Plateau. He has been active in Kaas activities with the committee and villagers as well. He comes from a corporate field, having worked in HR division of well-known company, for few decades. He has been willing to contribute to his village and its people so that their future is secured in a concrete form.

As everyone knows that Kaas is a place with great potential for tourism, particularly during the couple of months of blooming season, but he desires that tourism should be year round. Therefore, he has taken initiatives to explore potential sites around Kaas village and spotting some relatively unknown but potentially useful sites. His idea was to generate employment from management of these sites. His idea was to generate revenue from tourism and use the returns from the same for further development. Urmudi parisar, Navra navri dongar, Kaas Sunset point, Handa ghagar are few of the sites which he is keen to show it to people.

5.3. Interaction with the Stakeholders

Ever since, Kaas was declared as the UNESCO World Natural Heritage site, the local community has received proactive guidance from various individuals and organizations for sustainable tourism and management. Following collaborations are the stakeholders who have been actively engaged in the protection of Kaas plateau:

i. Mahadev Mohite, Deputy Conservator of Forests – Satara



Under the guidance of Mr. Mahadev Mohite, Deputy Conservator of Forests – Satara, JFMC who is working with local people to identify challenges and seek solutions to these challenges, such as additional meaningful employment opportunities for the villagers throughout the year and not just during the flowering seasons.

He said that the Kaas plateau tourism has helped in the development of the region. But due to Covid-19 pandemic, the tourism at the plateau was closed for

tourist based on the Government directives, so there was no tourism in 2020. In those hard times JFMC and Forest department helped the local residents by providing them with essential things like food grains.

He expressed the need of establishing the missing links between the communities that are associated in the management of Kaas Plateau Tourism. More synchronized efforts in the forest department, JFMC and Villages are required for smooth functioning. He appreciated the efforts of TERRE Policy Centre for documentation of the socio-economic aspects of the Kaas plateau.

Mr. Mohite strongly feels a need to carryout scientific research on Kaas Plateau. To support the research efforts, the required infrastructure in terms of weather station is to be re-established at the plateau for convenient data collection and monitoring. Kaas plateau has a variation in flowering during various seasons and regular documentation is very essential to understand the patterns and flowering species. He proposed to undertake a yearlong ecological study at Kaas plateau for concrete conclusions on the flowering and various other aspects related to it. The study can be carried out with a team of experts in every month of the year to understand the seasonal anomalies of the plateau. This study can act as a baseline study for future research of Kaas plateau. The local guards of Forest Department can also be trained for regular data collection and monitoring on the plateau.

The Forest Department is aware about the ongoing disputes among the committee and village regarding land settlement. Department has taken the cognizance and taken steps to resolve the issue. Series of dialogues and meetings have been arranged with committee and village resident to solve the dispute. He emphasized that Forest Department with the help of JFMC and local people aims to continue its committed efforts to conserve the flora and fauna of plateau, which is a home to some rare, endemic and threatened species of flowering plants

ii. Dr. Aparna Watve, Coordinator, RLA, IUCN SSC Western Ghats Plant Specialist Group.

In recent years, the flowering event on the Kaas plateau has been a subject of much discussion. Since 2012, the plateau has been divided into different sectors and tourism is restricted to only two selected sectors, on specific paths. Implementation of these rules has improved in the past 5 years and the disturbance of the habitat due to trampling and unrestricted movement of tourists has reduced.



Grazing of domestic cattle has been stopped for various reasons. Collection of fuel wood has also stopped. All this has led to certain changes in habitat. A brief ecological survey was undertaken in October 2021 to compare with earlier data collected on vegetation ecology in 2003-2006. The data is not strictly comparable as environmental factors vary and the vegetation changes with the slightest change in climate. However, broad patterns can be recognized and are noted below.

- Characteristic ephemeral flush vegetation of *Utricularia- Eriocaulon* type is still dominant in the area, however, its relative dominance appears to have reduced due to heavy growth in grass cover.
- Vegetation of shallow pools, rock crevices, rock surface and shallow depressions has not changed and retains the same floristic characters with dominance.
- Shallow pools with Pogostemon deccanensis, Pasapalum canarae are common. However, Eriocaulon tuberiferum appears to have reduced and monitoring is necessary.
- Extent of *Smithia hirsuta* has increased and has colonized areas that previously had cover of *Impatiens lawii*.
- Alien invasive species have not increased. However, grassland species of *Blumea* appear to have increased in cover.
- The rocky habitat near the first forest check post, near the newly constructed bund has significantly degraded and entire ephemeral flora has been impoverished.
- The large pond (first pond-popularly known as Kumudini pond) has more depth of water now due to bunding, but there appears to be eutrophication leading to heavy growth of algae and increase in the biomass of aquatic species. The effect on pond biota should be studied.
- Number of boulders has reduced, leading to loss of lithophytic flora.

