WILD HOPE
A.I. of the Tiger

	TIME CODE	VIDEO	AUDIO
1.	01:00:03;08		**HRISHITA NEGI:** The Central India landscape supports one of the largest tiger populations in the world. One of the downsides of having a great tiger population is the increasing number of conflicts that also take place. Advancements in technologies are an incredible way to help reduce the conflict. It is possible for these communities and tigers to coexist.
2.	01:00:36;04	**GRAPHIC: TITLE** WILD HOPE A.I. OF THE TIGER	**TITLE** A.I. OF THE TIGER
3.	01:00:46;03 01:00:46;18	 **LOWER THIRD:** DR. HRISHITA NEGI Conservationist	**HRISHITA NEGI:** I fell in love with tigers literally in my formative years. I grew up in a tiger conservation landscape because of my dad being a field director for over 15 years. So, I kind of grew up watching wild tigers. My most fond memories are in the Jeep going around in the jungles you're just completely in the moment looking at this beautiful, beautiful predator in front of you.
4.	01:01:13;14 01:01:16;10	**SUBTITLE:** Seeing a tiger is always thrilling and doesn't matter how many times you have seen a tiger, that thrill never goes away. **LOWER THIRD:** DR. HIMMAT SINGH NEGI Former Director, Kanha Tiger Reserve	**DR. HIMMAT SINGH NEGI:** Seeing a tiger is always thrilling. and doesn't matter how many times you have seen a tiger, that thrill never goes away.
5.	01:01:20;07		**HRISHITA NEGI:** Watching his passion for tigers unfold in front of my eyes was pretty inspiring.
6.	01:01:27;00		**NARRATOR:**

			THAT INSPIRATION ULTIMATELY LED HRISHITA NEGI TO PURSUE HER PH.D. AT CLEMSON UNIVERSITY, WHERE SHE BECAME A TIGER HERSELF. SHE STUDIES HUMAN/WILDLIFE CONFLICT RESOLUTION AND IS FOLLOWING IN HER FATHER'S FOOTSTEPS.
7.	01:01:43;15	**SUBTITLE:** She is assisting me in conserving tigers in this part of the landscape. I have worked with the National Tiger Conservation Authority. So I've been working with Tiger conservation in the country for a long time. And equally important is working with my daughter in tiger conservation.	**DR. HIMMAT SINGH NEGI:** She is assisting me in conserving tigers in this part of the landscape. I have worked with the National Tiger Conservation. So I've been working with tiger conservation in the country for a long time. And equally important is working with my daughter in tiger conservation.
8.	01:02:01;15		**NARRATOR:** HRISHITA'S RESEARCH HAS BROUGHT HER TO MADHYA PRADESH IN CENTRAL INDIA, KNOWN AS THE TIGER STATE. IT'S HOME TO THE LARGEST TIGER POPULATION IN THE COUNTRY. BUT THEIR HISTORY HERE, AND IN INDIA AS A WHOLE, IS A FRAUGHT ONE. IT WASN'T SO LONG AGO -- JUST IN THE EARLY 1900'S -- THAT AN ESTIMATED 40,000 TIGERS ROAMED ACROSS INDIA. BUT AS THE HUMAN POPULATION BOOMED, NEARLY 95% OF THEIR RANGE WAS LOST. RAMPANT HUNTING TOOK A FURTHER TOLL.

9.	01:02:41;19		**HRISHITA NEGI:** The hunting as well as a vermin extermination programs at the time contributed together into a very, very steep decline in the tiger numbers.
10.	01:02:52;02		**NARRATOR:** BY THE 1970'S, THE SPECIES WAS ON THE BRINK. SO IN 1972, THE GOVERNMENT PASSED THE WILDLIFE PROTECTION ACT, BANNING THE HUNTING OF MOST ANIMALS, INCLUDING TIGERS. AND JUST A YEAR LATER, IT LAUNCHED A LANDMARK INITIATIVE: PROJECT TIGER. THE CAMPAIGN WAS NOVEL: THE FIRST NETWORK OF TIGER RESERVES TO MANAGE AND PROTECT THE BIG CATS.
11.	01:03:21;09	**SUBTITLE:** When we started the Project Tiger, we had only nine tiger reserves.	**DR. HIMMAT SINGH NEGI:** When we started the project tiger, we had only nine tiger reserves
12.	01:03:24;19	**GRAPHIC:** MAP OF THE LOCATION OF TIGER RESERVES IN INDIA	**NARRATOR:** TODAY, THERE ARE 55 PROTECTED RESERVES AND COUNTING.
13.	01:03:31;05	**SUBTITLE:** When we started, the protected area was around 9,000 square kilometer. And today we are having 76,000 square kilometer under the Project Tiger coverage.	**DR. HIMMAT SINGH NEGI:** When we started, the protected area was around 9,000 square kilometer (*3474.919 Square mile*). And today we are having 76,000 square kilometer (*29343.764 square mile*) under the Project Tiger coverage.
14.	01:03:42;00		**NARRATOR:** TIGERS NEED VAST TERRITORIES TO SURVIVE, SO CONSERVING THEM ALSO BENEFITS OTHER WILDLIFE.
15.	01:03:48;04	**SUBTITLE:** If the tigers are	**DR. HIMMAT SINGH NEGI:** If the tigers are protected, your entire ecosystem is protected.

