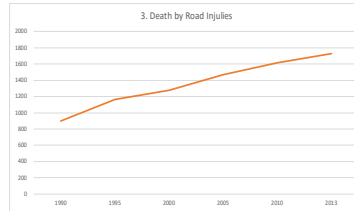
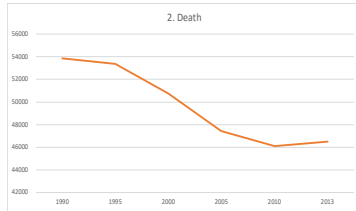
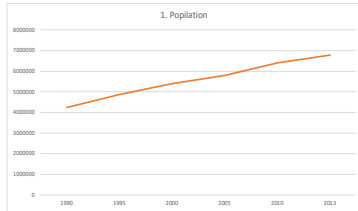


Abstract

Background and aim: Due to the progression of the road infrastructure development in Laos, the volume of the traffic is rapidly increasing and causing the massive increase of night time traffic accidents in the area with no street lights or traffic signals. It is extremely dangerous for both drivers and pedestrians including children and farmers using bicycles and tractor carts on the dark road and we strongly feel the necessity of traffic accident prevention measures in Laos. Mono-directional light reflecting tape reflects the light to the direction of incoming light from car and distributing this tape in sticker format is a cost effective and immediate solution for preventing collision of car and pedestrians on the dark road.

Our aim is to protect children and farmers from traffic accidents using this method and to provide educational information for preventing the traffic accidents to them. We (NPO Treasures of The Planet) have distributed the light reflecting tapes in Khan Mak village located between Vientiane and Vang Vieng on 3/28/2015 and applied on 30 bicycles and 12 tractor carts in the village. We have assessed the efficacy of the tape on 7/3/2016 in Khan Mak village.

Future activities: We will revisit the Khan Mak village in October 2016 to distributed reflection tapes be applied in the area with frequent the traffic accidents. We are planning to donate a computer to create a accident data record system. Using acquired data from our activities in Khan Mak village, we are planning to investigate the locations with frequent accidents and think about the measures. Also design more effective reflection tape products. We are seeking corporate sponsors to produce these tapes with sponsor's logo to further reduce the cost.



1. Population of Laos is increasing every year.
 2. Number of death in Laos had been declining until year 2010, but started increasing after 2010.
 3. Death by Road Injuries in Laos is increasing every year.
- Increasing traffic accidents have become a serious problem in Laos.



A



B



C



D



E



F

- A. Traffic congestion in Vientiane.
- B. Insufficient parking space in Vientiane is causing uncontrollable on-street parking.
- C. Photo taken from a bus driving from Vang Vieng to Xieng Khouang. Many farm animals are on the road. No street lights, night time is very dangerous.
- D. Map of Khan Mak village.
- E. Khan Mak village, about 3-hour drive from Vientiane. Increasing traffic accidents due to the heavy traffic on Route 13.

F. Reflective tape, which we distributed in Khan Mak village. It reflects the light back out the same direction of incoming light.

G.H.I. March 2015, Khan Mak village, we have placed the reflective tape on the rear portion of 30 children's bicycles.

J.K. Also placed the reflective tape on the back of 12 farmer's tractor carts and fixed with staple gun.

L.M. July 2016, visited Khan Mak village again. Reflective tape placed on the tractor carts with staple gun remained, but most of the tape attached to the bicycle were peeled off and only 1 of 30 was present.



G



H



I



J



K

Requirements for traffic accident prevention.

1. Improving the safety of road users.
Setting legal driving speed limits, legally ban drink-driving, Mandatory wearing of seat belt.
2. Improve the safety of motor vehicles
Air bags, seat belts, using safety device, such as child seats, etc.
3. Improve the safety of road infrastructure
Slip prevention of the road surface, road markings and signs, hatched separation zone, crosswalk, guardrail, etc.
4. Popularization of traffic safety education and measures to prevent traffic accidents for pedestrians and bicycle users.
5. Enhancement of the on-site injury treatment and conveyance of the traffic accident victims.

NPO Treasures of The Plane will focus on No.4 Popularization of traffic safety education and measures to prevent traffic accidents for pedestrians and bicycle users.

Reflective tape was very effective for preventing traffic accidents in Khan Mak village, because there are no street lights.

Future activity policy of NPO Treasures of The Planet

1. Donate one PC to Khan Mak village to create a record of the traffic accidents.
2. Investigate the prone spot of traffic accidents and figure out the countermeasures.
3. Design other traffic accident prevention goods in addition to the reflective tape.
4. Create and distribute educational materials for traffic safety.



L



M