- There is an increase in grass biomass almost exclusively of *Ischaemum spp*. which is likely to dominate other herbaceous flora.
- Strobilanthes spp cover has increased significantly as a result of protection and although it is changing physiognomy of parts of the habitat, it should be seen as a positive change that indicates ecological recovery. The dense growth will be beneficial for the local fauna and will also help natural regeneration of tree saplings.
- The forest patches show improvement due to reduced burning and lopping, which will provide ideal conditions for a variety of animals those prefer shaded conditions.
- There is a need to monitor the ongoing habitat changes to ensure that the recovery happens naturally and alien or invasive species are not introduced even by accident.
- The plateau is at threat from alien invasive Cosmos, Zinnia and Eupatorium.
 There is a need to sensitize visitors and area managers regarding prevention against introduction of these or other alien species in the landscape.

The Ceropegia jainii population on the plateau does not show much change even after increased protection. Special efforts may be needed to ensure the population remains viable.



iii. Prerna Agarwal, Founder Ecosphere Connect, Pune

"I have been visiting and researching on kaas pathar since 2012 -2015 trying to understand the ecological impacts of tourism on native ecological communities around Kaas Plateau and my findings have shown that even if 500 people walk/trample on a certain patch, the patch does not recover. So imagine what could be the possible damage if 10,000 people walk around. But after a gap of 2 years during Covid-19, we got a chance to visit kaas. We attended the community dialogue arranged here at Ghatai Devi Mandir on October 22nd and had put forward some important points stating the increase in invasive species like Tantani (Lantana), Alternanthera, Congress grass (Parthenium hysterophorus). The root cause of such invasion is due to tourist vehicular activities or if there is any disturbance in the area, due to which the local biodiversity is under great threat and its needs to be conserved with the help of local people. There is also a concern of waste and waste management which has been a problem since there has been increase in tourist. Though on one side the tourism is doing well by providing alternative livelihood but my concern is also biodiversity conservation on the plateau. So in community dialogue with villagers we have revolved the discussion around how we can conserve the biodiversity for nature based tourism which is what kaas needs now and not ecotourism. The people here are convinced with the idea and will be going forward together. We will be finding workable solutions to make this a reality and to make kaas a model for a UNESCO World natural heritage site and community-based and nature - based tourism. Secondly, the management has improved over the years and I would like to congratulate each and every one for the commendable job done by people who were involved in it. It feels good to know that the local people, Forest department and the committees over here are aware that the biodiversity needs to be preserved and conserved to run a good tourism in future and this can be done by the efforts of everyone working towards it jointly."

6. Status of Tourism and Revenue Details 2019 and 2020

The details of tourism and revenue are for the flowering session of 2019, as due to Covid-19 there was no tourism in year 2020.

- 1. Concept of 'Parisar Darshan' introduced to promote various spots in and around Kaas to keep tourist interested in existing and exploring new sites
- 2. Number of resorts and hotels has increased in Kaas due to increased inflow of tourists.

- 3. Involvement of school children's and students to be promoted which could also help in awareness about Kaas.
- 4. More tourists prefer to stay at Kaas village for more than 1 day hence tourism facilities' have to be developed accordingly.
- 5. Information boards have been put up on the route from Satara to Kaas Plateau route. The local authority has issued a notice. "If any person from outside Satara district comes to Kaas plateau in violation of this Covid19 ban, immediate action has also been ordered against them."

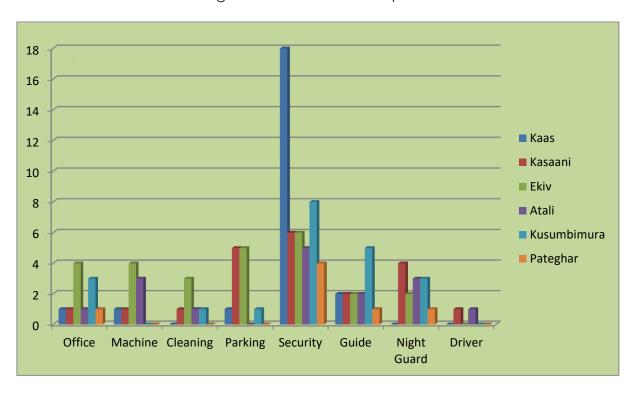
Revenue Generation during the Year 2019

The following chart shows the revenue generated from various activities at Kaas during the year 2019 as during the year 2020 there was restriction in tourism because of COVID-19 Pandemic.