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16.	01:03:52;10		**NARRATOR:** IN THE FIFTY YEARS SINCE PROJECT TIGER STARTED, TIGER NUMBERS IN INDIA VIRTUALLY DOUBLED FROM AROUND 1800 TO SOME 3700 TIGERS TODAY. IT'S A POSITIVE TREND, BUT IT'S HAPPENING IN A COUNTRY THAT IS NOW HOME TO 1.4 BILLION PEOPLE – THE MOST POPULOUS ON EARTH.
	01:04:14;17	**GRAPHIC:** Map of tiger reserve and zooms into	HERE IN MADHYA PRADESH, TIGERS AND PEOPLE ARE EVEN MORE CONCENTRATED WITHIN A 2300 SQUARE MILE (*6,000 square kilometer*) STRETCH OF FOREST THAT ALSO SERVES AS A TIGER SUPERHIGHWAY
17.	01:04:26;22		**HRISHITA NEGI:** Kanha and Pench corridor is a corridor which exists between the two tiger reserves. Two very important source areas for tigers.
18.	01:04:35;10		**NARRATOR:** THE CATS HAVE TO MOVE BETWEEN RESERVES TO FIND MATES, PREY AND NEW TERRITORY. BUT LOCAL COMMUNITIES DEPEND ON THIS FOREST AS WELL.
19.	01:04:46;19		**HRISHITA NEGI:** The corridor also happens to have more than 700 villages.
20.	01:04:55;01		**NARRATOR:** OVER 2.7 MILLION PEOPLE AND MORE THAN 300 TIGERS IS A RECIPE FOR CONFLICT.
21.	01:05:04;01		**HRISHITA NEGI:** Human population in these landscapes along with livestock are increasing and so are the tiger numbers and there is going to be more and more spatial overlap.
22.	01:05:16;00	**SUBTITLE:** Conflict is bound to happen because we	**DR. HIMMAT SINGH NEGI:**

		have a free-ranging system. Cattle, they are let loose in the jungle. If the easy prey is available, in the form of maybe a cow or buffalo or maybe sheep, goat, obviously a tiger will prefer to have that kind of easy prey. So they get killed by the tigers.	Conflict is bound to happen because we have a free-ranging system. Cattle, they are let loose in the jungle. If the easy prey is available, in the form of maybe a cow or buffalo or maybe sheep, goat, obviously a tiger will prefer to have that kind of easy prey. So they get killed by the tigers.
23.	01:05:51;16		**HRISHITA NEGI:** A lot of the households here primarily rely on raising livestock. It's what they rely on for revenue generation and sometimes to supplement income. So, livestock depredation is truly an economic loss for the communities.
24.	01:06:13;18		**NARRATOR:** HUNDREDS OF THE VILLAGERS' ANIMALS ARE KILLED HERE EACH YEAR.
25.	01:06:18;15	**SUBTITLE:** Our two goats were eaten.	**OJIN BAI (in Hindi):** हमारा बकरी को तो खा गया
26.	01:06:21;06	**SUBTITLE:** Ours too, it ate 2-3 cows.	**OJIN BAI (in Hindi):** हमारा भी गाय का भी तो 2 3 गाय खा गया
27.	01:06:25;15	**SUBTITLE:** Many animals have been killed.	**YASODA KAVERE (in Hindi):** बहुत जानवर मारे है
28.	01:06:28;18		**NARRATOR:** THE ATTACKS HAVE LED TO CALLS FOR RETRIBUTION, BUT THESE CALLS ARE TEMPERED BY THOUSANDS OF YEARS OF CULTURE AND TRADITION.

