Report No: 313-2016-7

Good Practice Model for Traffic Injury Prevention

Volume 2

Thai Health Promotion Foundation (Thai Health)

The Work of the Support for Road Traffic Injury Prevention at Provincial level

Good Practice Model for Traffic Injury Prevention

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Report No: 313-2016-7

Edition: First edition, November 2016

Sponsored by: Thai Health Promotion Foundation (Thai Health)

Publisher: Thailand Road Safety Network

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Tel./Fax.: 0 4333 7525 Website: www.rswgsthai.com

Publishing company: Khon Kaen Printing LtD.Part.

64-66 Ruenrom Road, Mueang District, Khon Kaen 40000 Tel: 0 4322 1938

ACKNOWLEDGEMENT

This document reports practices learned under the work carried out by The Thailand Road Safety Network. It is made possible by the collaboration of working partners from multiple disciplines in the hope that this report will serve as a guide to help road safety work that is suitable to local community areas.

The Working Group Committee would like to take this opportunity to express sincere appreciation to the Advisory Committee, Central and Regional, the Executive Board of Thailand Road Safety Network, Dr.Thanapong Jinvong, Manager of Road Safety Group Thailand, Assoc.Prof.Nongluch Suphanchaimat, the Advisory Expert, regional management team, and the technical advisory team, for the advice and recommendations to help complete this report.

Thai Road Safety Network Working Group Committee

November 2016

PREFACE

A road traffic crash is a complex issue involving multiple factors, conditions, and dimensions, the prevention of which cannot be resolved by a single organization. The problem must be tackled by all relevant agencies through work integration with a shared goal of road users' safety.

Thailand Road Safety Network has continued its work on prevention measures through a number of strategies in law enforcement, traffic engineering, public relations and media, public knowledge, network cooperation, management and monitoring, and individual strategies used by each province to heighten success. For example, one province had adopted a strategy called "5Ch" (Thai term), which applied 5 steps into all road safety work to resolve road traffic issues. Ch1 is a presentation of information to report an issue to the senior management to be aware of the problem, actual cause, and full impact of the problem. This leads to Ch2, which is coordination with all relevant agencies to discuss, and brainstorm for a solution, communication, and cooperation. Next, Ch3 is the selection of appropriate initiatives to address problems and issues before conducting Ch4, which is assessment to looking into its success or obstacles to improve work effectiveness. Finally, Ch5 is an expression of appreciation to those who dedicated themselves towards road safety work. Another set of "5S" has also been utilized; S1 is information technology, S2 is riskiest factor, S3 is multi-sectors, S4 is worthiness, and S5 is participation. 5S helps guide the work by utilizing the information to its full benefit, which leads to selecting the most risky factor to work on. By identifyingthe risk factor to work on, the most appropriate and worthiest measure can be clarified which allows participation from all relevant agencies and community networks to take part. Subsequently, community network expansion is promoted by adopting the INN approach being developed by Prof. Emeritus PrawaseWasi, M.D.Under INN approach, a person (Individual) within the community is developed to become a leader, which is later supported by forming a working group (Node), and expanded into a multi working groups (Network).

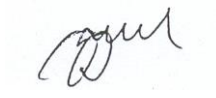
Some provinces conducted meetings among networks to exchange information and share lessons learned. Successful outcome and problem solving have been shared and adopted by others according to their context.

Thailand Road Safety Network has been established since 2005 where the team and networks in each province are continuing to put together a strong teamwork and dedication towards road safety. Through a decade of work, Thailand Road Safety Network has created a number of good innovation and strategies in every province that progress the reduction of the losses caused by road crashes.

Therefore, the strategy, tactics, and successful factors that evolved from this network is considered to be valuable knowledge, and should be put on therecord for those who work in road safety to learn and apply the knowledge within their responsible area.

As a result, the working group has reported all working experiences from different provinces that enabled reaching their work target and eventually decrease the road toll. It is in our hope that these successful stories would inspire the relevant stakeholders and serve as guide for those who work in the road safety sector to promote road safety into the future.

Finally, the working group committees would like to take this opportunity to express appreciation for the contribution of all stakeholders mentioned in this report. For further comments, or recommendations to make this report more complete, please do not hesitate to Email: Kulleab@gmail.com.



(Dr.Witaya Chadbunchachai)

Honorary Doctor

Chairman of Thailand Road Safety Network

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"Cooperation" leads to Road Safety in Suphan Buri Province

Khamron Nimanong
Suphan Buri – Thailand Road Safety Network Mentor
Samut Songkhram Community Based Research Coordinating Center

"Road safety work requires a systematic working approach in building up newcomers and network partnership. It can begin in the form of regular meetings to get to know each other as well as information sharing. Working in this way leaves a person with road safety conscious and whereby they continue doing road safety work regardless of where the person has goes to in the future."

Suphan Buri today...

Based on the lesson learned from the past work until 2015, Suphan Buri is still doing road safety work within road safety partnership integration framework with a focus on an in-depth road crash data analysis to determine the cause of the crash. All data such as the speeding, unsafe motorcycle riding, no helmet wearing, unsafe school bus, unsafe roads and environment, drink driving, and a case study, has been taken into consideration to help the working group committee to identify the actual cause of crash and develop a suitable solution to prevent future crashes. This has been the underlying principle for the implementation of organisational road safety measures. Another example is that it has given a lesson learned for the youngsters to recognise the impact of road crashes and gain better understanding on road crash preventative measures and practices. Working together has shared one aim of creating road safety within local communities basing on actual causes where monitoring and evaluation of the working process is carried out properly. As a result, this will lead to sustainable road safety behaviours among youngsters. Moreover, integrated road

safety cooperation among relevant agencies has allowed risk spots to be treated, which leads to road crash reduction as well as reducing road injuries and deaths.