	No. of Visitors	Revenue INR
Online Registration	33,838	33,83,800
Offline Registration	51,208	51,20,500
Students	3,566	71,320
Senior Citizens	8,946	-
Fines Collected	2	1,500
Sale from Tea	ı	41,700
Guide Fee	-	59,000
Parisar Darshan	-	54,400
Offseason Tourist	5,295	1,05,900
Bus Fee	-	12,44,120
Total Revenue	-	10,082,240

Joint forest management committee (JFMC) Staff Details:

Following chart shows distribution of staff working under Joint forest management committee from various villages in and around the plateau



7. Community Dialogue 2019-2020

TERRE Policy Centre has been playing a leading role to undertake the community dialogue since 2012, after the plateau was inscribed as UNESCO World Natural Heritage Site. The purpose of this community dialogue is to review and address the various issues faced by the communities around Kaas Plateau, providing sustainable solutions for development of region.

The community dialogue for year 2020 couldn't be organized due to the unprecedented Covid-19 situation. The recent community dialogue for 2019-2020 1 was organized at Ghatai Devi Mandir, an important place of belief of Kaas community.

Representatives from the Forest Department, Researchers, Academicians, Experts, Civil Society, other NGOs and local media actively participated in the dialogue and carving out the action plan. The communities from 6 neighbouring villages - Kaas, Ekiv, Atali, Kasani, Pateghar and Kusumbimura, all of which collectively constitute the Northern Cluster of the Western Ghats were the key participants of the dialogue.

¹ More information on the community dialogue is in annexure.

The discussions included the need of strategy for removal of invasive plant species, threats to wild flower due to insensitive and unsustainable tourism and Climate Change, reestablishing appropriate traditional practices, need for urgent consultation with experts for conservation of wild flowers and other many such pressing issues that were required to be discussed for sustainable management of Kaas Plateau. The community dialogue resulted in identifying the number of challenges and opportunities and possible actions that could begin now. The collective actions by the community are necessary to conserve, protect and nurture the heritage.

8. Conclusions

The year 2019 had significantly seen good amount of tourist visiting the plateau but the year 2020 hardly saw any tourist coming to plateau because Covid-19 pandemic.

- During the ecological survey conducted while preparing the current report, it was observed that there has been increase in invasive grass species. Hence, certain strong measures have to be taken in order to control their growth.
- ➤ Due to tourism pressure on kaas from past few years, there has been an effect on flowering. So there should be control on tourism to avoid the harmful effect and nature based tourism can be a priority for better management of flowering as well as the tourist.
- ➤ There has been significant decrease in grazing activities happening on the plateau, which has started affecting the flowering so there can be some experimentation carried out based on scientific recommendations provided by experts, which will eventually help the flowering on the plateau.
- ➤ There have been new initiatives to promote tourism on the plateau, taken up by the Joint forest management committee, which would help to promote tourism and the revenue generated can be used for the villagers.

9. Annexure

9.1 Pre Event Guidelines for Community Dialogue at KAAS Plateau

21th October 2021, Wednesday,

A country's identity is defined by its rich cultural and natural heritage. UNESCO defines the site as World Heritage Site for having historical, cultural, natural and scientific significance. UNESCO's World Heritage Sites have expanded into a total of 1154 sites out of which 218 are World Natural Heritage sites from 167 countries as of now.

World Heritage Committee of UNESCO in 2021 at Fuzhou, China inscribed 34 new properties. Out of 34 new inscribed sites, 5 are under the natural heritage category and the remaining 29 are cultural heritage.

Kaas Plateau is one of the 39 serial sites of the Western Ghats, inscribed as World Natural Heritage in 2012. It is mini-site with mega achievements and ambitious future plans. The area covered by the Kaas plateau is just about 16 Sq. Kms out of 160,000 Sq. Km. of Western Ghats, which has been identified as one of the hotspots of biodiversity due to its unique ecosystem, abundant endemic species and threats to its flora and fauna. The site is sensitive to external threats arising from insensitive tourism and biotic invasion mainly due to extensive traffic. Climate change and extreme weather events represent the existential threats to the ecosystem of Western Ghats.

TERRE Policy Centre, a Pune-based global NGO that has contributed significantly to the inscription of the 39 serial natural sites of Western Ghats, recognizes these threats and has been tracking the progress of the Kaas site management. It has been providing guidance to the local community for preservation and restoration of the ecosystems as well as sustainable development of the nearby communities. It is mainly done through Annual Report Cards (ARC), post-dialogues with the stake-holders. TERRE has been publishing ARCs since 2013 that highlights the outcome of cumulative efforts of the Joint Forest Management Committee (JFMC), Forest Division of district Satara of State Government, local community, researchers, experts and journalists. It also develops the suggestions for future actions.