29.	01:06:40;20		**HRISHITA NEGI:** Across India you'll find reverence and even kinship that communities find in a lot of wildlife species. There are rituals that the community performs to be showing their gratitude to the tiger because they revere the tiger as a tiger deity. You'll find amongst these indigenous communities some incredible definitions of tiger as a protector, which is so distinct from anywhere in the world.
30.	01:07:10;02		**NARRATOR:** FOR HRISHITA, THIS REVERENCE PROVIDES A FOUNDATION FOR CONFLICT RESOLUTION. SHE AND HIMMAT HAVE BEEN WORKING WITH THE VILLAGERS ON A SOLUTION THAT PROTECTS BOTH PEOPLE *AND* TIGERS.
31.	01:07:22;21		**HRISHITA NEGI:** In communities that live at such close proximity to tigers, community engagement gives you an opportunity to hear about their challenges. We also develop a sense of why it is important for these communities to care and conserve tigers
32.	01:07:39;11		**NARRATOR:** TOGETHER, THEY'VE DEVELOPED A PLAN THAT RELIES ON COMMUNITY COLLABORATION, AND CUTTING-EDGE TECHNOLOGY: ARTIFICIAL INTELLIGENCE. PIYUSH YADAV IS ONE OF THE MINDS BEHIND THE TECH, KNOWN AS TRAILGUARD AI.
33.	01:07:59;15 01:08:00;02	**LOWER THIRD:** PIYUSH YADAV Lead Engineer & Director, TrailGuard AI	**PIYUSH YADAV:** Trail Guard AI camera system is an AI powered camera.

34.	01:08:03;13		**NARRATOR:** FOR THE PAST FEW YEARS, THESE AI-ENHANCED CAMERAS HAVE BEEN DEPLOYED IN FIVE AFRICAN COUNTRIES, TRAINED TO DETECT HUMANS TO HELP COMBAT WILDLIFE POACHING. IN THAT TIME, THEY'VE LED TO THE ARREST OF 32 POACHERS. NOW, THE TEAM HAS BROUGHT THE A.I. TO INDIA—AND TRAINED IT TO RECOGNIZE TIGERS. THAT'S STEP ONE IN AN EARLY WARNING SYSTEM THAT FEEDS BACK TO THE VILLAGES.
35.	01:08:31;21		**HRISHITA NEGI:** We demonstrate to them how the, the technology works and also how the cameras can possibly help in reducing the increasing conflicts that they face.
36.	01:08:43;02		**NARRATOR:** TRAILGUARD A.I. WORKS MUCH LIKE AN ORDINARY CAMERA TRAP, TAKING A PHOTO WHENEVER SOMETHING PASSES BY. BUT THE CAMERA DOESN'T SIMPLY STORE THE IMAGE. IT *ANALYZES* IT.
37.	01:08:58;12		**PIYUSH YADAV:** The AI intelligence that is available on the camera itself is able to differentiate between different species. It could be a human, it could be a tiger.
38.	01:09:07;22		**NARRATOR:** WORKING WITH THE FOREST DEPARTMENT, PIYUSH INSTALLS THE CAMERAS ALONG TRAILS THAT LEAD DIRECTLY INTO THE HARDEST-HIT VILLAGES.
39.	01:09:20;08		**PIYUSH YADAV:** As soon as any motion happens in front of the camera, it captures the image.

40.	01:09:26;00		**NARRATOR:** AND SOUNDS THE ALARM.
41.	01:09:30;01		**HRISHITA NEGI:** Once there is a trigger and if the AI classifies that image as a tiger, it would communicate that image. You have a tiger presence that you've captured in a certain area.
42.	01:09:43;11		**NARRATOR:** A REAL-TIME IMAGE OF THE TIGER GETS SENT TO THE FOREST DEPARTMENT.
43.	01:09:48;01		**PIYUSH YADAV:** We are able to get this data from all the remote locations to the forest staff in under 30 seconds.
44.	01:09:55;12		**HRISHITA NEGI:** The forest Department would immediately alert our community steward
45.	01:10:01;04		**NARRATOR:** THIS PERSON, CHOSEN BY THE COMMUNITY, JUMPS INTO ACTION.
46.	01:10:10;14		**HRISHITA NEGI:** His duty then is to alert his community members about where the tiger was spotted and what are the areas that they should potentially avoid.
47.	01:10:28;18 01:10:30;13 01:10:34;06	**SUBTITLE:** It's very good technology which lets us know that Tiger is coming. **LOWER THIRD:** ANUJ SIRSAM Community Steward **SUBTITLE:** So what could be better than this?	**ANUJ SIRSAM (in Hindi):** अनुज: अच्छी टेक्नोलॉजी जो उससे पता चल जाता है कि टाइगर अभी जा रहा है तो उससे अच्छा और क्या होगा गांव वालों को भी पता चल जाता है।
48.	01:10:37;05		**HRISHITA NEGI:** The villagers can take an immediate action.