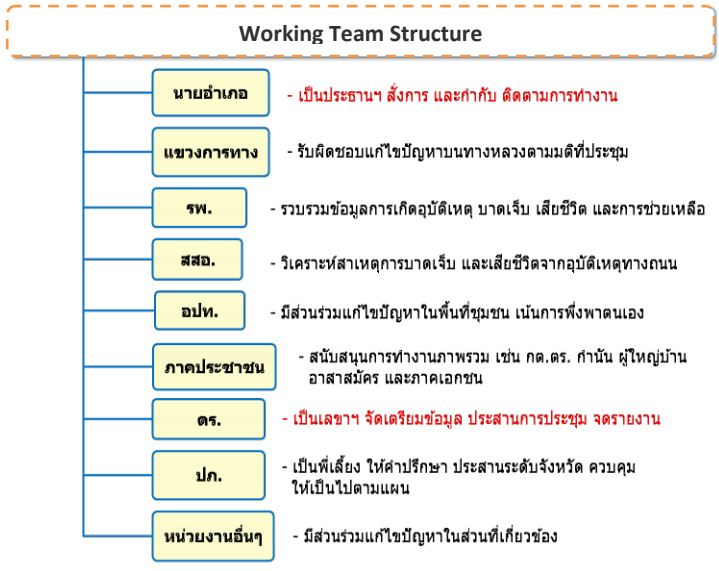
The district working team to treating risk spots commenced work by analysing the data to find the cause and come up with a solution. The information and suggested solution was then shared and discussed with relevant agencies and local community leaders at the district meeting on a monthly basis. The information is then passed onto communities to ensure that the work is carried out as a result of careful consultation among key stakeholders with one objective to resolve road safety issues for the local people. Despite contradicting statistics on a number of road crashes, and by constantly doing road safety work through partnership, a reduction of risk factors and risk spots in community and district areas has taken place. For the treatment of risk spots, Suphan Buri Provincial Land Transport Office has conducted a project called “Community Vigour Strengthen Road Safety”, which supported by the Road Safety Fund to provide budget for risk spot treatment in 10 pilot communities from 10 districts each year. In addition, a road safety knowledge session was held to educate the community on safe driving, and provided a licensing service for new riders and renewal of the expiring one for 100 people per community for the past 3 years.

With Inspiration and Leadership

Even though the road crash statistic tends to increase, the road safety network and working group members are not discouraged. In fact, all relevant agencies have formed a good working relation and partnership with full cooperation, support, and dedication to help one another tackle road safety. Moreover, the network has received positive support from the provincial leader who has put road safety as a priority issue. This has given a driving force for the team to continue on with their road safety work. This road safety network and partnership has also extended down to district level, which have given more road safety personnel to join the work force.

"District Working Group Committee"...Real local expert

Expanding the road safety network and partnership into district level has proven significant in analysing the cause of road crashes in the local area to enable a suitable solution. This has been used as a working approach in conducting the project in all 10 pilot districts. In 2016, six meetings were held in each district to analyse risk spots and their causes of the crash in the district area. The district analysing team was appointed by the Provincial Governor and the police is acts as a secretariat. The team was comprised of district office, local administrative organisations, district police station, district hospital, district health office, Educational Service Area Office, District Highway Office, local public representatives, local traffic police, and Provincial Disaster Prevention and Mitigation Office.The below diagram demonstrates the structure of data analysis working team.



The team conducts an in-depth analysis by looking at crash pattern, cause of crash, and surrounding factors including approaches to solve the problem that is suitable to the local context both in short term and long term. The District Police is a key input in organising the meeting, and accumulating risk spots data before transferring all information to the District Highway Office for implementing risk spot treatment as agreed by meeting resolutions.

Collateral Check-point..."More than handing out fine"

Apart from risk spots treatment, the Provincial Road Safety Directing Center has applied an integrated check-point in collaboration with police check-points. The integrated check-point comprises the traffic police, Provincial Land Transport Office, Educational Service Area Office, Suphan Buri Highway Office, Provincial Health Office, Public Sector, Media, Army,

The Transport Co., Ltd., and Provincial Disaster Prevention and Mitigation Office. The location of the collaboration check-point was set on both main road and secondary road and operating from 16:30-20:30PM twice a month for 10 months. The evaluation of the activity was then carried out after the activity was concluded for future improvement. This activity has allowed all agencies representatives to get to know each other and formed a good network and partnership. This aspect is particularly important to effectively and conveniently coordinate work that follows since all of the agencies can now talk, consult, and share the information with one another. Additionally, it has given more opportunities for field officers to meet with the provincial executives. This is clearly reflected in today's work when previously the check-point team had to be appointed, but now the agencies just meet once or twice a week to carry out the activity. The job is not limited to just conducting a check-point but also includes other road safety work.

Key to success... "secrets that waiting to be magnified"

1. Maintaining regular meetings for both provincial and district working groups.
2. Utilising local information (sub-district/district level) for decision making and problem resolutions.
3. Focusing on good relationship building with other agencies at all levels, which is not limited to just working hours or only road safety matter.
4. Information from each agency has to be shared with others for better understanding on each of their responsibilities and workload so that an integrated road safety work can be planned appropriately.

5. Involving the local media to follow up with project work in every step for better understanding of the whole process and being able to project the information to the public correctly.
6. Communicate with all relevant agencies' leaders via Line Application Chat Group. This communication platform is proven to be very effective due to its ability to liaise a direct and real time communication between chat group members.
7. It helps develop the working group's ability through cross disciplinary work areas.
8. The work is based on networking and integrated working approach.
9. A senior executive such as the Deputy Governor or head of government agencies in the province has to be invited to the monthly meeting to be aware of the project work.
10. Building capacity of people at the back row by inviting them to participate in all activities regularly. Getting them to know other partnered agencies and allowing them to practice in real work, which would help them gain better road safety knowledge.
11. The provincial working group has to act as a coordinator for liaising information that is received from the district working group with other directly responsible agencies in the province for further work.
12. The project monitoring and evaluation should be carried out in a supportive manner to motivate those working in the field to continue with their work rather than pressing them to reach the objective.

