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Abstract — This project aims to be a handbook that will inform enforcement officers involved in wildlife crime investigation about specialist forensic techniques. Whilst the paper is written from the perspective of law enforcement in the world, many of the described techniques will be applicable to wildlife crime investigation at an international level. All statutory agencies should ensure that they adhere to their own guidance and standards in relation to the collecting and handling of evidence and that any forensic methodology used will stand scrutiny under their legal process. In the world, the Association of Chief Police Officers (ACPO –covering England, Wales and Northern Ireland) and ACPOS in Scotland have issued a number of guidance documents for police forces. Some of those relevant to world wildlife crime investigation are listed at in this report.

II. INTRODUCTION

This project dealing with the more standard types of forensic examination have deliberately been made not too prescriptive. Standard procedures are already in place and advice in relation to the handling, preparation and submission of samples is readily available from police Crime Scene Investigators (CSI), forensic science managers and forensic science providers. In other sections more detailed advice is provided and is intended to be of assistance primarily to the investigator, but may also be of general interest to those unfamiliar with the requirements of handling exhibits and providing evidence in a criminal enquiry. The detail advice is provided and is intended to be of assistance primarily to the investigator, but may also be of general interest to those unfamiliar with the requirements of handling exhibits and providing evidence in a criminal enquiry.

II. LITERATURE SURVEY

According to literature survey after studying different IEEE paper, collected some related papers and documents some of the point discussed here.

1. Wildlife Crime:

Conservation, Protection of forest and wildlife assumes greater, significance in the present scenario because of increased pressure on forest and the monetary value involved in the wildlife trade. The article summaries in detail what is meant by wild life, wildlife crime, the crime detection, prevention agencies, and steps to be taken during the wildlife crime scene area? Precautionary measure for prevention of wildlife crimes. Paper deals with relevant acts and their provision to deals with wildlife crime. It also deals with a stand ard anti-poaching checklist and wildlife patrol plan. It also deals with how intelligence and information can be gather form informants to prevent and in the use during wildlife crime investigation.

2. GATA: GPS-Arduino Based Tracking and Alarm System for Protection of Wildlife Animals:

In the present arena, wildlife and forest departments are facing the problem of movement of animals from forest area to residential area. The number of trees has reduced drastically from the forest that creates an unhealthy environment for animals to survive in the forest. This paper proposes a system we call GATA for tracking and alarming for the protection of Wildlife Animals. GATA combined Wireless Sensor Network (WSN) [1] and Global Positioning System (GPS) technologies to solve the above mentioned problem. Wild animals straying out of wildlife sanctuaries and natural parks have been tracked by auto generative location tracking and movement patterns. Automatic location and movement tracking has been implemented using GPS with the accelerometer and the WiFi shield. In the event of straying of a wild animal out of the predefined zone of sanctuary or natural reserve, an alert is sounded on a fixed base station (BS). As a prototype, we have tested this hardware on the cows, which shows that the proposed approach is very efficient in terms of flexibility and cost. This may be acting as a deterrent to various anti-social activities poaching, train delays, railway accidents and danger to man due to the straying out of the animals off their habitation zone.

3. Digital Forensic Analysis through Firewall For Detection of Information Crimes in Hospital Networks:

Digital forensics analysis was done by taking a view of Firewall on the Firewall used in the hospitals, and the data that could create a criminal element were determined. As is known, all network traffic on the networks is over the firewall. For this reason, the traffic on the entire network is recorded on the firewall. When these records need to be

analyzed in terms of forensic information and criminal elements should be detected, the records on the firewall should be analyzed without deterioration. For this purpose, the image of the firewall needs to be taken. However, in order to obtain images, it is necessary to calculate MD5 and SHA-1 HASH values with international validity, which confirms the integrity of the image. For this purpose, the Juniper SSG 550 firewall device used in Firat University Hospital will be analyzed. For analysis, FTK Imager program which is developed by Access Data firm and offered for free use will be used. This image will be analyzed with forensic tools such as forensics explorer.

4. Poaching, Illegal Trade In Wildlife And Wildlife Products And Associated Money Laundering In The Esaamlg Region:

This typology report primarily looks at the poaching, trafficking and the proceed thereof (illegal trade), in the ESAAMLG member countries and Africa as a secondary part of the scope. Given the significant demand for wildlife and wildlife products harvested in member countries, it is clear that there are significant financial flows associated with these crimes. Such financial flows constitute proceeds of crime, and thus fall within the ambit of money laundering, and to a certain extend these financial flows may in one way or the ot her be used to support terrorist financing activities in Central Africa.