49.	01:10:43;05		**PIYUSH YADAV:** If the villager is where there could be a potential threat to livestock, he can bring it back as soon as possible back to their houses.
50.	01:10:57;20	**SUBTITLE:** Yes, this means we can live. By installing cameras, it automatically becomes known that a tiger is coming, so the villagers themselves become safe in advance.	**ANUJ SIRSAM (in Hindi):** अनुज: अभी क्या होता है कैमरा लगाने से ये हुआ कि ऑटोमेटिक पता चल जाता है उससे कि अनुज: कि टाइगर आ रहा है तो गांव वाले खुद ही पहले से अपने सुरक्षित हो जाते हैं।
51.	01:11:12;06		**PIYUSH YADAV:** The response of villagers has been very positive for our technology. Now they're so confident about the technology that they are adjusting it to their own lifestyle.
52.	01:11:24;20	**SUBTITLE:** If a tiger passes in front of the camera, we come to know that there is a tiger, so the chances of being attacked are less because the villagers do not take their animals there. They'll take them somewhere else for grazing.	**ANUJ SIRSAM (in Hindi):** अनुज: अभी क्या होता है कि ट्रेल गार्ड हमने लगाया कैमरा तो उससे जैसे अनुज: आप टाइगर जहां लगाते हैं टाइगर क्रॉस करता है तो उससे हमको पता चल जाता है कि अनुज: इ उससे फिर अटैक के चांस कम रहते हैं क्योंकि गांव वाले उधर अपने जानवर नहीं ले आते अनुज: हैं दूसरी साइड ले जाते हैं चराने के लिए
53.	01:11:42;18		**NARRATOR:** THE WARNING SYSTEM IS WORKING.
54.	01:11:47;01		**PIYUSH YADAV:** We have positively ID'd 200 images of tigers and these location interestingly are not inside any deep forest area. These locations are near the villages. We have been seeing the coexistence of tigers and humans in this region for the past two years.
55.	01:12:09;12		**HRISHITA NEGI:** We most definitely have seen a change in the reception of the community members after being told about the reason

			why TrailGuard is here and receiving those real time notifications of the Tiger's presence. Empowering the communities makes them feel that they are being part of the decision-making process, which is so important.
56.	01:12:33;12		**NARRATOR:** WITH THE SUCCESS OF THE EARLY WARNING SYSTEM IN CENTRAL INDIA, THE TECHNOLOGY IS NOW BEING PUT TO USE IN WEST BENGAL TOO, WITH ENCOURAGING RESULTS.
57.	01:12:43;20		**PIYUSH YADAV:** We are deploying these cameras to create an earlier alert system to detect elephant in real time and alert the villagers.
58.	01:12:51;21		**NARRATOR:** WHETHER IT'S ELEPHANTS OR TIGERS, HUMANS OR LIVESTOCK, THE A.I. TECHNOLOGY IS PROVING TO BE A POWERFUL TOOL.
59.	01:13:01;10	**SUBTITLE:** Technology such as A.I. has a huge role to play across the globe. When we talk about the conservation of species like tiger, this technology is going to help in a big way.	**DR. HIMMAT SINGH NEGI:** Technology such as A.I. has a huge role to play across the globe. When we talk about the conservation of species like tiger, this technology is going to help in a big way.
60.	01:13:16;21		**HRISHITA NEGI:** With the advancements in technology to mitigate conflict, it is a pretty hopeful future for tiger numbers.
61.	01:13:26;08		**PIYUSH YADAV:** I completely believe that tigers and humans can and should coexist. Any kind of wildlife species should coexist with humans because this is not humans' planet. It is everyone's planet.
62.	01:13:46;19	**GRAPHICS ONSCREEN:** Credits	

63.	**TRT:** 01:13:46;19		