"Search and Rescue Network" for Risk Behaviour

Phuangthong Mangked
Technical Officer
Thailand Road Safety Network for Central Region

In the past, the Sawang Bechatham Foundation in Samut Songkhram Province was focusing mainly on assisting the injured and collection dead bodies. Thus, the operation is somewhat reactive in its nature where the rescue team would wait for the incident to happen before responding to the call. Despite being expert on rescuing and first aid treatment as well as being part of the Emergency Medical System operated by Ministry of Public Health, all the team could do was to prolong the life or collection of bodies as the severity of the injuries continues to increase. This prompted the head of the rescue unit to move into road crash preventive measures rather than waiting to help the road crash victims with hope that they would survive in the end. Consequently the role has been shifted to a more proactive one by integrating the unit's work with other relevant agencies and other nearby rescue units. This is different from the past where each organisation just worked independently, and no crash data or crash site investigation was collected or recorded. Thus, the new working approach was to cooperate with other rescue units from different foundations that are responsible for Rama 2 Road and adjacent areas to collect relevant data needed for road crash analysis for future prevention. This group of rescue units consists of Sawang Bechatham Foundation (Rescue Unit) from Samut Songkhram Province, Sappharachen Foundation Rescue Unit, Samut Sakorn Foundation, Srisamut Radio Center, Sawang Sanpetchayatham Sathan Foundation (Khao Yoi Station) from Phetchaburi Province.

Rescue Unit Network for Risk Behaviour Modification

The Rescue Unit of Sawang Bechatham Foundation had conducted a meeting with other rescue unit networks to explain about risk spot data collection in target area, for which all of the networks had planned as part of the implementation process together. Then followed training of EMT Alert Mobile Application, and conducting a public campaign on road safety in schools and during Song Kran Holiday. This has brought changes to the rescue units from all four areas where data on crash sites and crash statistics is collected by the team members, risk spots are searched, identified, and treated. A good example was from the cooperative work by Samut Sakorn Foundation, Srisamut Radio Center and local administrative organisations which identified and analysed risk spots and installed a speed

bump as well as applying 100% helmet wearing policy by Phetchaburi Rajabhat University Nursing Student Volunteer Club. The student road safety training activity and helmet wearing promotion was conducted in Mueang District, Thap Sakae District, and Bang Saphan District in Prachuap Khiri Khan Province. This is carried out in parallel to training rescue unit staff on data entry to GEO-ITEMS Mobile Application database, which is supported by ThaiRoads Foundation.

"We have no way of knowing when and where road crashes will happen and it could happen to any of us. Road safety knowledge is not found in a classroom, but rather learning by doing in rescuing people."

Kajornsak Laolohmwong

"After my wife and children had a motorcycle crash when a tricycle cut in front at close range, we now all wear helmets and fasten seatbelts every time."

Naronchai Somphorungrang

Rescue Unit Network for troubleshooting with local community

The rescue unit network partnership has driven road safety work in various forms as follow.

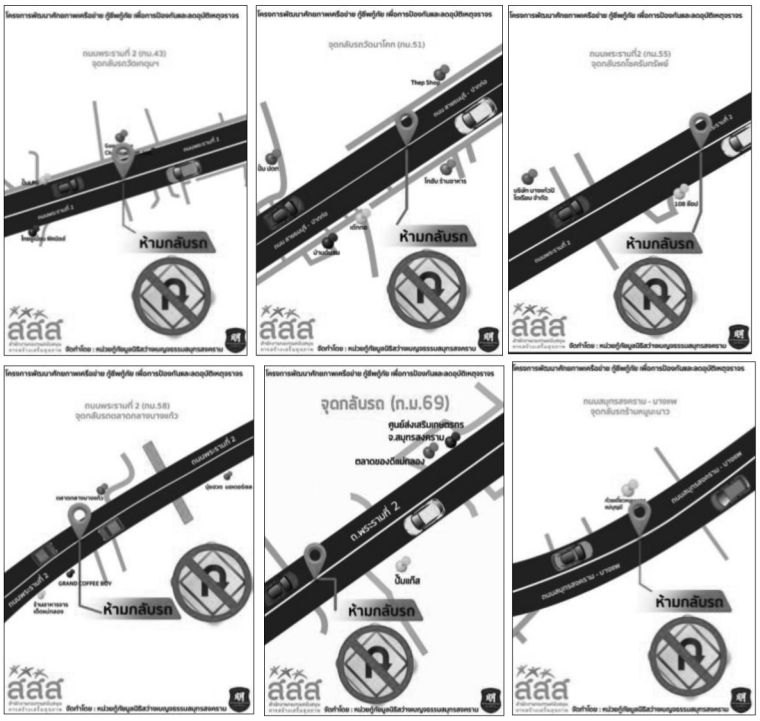
- Sawang Bechatham Foundation has developed a road crash database and transfers the information to Samut Songkhram Provincial Public Health Office every 15th and 30th of each month. The information was used for solving road safety issues such as liaising with Provincial Highway Office to install No Parking sign at the risk spot while requesting for police to stricter law enforcement by applying fines for those violating the sign. Another example was installing information signs for alternative U-turn traffic sign during public holidays when traffic density was increased.
- Enhancing the rescue unit members of Samut Sakorn Foundation and Srisamut Radio Center in searching for risk spots. The surrounding area of the identified site was then cleared up by the rescue unit to increase visibility initially before contacting Bang Ya Phraek Sub-district Administrative Organisation for complete risk spot treatment to help reduce road crashes.

- Road safety and first aid training has been conducted for Phetchaburi Rajabhat University Nursing Student Volunteer Club to support the organisation's 100% helmet wearing measures. Those failing to comply with the new safety measures have their conduct score deducted while risk spots within the university were treated.
- Support was given to Sawang Prachuap Thammasathan Foundation Rescue Unit in Prachuap Khiri Khan Province to conduct the organisation's 100% helmet wearing measures at Bang Saphan Hospital, and road safety promotion campaign in schools. There was also coordination with the police to produce and place warning signs and safety messages at risk spots in Hua Hin District.



Knowledge distribution...a way to new mentality in society

- School road safety campaign was conducted to promote road safety knowledge and awareness in young students and youth. The same type of campaign was also carried out during long public holidays like New Year and Songkran Festival to promote safe driving.