5. World Wildlife Crime Report:

The trafficking of wildlife is increasingly recognized as both a specialized area of organized crime and a significant threat to many plant and animal species. In response to this growing awareness, UNODC has been mandated to build a Global Programmed on Wildlife and Forest Crime, and research is a key part of this Programmed. This report represents the first global wildlife crime assessment conducted by UNODC, with the support of the International Consortium on Combating Wildlife Crime (ICWC), making use of the global seizure database “World WISE”.

III. PROPOSED SYSTEM

- This system dealing with the more standard types of forensic examination have deliberately been made not too prescriptive. Standard procedures are already in place and advice in relation to the handling, preparation and submission of samples is readily available from police Crime Scene Investigators (CSI), forensic science managers and forensic science providers.
- System gives more detailed advice is provided and is intended to be of assistance primarily to the investigator, but may also be of general interest to those unfamiliar with the requirements of handling exhibits and providing evidence in a criminal enquiry.

IV. SYSTEM DESIGN

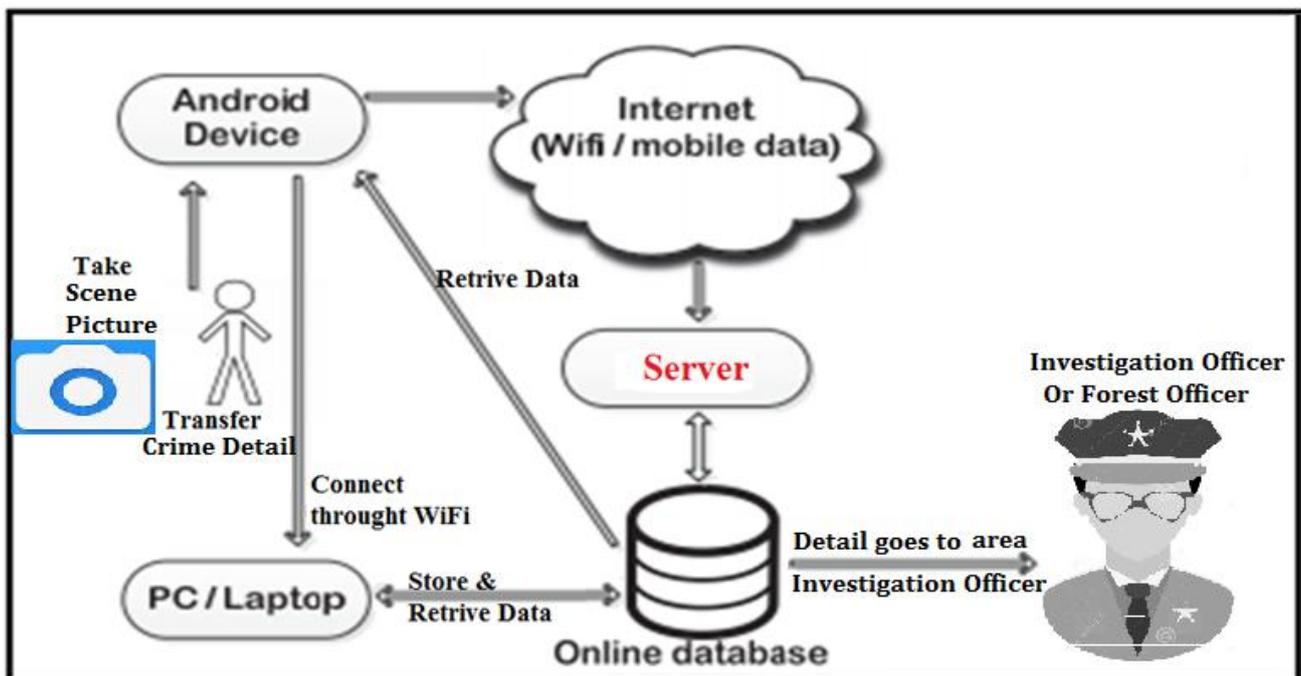


Fig.1 System Architecture of Wildlife Crime Reporter

V. ADVANTAGES AND DISADVANTAGES

Advantages:

- The scope of the project is in different field like wildlife crime, save forest, control illegal activities.
- Time saving.

VI. CONCLUSION

In this wildlife environment user can save the animals life from the peoples who desires to kill the animal. It includes the protection of wild species. Some species became extinct due to natural activities. The progress of man throughout has been helpful for the humanity but it is the life that has suffered through the years. Inventions of refined weapons, industrialization, urbanization, and even increasing human population are a number of the most causes for dwindling of our wealthy resources. Hunting, clearing of forests, drawing of swamps and damming of rivers for irrigation and trade - this is often what we have a tendency to tend to appraise of man's progress. These activities have immensely reduced the natural habitats of our life and plenty of species are vulnerable or nearly extinct.