Every year, TERRE, along with the Forest Department of Satara District and Joint Forest Management Committee (JFMC) hosts a community dialogue with the help of its association of UNESCO (NGO) at the local level to assess the progress and plan for relevant activities related to nature conservation and community

development. During COVID 19 pandemic, the annual report cards for the years 2019 & 2020 were not released due to absence of the community dialogue.

Kaas community and TERRE Policy Centre are now proposing a community dialogue for the period of 2019-2020. The dialogue will take place on 22nd October 2021 on Kaas Pushpa Pathar (Kaas Plateau of wildflowers) at Ghatai Devi Mandir. The dialogue will be attended by members of the Joint Forest Management Committee (JFMC) consisting of 6 village heads, bio-diversity experts, researchers, and media.



9.2. Community Dialogue 2021



Community Dialogue is Vaccine For Conflicts, Battles and Wars



iii. Dr Rajendra Shende (Center), Chairman, TERRE, setting the context of Community Dialogue 2021 On left- Mr.R.S.Pardeshi, RFO, Medha region and on right Mrs.Sandhya Chowgule, Principal, New English School, Angapur, Satara

Dialogues are the tools for Resolving Disputes.

"A dialogue should take place at a same level" says Dr Rajendra Shende, Chairman TERRE Policy Centre, while initiating the community dialogue in 'Ghatai Devi Mandir' on Kaas Plateau to-the northern-most World Natural heritage Site of the Western Ghats. Dr Shende, along with experts and Forest Officers sat on the floor like the villagers and JFMC (Joint Forest Management Committee) members. The people were assembled in the temple, not for offering prayers to Ghatai Devi but to discuss the ecosystem of wild flowers. Yes, those Flowers bestowed outstanding universal value and exceptional identity to the place. In fact, in 2012, the Kaas plateau was inscribed as World Natural Heritage Site by the UNESCO, due to these very endemic & exotic species of wild flowers blooming every year between June to August.

TERRE Policy Centre, organised a community dialogue to discuss strategies for protection, conservation and management of the UNESCO World Natural Heritage

site. It was attended by Joint Forest Management Committee (JFMC) members, Forest Department, researchers, experts and village community folks. In his video message, Eric Falt, Regional Director, UNESCO, New Delhi said, "Natural World Heritage Sites are internationally recognised areas of outstanding universal value and are delebrated as most significant protected areas on the Earth." He added, "TERRE Policy Centre supports the state department in the monitoring of the site, bringing together the local communities and making them important stakeholders."

Indelible Link between Kaas Plateau and livelihood

The community development is interlinked to the wild flowers on Kaas plateau. The ensuing dialogue with representatives of six villages and forest guards revealed number of challenges. Firstly, the threats to the Wild Flowers are getting serious due to insensitive and unsustainable tourism and Climate Change. Secondly, traditional practices followed by local community and the guidelines of forest department and experts are in logger-heads. These include but are not limited to cattle grazing and burning of the dry grass. The actions to resolve opposing opinions are urgently needed. Thirdly, the communities around these six villages share the benefits and shoulder the management of plateau (i.e. Kaas, Ekiv, Kasani, Atali, Kusumbi and Pateghar) and have not only gone through the difficult COVID19-dominated season, devoid of tourist in 2020 and 2021, but have also experienced the adverse impacts of fast growth of grass that dominates the sensitive and fragile wild flowers. R.S Paradeshi, Range Forest Officer (RFO) and Dr Rajendra Shende stated the need to hold urgent consultations with experts, National Biodiversity Board and Universities doing research to resolve these issues.



 ${f iv}$. Dr Prerna Agarwal presenting her Research on Kaas Plateau and need of participatory approach to protect environment.

Nature is beyond boundaries

Prerna Agrawal, long time Researcher on Kaas Plateau and popular with the community for her dedicated work in Kaas plateau, presented the outcome of her scientific study and stressed the need of participative approach to protect the nature. Expressing her views on the development and management of the Kaas Plateau, she said 'Nature does not recognise the boundaries and fences. The focus of management of the World Natural Site should be shifted to the extended areas and not confined to the Plateau'. She explained the spread of invasive species in the areas around the Kaas Plateau that may harm the wild flowers in near future.