Significant lesson learned...

- A proactive working approach should be promoted for rescue units that have the capability to carry out practical work and learning by doing. Moreover, it requires effective management and willingness to start making changes on risk behaviours themselves with dedication to do good for the public in general. This has to be done in parallel to providing adequate knowledge and needed skills that are conducive to their data collection work. This involves learning from actual sites, analysis skill, and on-going assessment on their work for lesson learned. Once their behaviours change, it will have an impact on others around them to change as well and eventually it would change the community and society in the end.
- Systematically utilize data for resolving problem issues together with other relevant agencies leads to risk spots treatment, and constantly campaigning road safety during public holidays. By using data application has allowed data to be presented in a timely manner, which helps promote safety caution among road users who are travelling along the route.


- By having a senior rescue team member training a junior or new team member has given a sense of team power and better understanding on new working approach and roles that the rescue unit is doing on data collection and site investigation. The aim was to develop a learning-by-doing process to allow the junior staff to change their working attitude that leads to their change on risk behaviours.
- A multi-disciplinary teamwork has facilitated a concrete outcome due to good coordination between different agencies. It has also provided a ground for mental as well as working support for one another effectively.
- A capacity building for rescue team members with new knowledge on data collection, new responsibility as school road safety trainers, and new partnership building with other agencies have opened their eyes. They get to see things from a different angle with new information, which can be adapted for their own work in the organisation.



- The risk spot information database being developed and used by the rescue units together with police, public health, Road Accident Victims Protection Co., Ltd. (RVP) has proven to be very useful for responsible agencies to treat the risk spot appropriately, which covered all aspects of human, vehicles, road condition and environment.
- The learning process and analysis has been extended to other rescue units, which turned out to be suitable for each organisation's working culture that promotes proactive working approach for road crash reduction. This is particularly important and feasible since the rescue team is the first and fastest agency to reach a crash site.

Consolidating power for capacity development of rescue unit networks from generation to generation

"In working, a person has to be patient and vigorous since obstacles are waiting ahead where pressure and resistance can only make us stronger and knowing about themselves better. This is the advice I give to junior team members who I get to know and become closed to. Thus, by doing this work there should yield some benefits or not doing it all because it would be a waste of time and money that people have given. Thai society is still lacking road safety skills, so the work should start from the individual motivation to make a change, which would be more sustainable rather than waiting for someone to come and make an arrest."

Chonlatee Laohakanwanich

Sawang Bechatham Foundation, Samut Songkhram

"In the past, I was not fastening seatbelt when driving, but after participating in the activity, I have realised the risk involved. Thus, I warn the junior team members to drive safely because the scale of the loss is great. At the beginning they may not see the risk, but after participating in road safety training they become more skillful in safe driving and road using behaviours. For school road safety training, I found that the youngsters are easier at making changes. Now a day, I fasten seatbelt and inform any crash information into a chat group over a mobile phone application as a reminder for careful driving and beware of unsafe driving behaviours such as driving on the wrong lane by migrant workers."

Kittipong Maneedam

Sawang Bechatham Foundation, Samut Songkhram

"When riding in a car, I must fasten my seatbelt, and wear a helmet when riding on a motorcycle for safety. I am proud to have a chance to help road users, and it is fun to work with senior team members"

Pongdakorn Chaibubpha

Volunteer, Sawang Bechatham Foundation, Samut Songkhram

Road safety is everyone's responsibility that all age groups can do and should do. To help solve road safety problem issues, the role of rescuers as "assisting the injured and collecting the death" has changed to risk spot data management on both main roads and secondary roads to help promote road safety reduction and prevention. The important working principle is to establish understanding among the network, collecting and analysing risk spot data, presenting the information to the relevant agencies, conducting a road safety promotion campaign during holiday seasons, conducting school road safety training, human resource capacity development, and delivering data in a timely manner. This integrated road safety work has transformed data into effective road safety solutions, which has inspired others to do the same.

Road Crash Reduction and Prevention Area Model example:

Tha Luang District, Lopburi Province

Khamron Nimanong
Suphan Buri – Thailand Road Safety Network Mentor
Samut Songkhram Community Based Research Coordinating Center

Model Area for Potent Community Innovation

An innovative process to create a potent road safety community was based on the proactive working approach by establishing a working group committee at district level. Under this district working group committee, the mandate was to mobilise road safety into sub-district level by involving local administrative organisations, sub-district health promoting hospital, and other relevant local agencies. There were two sub-districts participating in this project, which were Nong Phak Waen Sub-district and Hua Lam Sub-district. A detailed working process in these pilot sub-districts are stated below.

Hua Lam Sub-district: Hua Lam Sub-district Health Promoting Hospital

Working process

1) The district working group committee moved into the target community and conducted a road safety knowledge session for sub-district health promoting hospital, public health volunteers, and community leaders. The knowledge session is divided into 3 activity-based learning sessions.
    - Activity-based learning 1: First aid training and emergency health assistance
    - Activity-based learning 2: Road crash prevention and helmet wearing
    - Activity-based learning 3: Caring for sudden ischemic stroke patient
2) Sub-district Health Promoting Hospital officers and public health volunteers worked out ways to cooperate and agreed to a monthly meeting.
3) Set up a meeting with all 119 public health volunteers to explain about the project and work process.
4) Provided free helmets for public health volunteers and community leaders, and selling a helmet for 100 Baht to the volunteers who wished to buy it for their family members.