VII. RESULT ANALYSIS

Performance Measures Used:

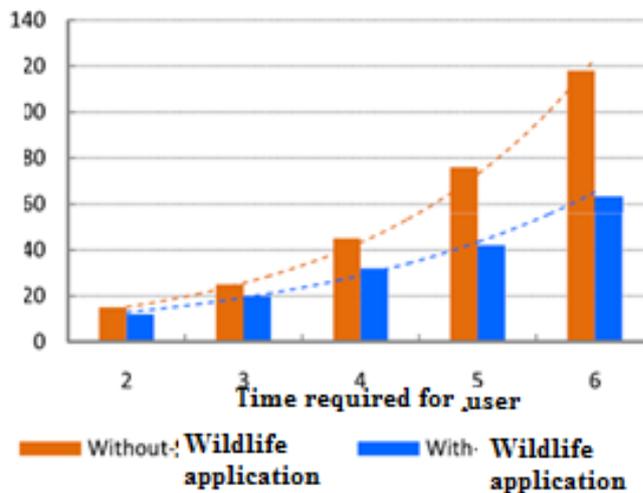


Fig.2 Time requirement

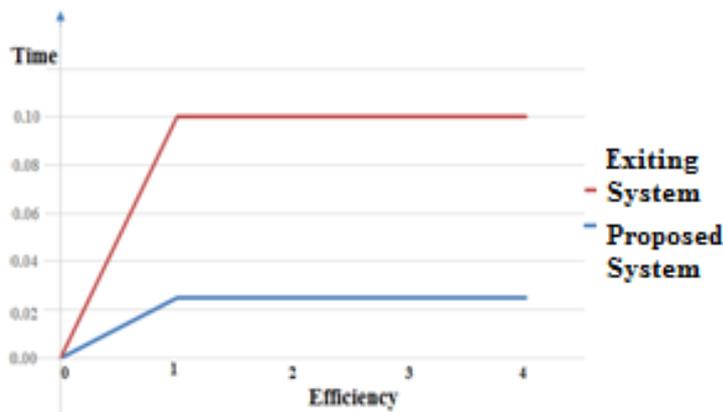


Fig:3 Time & Efficiency chart

RESULT ANALYSIS:

Input:

Here, Whole System taken many more attribute for the input purpose but here author mainly focuses on the Time and performance of system. Based some few attributes we will getting following analytical result for our proposed system.

EXPECTED RESULT:

No.	Feature Name	Value Range of Each Feature
y1	User Gender	Male, Female.
y2	User Age	Age
y3	User Location	Locations user want to travel
y4	User photo sending time	Time require for send the image
y5	Forest department action	Time of taking an action
y6	Start Time	Start time of System
y7	End Time	End time of System
Y8	Time Consumption	End Time – Start Time.

Parameter	Existing	Proposed
A	10	4
B	10	5
C	8	8
D	10	3
E	8	2

A = Computation Cost.
 B = Time Consumption.
 C = Scalable.
 D = Waiting Time.
 E = User Friendly

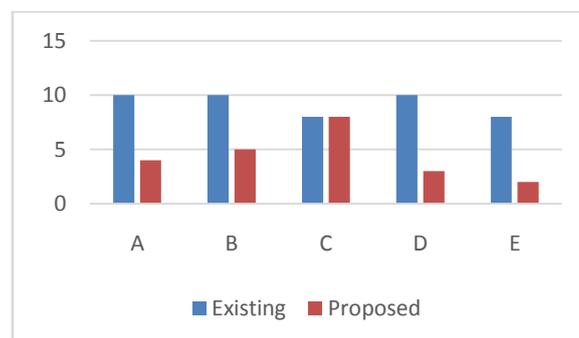


Fig: Time line chart of Result Analysis

REFERENCES

[1] M. Gor, J. Vora y, S. Tanwar z, S. Tyagi x, N. Kumar ‘GATA: GPS-Arduino Based Tracking and Alarm System for Protection of Wildlife Animals’ 2017
 [2] Ayhan AKBAL*, Erhan AKBAL ‘Digital Forensic Analysis through Firewall For Detection of Information Crimes in Hospital Networks.’ 2017
 [3] June Kim UNSW ,TomaszBednarzy ‘Virtual Reality to Save Endangered Animals: Many Eyes on the Wild’ 2015.
 [4] M. S. Obaidat and S. Misra, Principles of Wireless Sensor Networks, Cambridge University Press, 2014.
 [5] Guo Y, Poulton G, Corke P, Bishop-Hurley GJ, Wark T, Using accelerometer, high sample rate GPS and magnetometer data to develop a cattle movement and behaviour model, Ecol Model, 220, pp. 2068-2075, 2009.
 [6] Agouridis CT, Stombaugh TS, Workman SR, Koostra BK, Edwards DR, Suitability of a GPS collar for grazing studies, Trans Am SocAgricEng, 47, pp. 1321-1329, 2004.