Scientific Study is Key for Conservation

Shrirang Shinde, Retired Forest Guard, Forest Department has been working on Kaas plateau even before its inscription as UNESCO World Natural Heritage Site. He was also involved during inscription in 2012, ever since he is working extensively on the biodiversity of Kaas. He exclaimed the need of scientific documentation of flora and fauna not only of Kaas plateau but also of the locations around it. This area is unexplored and very crucial for survival and revival of Kaas Plateau. The forests around the kaas plateau also needs to be conserved as they are under

great threat. The increased human intervention is disturbing the working of pollinators that is affecting their services and regeneration of the species. He suggested for a scientific study and documentation of the whole area.

Time to Act

A teacher by profession, Sandhya Chowgule, Principal, New English School, Angapur, Satara suggested that the community needs to take urgent actions. She said, 'A Stich in Time Saves Nine, it is the right time to act. Once the time passes away, the wild flowers will be lost forever.' As a teacher, she inspired women to work alongside men, investing time and quality work. She requested the villagers to follow the tourism protocols strictly to avoid risk to the World Natural Heritage Site.

Scientific Kaas Plateau- An Ark of Opportunities

Ramchandra Bhosale, Retired Bank Official, Bank of India, commented 'The villagers should be cautious towards the preservation of the prestige of the Kaas Plateau and the rare species of the wild flowers. The Kaas plateau is distinctive in itself with varied opportunities for research study, community development and the small and micro nature based industries that would provide socio-economic benefits to the community. Similarly, the site has extraordinary characteristics that could be explored for benefit sharing. He instructed the community to concentrate on collective actions such as Community Market/Weekly Market exclusively selling local medicinal and ayurvedic herbs.

Building back post Covid-19

Somnath Jadhav, Member, Joint Forest Management Committee (JFMC), Kaas Plateau presented the annual expenditure for the year. He informed the audience that due to the unprecedented conditions of Covid-19, tourism activities were banned for 2020-2021 season as per Government directives. He also spoke about the tentative budget of 2021-2022 (August – October). More than 140 individuals were employed and trained for various aspects concerned with the Kaas Plateau and tourism. 2021-2022 (August to October) flowering season had around 91,364 visitors comprising of online and offline registration methods. 2021-2022 (August to

October) season had more tourist than last season i.e. 2019-2020 (August to October) season. Revenue was also generated from various activities like parking charges, Tea Stall, Bus service, Parisar Darshan (Visiting other tourist location around Plateau) and other few initiatives supplementary to the entry fees in 2021-2022 season. He informed that JFMC and Forest Department have also invited ideas from experts, organizations or other interest groups for sustainable development of Kaas Plateau with the aim of conservation of the plateau and year around income for the local communities.

Self-sufficiency through Sustainability

Dr Vinitaa Apte, Founder Director, TERRE Policy Centre suggested various activities that the community can undertake for conservation action and sustainable tourism at Kaas Plateau. She also urged the community to become independent and take steps towards our Prime Minister's vision of becoming "AtmaNirbhar".



In conclusion, the 2021 community dialogue resulted in identifying the number of challenges and opportunities with possible actions that could begin now. There is

growing realisation that the benefits that accrue due to inscription of Kaas plateau as World Natural Heritage by UNESCO is utmost important in continuing the community development. The collective actions by the community are necessary to conserve, protect and nurture the heritage.

Bajrang Kadam, Member, Joint Forest Management Committee (JFMC) on behalf of the committee proposed the closing remarks and extended thanks to conclude the dialogue.

Notes for editors:

TERRE Policy Centre is a non-profit, non-partisan and independent organization dedicated to sustainable solutions to our developmental imperatives. TERRE also is the abbreviation for 'Technology, Education, Research and Rehabilitation for the Environment.' TERRE strives to reach all strata of society, particularly the young generation and people at the bottom of the pyramid with capacity building tools on energy and food security. Its motto is: To think is good but to act is better". https://terrepolicycentre.com

TERRE Policy Centre publishes the Annual Report Cards (ARC) voluntarily right from the year 2013. The Annual Report Card is an important document that tracks the progress of the management of the site and provides recommendation to conserve the site in the following year.

The Annual report cards for year 2019-2020 were not published due to prevailing COVID19 conditions. This 2019-2021 Annual Report Card that recognizes the efforts of the Joint Forest Management Committee (JFMC), Forest Division of district Satara, local community, researchers, experts and journalists will be published in the month of November.

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Joint Forest Management Committee (JFMC) is a committee comprising of representatives from six- member villages of Kaas, Ekiv, Atali, Kasani, Pateghar & Kusumbi Mura and an office-bearer from the Forest Division of Satara are the driving force for Kaas Plateau Management. JFMC was formulated in 2016 and it has been responsible for contributing the most in preservation of the plateau. The committee also ensured that local communities achieve a sustainable livelihood from the tourism activities around the plateau.



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