5) Obtain mutual agreement on helmet wearing rules
    - The public health volunteer is responsible for helmet wearing data collection using the provided form.
    - Monthly crash data was checked and 200 Baht fine was handed out to the public health volunteer that failed to wear a helmet exceeding 5 times.
6) Collecting and checking on public health volunteers' helmet wearing rate at the monthly meeting. The data on helmet wearing covers both riders and passengers. This caused little interest since only a warning and requesting for cooperation was initially given. However, this began to change when data was thoroughly checked and a fine was strictly and continually applied, which later changed their habit. Data collection was made in 3 forms.
    - Another volunteer collecting data on other peer volunteers
    - Data was collected by police
    - Data was collected by sub-district health promoting hospital officers

Nong Phak Waen Sub-district: Community check-point model

The important inspiration for the local administrative organisation at Nong Phak Waen Sub-district to participate in the project came from their past experience, where they had the opportunity to attend road safety training. However, they were unable to turn it into a concrete work within their community until the district road safety working group committee initiated the community road safety project. This has given them a chance to work on road safety issues faced by the community with the key objective to reduce trauma caused by road crashes. A meeting with all relevant local agencies and community leaders was held to discuss the project planning, setting the target outcome, and allocating job responsibilities.




Working process

1) District road safety working group committee facilitated understanding on project objectives and filling knowledge gap on road safety and first aid assistance to local community.
2) Conducted a working team meeting and search for suitable spot for setting up a community check-point. This meeting has included all relevant agencies in sub-district level ranging from Sub-district Administrative Organisation, Sub-district Health Promoting Hospital, and community leaders. The key components being looked at for setting up a check-point are as follows.
    - Characteristic of the road crash, severity of the crash
    - Community routes and adjacent routes to other communities
    - Travel period with high density of traffic
    - Community road users behaviors
3) Assigning community check-point location
    - A check-point location was decided basing on data and information analysis by relevant agencies together with local community
4) Conducting the community check-point during New Year and Songkran Public Holidays
    - During New Year, the community check-point was conducted at Village No. 1, 3, and 7 at 17:00-22:00PM.
    - During Songkran, the community check-point was conducted at Village No. 1, 3, and 7 at 16:00-20:00PM.
    - Later extended the check-point to operate all year round, which was conducted by the people in the community using the budget from the

Village Fund (The district road safety working group committee had a meeting with Village Fund committee and its members to discuss and seek budget support from the fund, which was agreed and set aside the budget to support this community check-point activity)

5) Both district road safety working group committee and community are responsible for data collection and analysis basing on the number of road crash injury/death, crash number, type of vehicle involved in the crash, and time of crash. All information is used for identifying 9 risk spots, of which 3 of them were treated by the responsible agencies as follows.

- ***Risk spot 1:*** At Niyomchai Intersection on Road No. 2338 (Highway Station and Rural Road Office had worked together to install the railcrossing warning light at the cost of around 400,000 Baht)
- ***Risk spot 2:*** At Preecha Samransuk Intersection on Rural Road 4028 that crossed with the Provincial Administrative Organisation local road, which had many crashes. Thus, the Sub-district Administrative Organisation has cleared the sight lines for better visibility and installed warning light signal on 2 locations, while the Rural Road Office installed the electronic speed reduction sign with a warning light signal.
- ***Risk spot 3:*** At the intersection where a local gas station is situated on Rural Road 4028 there are high numbers of the factory employees travelling by motorcycles in the evening. The sub-district administrative organisation had improved it by installing four more sets of street lights (The Rural Road Office has transferred the authority to the Sub-district Administrative Organisation to maintain the facility with budget support)while the Rural Road Office has installed an electronic speed reduction sign with a warning light signal.

Project outcomes

Following the project work, the road crash statistic on injuries and death has shown improvement whereby it has declined in number after 8 months into the project in 2016. At Tha Luang District, there were 820 people being injured in road crashes in 2016 while there were 1,001 people being injured in 2015 (data was being collected at the same period of each year). In addition, there is now a network of road safety partnership in the form of district road safety working group committee established and well supported by heads of agencies. The work at Tha Luang has been extended to another 6 communities based on Nong Phak Waen Sub-district and Hua Lam Sub-district model. This has resulted in community innovation to generate road safety approaches where the local people can analyse risk spots in sub-district level and propose a treatment under the integrated working approach with other relevant agencies. This has led to changes on people behaviours in tackling road safety issues by taking more ownership to the problems and issues.

Limitations at diverse local areas and contexts

It needs to be understood that different people have different capabilities and this is also the case for each of the local community leaders. Thus, the working group committee has spent quite a bit of time trying to win support and understanding of the community leader, which has resulted in having to spend longer time in delivering the project than anticipated. This is also the case for the working method used by each community, for example, some communities had involved the young generation in project work while another community paid very little attention to this group. This required an intervention from the working group committee to motivate them. Another obstacle is the lack of budget support, whereby some communities cannot allocate any funding from the local budget to support road safety work. In addition, in some communities, the road safety work is limited to just a group of people in the community rather than being widely inclusive of the entire community as a whole.

Ways forward

1. To conduct community check-point activity in every sub-districts of Tha Luang District using Nong Phak Waen Sub-district model.
2. To meet with the Village Fund Committee in every sub-district to request for funding support so that each community can sustain their work.
3. To establish 100% helmet wearing leaders using Hua Lam Sub-district model to expand to other sub-districts.

4. To distribute road safety knowledge and inspire more diverse groups of people within the community to work in road safety rather than focusing only on local administrative organisations and sub-district health promoting hospitals.
5. Establish road safety working team or leaders who have good knowledge on the local community, understanding of working principles, and able to make a decision, to help mobilise road safety activities and building partnerships in district level.
6. Increase frequency visits by the district road safety working group committee to follow up on every community and participate in every community road safety activity.

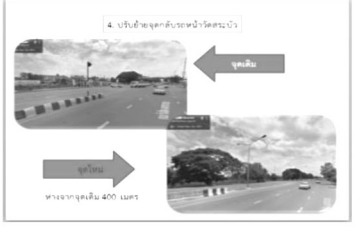
Integrated Thailand Road Safety Network for DHS in Pathum Thani Province (2016)

Wirunya Lacharojn
Pathum Thani – Thailand Road Safety Network Mentor
Registered Nurse, Pathum Thani Provincial Public Health Office

An integrated road safety reduction and prevention project in Pathum Thani Province in 2015 was an extension of a project from the previous road safety project by Nong Suea District Health System (DHS) supported by Thailand Road Safety Network. It has based its road safety reduction and prevention work on DHS policy by turning it into real practice, which established road safety work as One District One Project (ODOP). This led to pilot sub-district work, which had become Bueng Ba Model. This road safety community project work was supported by Nong Suea District Road Safety Directing Center and the project plan has been included in the local administrative organisation to commence work with other relevant road safety networks. A road crash investigation team was established, which comprised of multi-disciplinary professions to systematically treat risk spots. Pathum Thani Province has recognised the importance of such project work, so it has employed five road safety working strategies to continue work by expanding it into another 7 districts with budget support from Thailand Road Safety Network. The province received a total of 806,370 Baht to mobilise the project activities through the existing District Road Safety Directing Center structure where it is chaired by District Chief, Deputy District Chief is a secretariat, and District Health Officer and Community Hospital are the assistants to secretariat.





The project which commenced its work in June 2015 until present, has produced outputs as follows; 1) organised a meeting on data collection, whereby 3 data bases of police, Road Accident Victims Protection Co., Ltd (RVP), and Public Health Office had previously presented to the Provincial Road Safety Directing Center for data analysis, 2) search for risk spots and treatments by relevant agencies, 3) conducted training on road crash investigation for multi-disciplinary team members from all districts and one provincial team. This training was supported by the Office of Disease Prevention and Control 1, Bangkok, to train on Haddon Matrix. It was later modified into a simple check list to be more users friendly and flexible enough to be used by the rescue team, EMS team, police, RVP staff, and public health officers. This is treated as a standard form for all data collection, which data is later integrated for final analysis by Provincial Road Safety Directing Center as the lead agency.

In addition, a session on lessons learned was also held for all 7 districts to come and share their experiences. The session was also used to present a certificate by the Vice Governor in recognition for their participation in the project.

In summary, this integrated road safety reduction and prevention project in Pathum Thani Province has provided a strategy and working approach for conducting road safety activities, which yield a concrete outcome in 2016. However, there is a need for mentoring support to help the team move from a policy setting into real action. It began with the problem issue, and then a network of multi-disciplinary team being formed, which has led to integrated data analysis before presenting the information to the policy management level for support. The information was fed back to the local district working body to identify the causes of the crash, injury, and death, which relates to risk spots and risk behaviours. Through this process, the road safety working group was able to come up with a solution that is suitable to the local context. This aligned with the DHS policy, which indicates road safety trauma is preventable and can be resolved. As for a bigger picture, by preventing or even reducing road crashes and reducing the loss of life and assets of people in the family, society, and the country as well as applying the work to preventing and solving other health issues effectively.

Forming Youth Network and Road Safety Conscience for Traffic Law and Discipline at In Buri District

Phuangthong Mangked

Samut Songkhram Community Based Research Coordinating Center

Phahonyothin Road or National Highway 1 is a main road to the northern region of Thailand, which runs through In Buri District which is well known for being a highly risk location for road crashes. Based on the EMS database collected by Inburi Hospital in 2014, there was a total of 968 patients, 98 were involved in car crashes, of which 37 of them did not wear seatbelts. Another 761 were involved in motorcycle crashes, 451 of them did not wear helmets, and 89 of them were driving under alcohol influence. The statistics showed how significant the problem is and that road users' attitude and behaviours need to be changed for the safety of everyone on the road. This problem has prompted Bussarin Pengboon, Registered Nurse from Community Psychiatry Division and Sing Buri - Thailand Road Safety mentor, and Nunnapassorn Srunggunharat, Registered Nurse from OR Division from Inburi Hospital to mobilise Thailand Road Safety Network project activities. This started with coordination with Kruawan Dispong, Director of Wattait School, who believe that road safety conscience must be formed at a young age. The Director has got firsthand experience as she too lost a son in the road crash. Therefore, the project of Youth Network and Road Safety Conscience for Traffic Law and Discipline Establishment at In Buri District has been formed, which is supported by In Buri – Thailand Road Safety Network and Thai Health Promotion Foundation.





All working processes are carried out under the road safety 5 strategies and 5 principles beginning with a call for a meeting with school directors under the Primary Education Office Service Area5. The purpose of holding a meeting with all schools is to explain about the project and its working process as well as seeking their participation in the project. Once the name of participating schools is received, a meeting with a school representative is then conducted for project planning, followed by teacher training on

teaching material design and production before conducting safe riding training with integrated road safety knowledge for students. All of which has been carried out in parallel to having a meeting with road safety partnered agencies to define the characteristic and selection criteria for road safety youth examples.

After conducting a project for one year, there is a total of 1,100 primary school students participated in the project. They are from 12 schools under Primary Education Office Service Area5, which vary in size whereby 7 schools are small, 4 schools are medium, and 1 is large. Under school activities, students get to make learning materials on traffic rules and safe riding themselves such as a student road safety journal, composing tales and storytelling, composing song with dancing choreography, and essay writing. For teaching and learning materials, which are made available for other schools to use Moreover, all participants have gained knowledge on traffic rules and discipline that led to behavioural change in 3 levels as follows.

1) **Students:** They have learned about traffic light signaling, riding a bicycle on the left lane, helmet wearing when riding on a motorcycle, important traffic signs, riding practice, riding with senior students to/from schools by Watranam School, riding practice on a practice track by Watklang School, helmet wearing promotion campaign by Watboth School.

2) **Teachers/schools:** Teachers have incorporated road safety knowledge and attitudes on rule obedience in regular teaching subjects such as Health Education. This is followed by activities in the afternoon where there is no class, so the to/from school travelling trial to promote actual riding practice with helmet wearing is undertaken By participating in this project, teachers have got the chance to learn more about road safety and make changes on their road using behaviours, for example, they now fasten their seatbelts not because they got annoyed with the warning signal but rather because they are aware of potential risks. Moreover, they now wear helmets to be a good role model for students.
3) **Family/community:** Parents are the first to notice the change in their children's behaviours when they started seeing them riding on a bicycle in the left lane, and lining in a single line with senior students escorting them. This is also being noticed and admired by people in the community for their discipline, which Tha Ngam Sub-district Administrative Organisation has supported.



Road safety project mobilization has created a road safety conscience and traffic law discipline among students where they get to learn and practice themselves to gain firsthand experience. In addition, teachers have to provide a lesson to conclude the learning outcome and where improvement can be made, which would cover the learning process from the beginning to the end. By involving students in the learning process a sense of pride and positive motivation to change their behaviours has developed. Another important aspect in delivering the road safety project is the support from the multi-disciplinary partnered agencies who have taken up tasks and responsibilities according to their area of expertise in both planning and designing activities effectively. For example, police who is expert on traffic law. Teachers are expert in learning material design and teaching appropriately to each age group, so when combing the two students' interest in learning about road safety continuously has developed. This activity is integrated into the new policy of Moderate Class, More Knowledge Programme, which allowed teachers to use this period of time to conduct

road safety activities with students. This is new, interesting, and fun for students, but more importantly students get to learn by doing and in doing they gain better understanding, which leads to behavioural change that is based on their conscience rather than being forced. Teachers are acting as a coach and motivator to encourage them to do the right and good things for themselves and for the society with the hope that they will become quality citizens of the country in the future.

Phok Ruam Sub-direct Administrative Organisation with Proactive Approach to Road Crash Prevention and Reduction in Local Community

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Road crash situation in Sing Buri Province

Sing Buri Province has a number of tourist attractions and is the gateway to the northern region of Thailand where National Highway 2 cuts through the province. Road crash statistics in the provincial area posted a real concern over a high number of road trauma each year. In 2013, 43 died, and 39 in 2014 compare to a total population of around 210,000 people. The average road toll for 2013 -2014 is 41 people per year, and that is 19.52 persons per 100,000 population, which is above the target number under the Decade for Road Safety Action 2011-2020 framework which calls for a reduction to no more than 10 persons per 100,000 population. Sing Buri has established both Provincial and District Road Safety Directing Centers to move forward road safety activities during long holidays and throughout the year, but road crash statistics still shows no decline. This is due to the lack of integrated road safety work and coordination between relevant agencies and organisations from all sectors. The Regulations of the Office of Prime Minister on Road Safety B.E. 2554 (2011), Clause 22 stating that any local administrative organisations faced with road safety issues to the point where a road safety directing center has to be established, the Governor has to coordinate with that local administrative organisation to consider establishing local administrative organisation such as a road safety directing center.

Paradon Rungrojteera, Senior Foreign Relations Officer, Sing Buri Provincial Disaster Prevention and Mitigation Office, has proposed a pilot project to establish a local administrative organisation road safety directing center to manage road safety activities with the budget support from Thai Health Promotion Foundation, and working support and planning by Thailand Road Safety Network. The objective is to reduce road crash injuries and death in Sing Buri Province down to less than 10 death per 100,000 population by 2020 and that the local administrative organisation has to gain capacity and capability in moving road safety forward and become an important mechanism for integrating road safety agencies and sectors in delivering road safety work in the community.

Working process

The work began with the selection of one Sub-district Administrative Organisation (SAO) from each district that is ready to participate in the project and attend a training and study visit on community safety in Nan Province. The budget support came from the award the province received for having zero crash during long holiday season. After returning to the province, a working group meeting was held to plan out the activity, and conducted road safety knowledge training for local administrative organisation road safety directing center committee from pilot area. The Regulations of the Office of Prime Minister on Road Safety B.E. 2554 (2011), the National Road Safety Strategy 2013-2016, together with the implementation plan for road safety data collection and analysis have helped feeding the information back to the local administrative organisation road safety directing center. 6 SAOs have joined the project, which are located along the main and secondary roads, experiencing high rates of road crashes. The main road is Asian Highway and the secondary road is the route along Noi River from Ang Thong to Sing Buri, which passes through Phok Ruam SAO in Mueang Sing Buri District, Wihan Khao SAO in Tha Chang District, Tha Kham SAO in Khai Bang Rachan District, Rong Chang SAO in Phrom Buri District, Mae La SAO in Bang Rachan District, and Tha Ngam SAO in In Buri District. Among them, Phok Ruam SAO has a high number of road crashes since it is located close to the main road. Thus, it has applied all road safety strategies, tactics, and exercised 10 key traffic law enforcements. Details on working procedures are presented as followed.

Project outcomes

Outputs

- 6 SAOs have made road safety implantation plans and established the local administrative organisation road safety directing center to implement the activities through integrated working group of all sectors, relevant road safety agencies, and people in the community.
- SAO has allocated the budget to support road safety activities (details are shown in the below table).

Area	Work Plan (2016-2018)	Budget (Baht)
Phok Ruam Sub-district Administrative Organisation, Mueang Sing Buri District	Repairing road and shoulder, traffic light signals, street lights, and public information campaign	1,035,000
Tha Kham Sub-district Administrative Organisation, Khai Bang Rachan District	Installing warning light signals, street lights, traffic mirror, road marking, improving visibility, and child helmet wearing promotion at a child Development Center	490,000
Mae La Sub-district Administrative Organisation, Bang Rachan District	Installing traffic light signals, street lights, and road safety campaign during public holidays	219,000
Rong Chang Sub-district Administrative Organisation, Phrom Buri District	Conducting an integrated check-point and service points during public holidays, risk spots survey and treatments, school and public road safety promotion campaigning, training session for Civil Defence Volunteer/relevant officers	180,000
Tha Ngam Sub-district Administrative Organisation, In Buri District	Conducting an integrated check-point and service points during public holidays, risk spots survey and treatments, school and public road safety promotion campaigning, training session for Civil Defence Volunteer/relevant officers	180,000

Area	Work Plan (2016-2018)	Budget (Baht)
Wihan Khao Sub-district Administrative Organisation, Tha Chang District	Conducting road crash prevention and reduction activity during New Year and Songkran Holidays	120,000
Total		**2,224,000**

Outcomes

- After seeing what has been done in Nan Province, it has changed the idea of Suthep Promphol, Chief Administrator of the Phok Ruam SAO to be more aware of the severity of the problem in a bigger picture. The case study presented by Nong Phak Waen SAO from Tha Luang District in Lopburi Province has inspired others to do something about road safety issues that are faced by Phok Ruam Sub-district. The district had one death in 2013, another one in 2014, but jumped to five deaths in 2015. After returning, the Phok Ruam SAO officers had attended the working process learning session before commencing their work by meeting to discuss the activity. The next meeting was to identify risk spots and suitable treatments as well as planning for Phok Ruam SAO road safety implementation plan (2016-2018) for the budget of 1,035,000Baht to repair the road and improve the road shoulder, to have a road marking for lowering speed, installing traffic light signals, installing information signage for intersections ahead, installing street lights, installing a speed bump, installing traffic mirror, clearing surrounding area for better visibility, and campaigning on road safety for public information. This is done in cooperation with Provincial Rural Road Office and other relevant agencies.

Integrated working approach

- The work was carried out through the integrated working approach, which involved a number of organisations such as Phok Ruam SAO, community leaders, local agencies in order to be able to identify 17 risk spots in villages, local road users' behaviours, vehicle conditions, road conditions, and surrounding environment before finding ways to treat risk spots together.

- Phok Ruam SAO's road safety action plan preparation is based on a bottom up process by having information shared with the community, collecting data on risk spots, finding ways to treat them, and meet with all relevant agencies to create a work plan.

Key success

Supportive factors

- It is important to win support from Chief Executive of the SAO in order to be able to work effectively. Thus, by having a constant discussion and information sharing with the head of the organisation and maintaining good understanding of the project and working process is very necessary. For future provincial work, even though there were only 6 SAOs participated in the project, but they served as a pilot area for others to follow.
- A bottom up working approach is used to form an action plan and has proven to be useful in promoting participation rather than top down process approach where policy is handed down from central authority. Additionally, a horizontal coordination from policy level to practical level has also created a big impact and outcomes.

Conditions

- By having learned from others' work through an excursion activity a new way of thinking about community work evolved. In another word, it allows the work to be done outside the box. Thus, the provincial working group should ensure that really dedicated people with a genuine interest in moving forward road safety in their community is selected for excursion activity.

- To promote road safety work at a community level, it should start from a small scale and steadily expand to a larger scale. The work should be based on the existing local resources rather than basing on budgeting alone. This has to be done in parallel with information distribution to the people in community for better understanding. As for the provincial working group, a constant follow up, of monitoring, and evaluation process is needed to help elevate the quality of future work.

"Strengthening District"Leads to Road Crash Prevention and Reduction at Tha Luang District in Lop Buri Province

Khamron Nimanong

Suphan Buri – Thailand Road Safety Network Mentor

Tha Luang District...Tourist destination and travel route

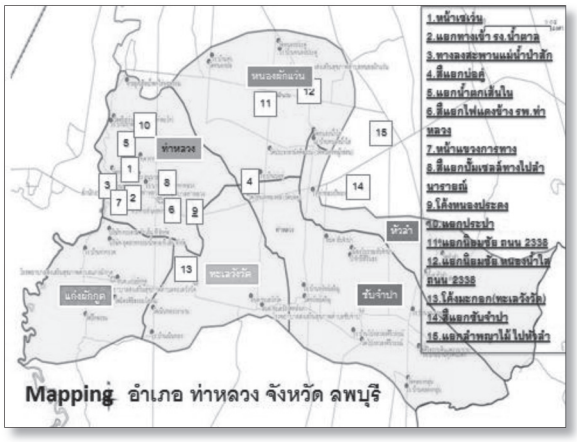
Tha Luang District is located about 80-90 kilometers from Muang Lob Buri District, and has a bypass road that can enable travel to Nakhon Ratchasima Province. During holiday seasons the traffic density is drastically increased. Major population is sugarcane farmersas there is a sugar mill located in the district. In addition, there are tourist destinations such as Wang Kan Lueang Waterfall, Sapchampa Ancient City, and Magnolia Sirindhorn Forest. Types of vehicles used in the area are mainly motorcycles, pick-up trucks, sugarcane trucks, trailers, and tractors. The area would see more private cars on weekends while trailers are running at all times. Most severe crashes occur to private cars from other areas, while local crashes mostly involves motorcycles. Those motorcycle crashes happen to reckless riders and underage riders, which result in the loss of lives in younger age group. Teenagers often get together for a race and with contact crashes result or being crushed by a trailer. Road crashes are already increasing, but since the road is expected to be expanded into a four-lane road with more vehicles passing through the district it is likely that there will be more crashes, and more loss of lives, injuries, disability, and assets. Road crash data in 2011 showed that there were 883 crashes with 13 people dead, in 2012 there were 1,044 people being injured and 6 dies, in 2013 there were 1,099 being injured and 11 deaths.

Part of the problem contributing to high road crashes is due to drivers who are foreign to the area, so are not familiar with the environment, and driving at high speed, which adds to the risk of being in a crash. This is reflected in 2016 when Tha Luang District had the highest road toll in the province and continues to worsen. Thus, in November 2013, Thaluang Hospital decided to request for a budget support of 100,000Baht from Thailand Road Safety Network to carry out road safety network partnership establishment in Tha Luang District. The hospital has developed a working system to help prevent and resolve road safety issues at a district level by dealing with risk spot treatment. This work has engaged government sector and local administrative organisation to analyse risk spot data before feeding it back to relevant agencies and organisations from both government and private sectors for planning. Furthermore, the work also targets road safety behaviours in a

group of population with high risk based on road crash statistics. The information is drawn from road crash data collected since 2008 to the present, which resulted in road crash reduction in 2014 where it dropped to the second highest road crash in the province. Since then, the road safety partnership and networking has been formed with a regular meeting now being held. This has allowed people to get to know each other, to have a chance to discuss and analyse the information together, and form a resolution. The meeting is conducted every 3 months, and the new working approach was introduced in 2015 to become proactive where road safety work is extended from district level to sub-district level under the concept of strengthening community road safety prevention and reduction innovation. The road crash statistics and information is presented to the people in communities, and allows them to present their view and ideas for solutions and preventive measures. The work is well supported and participated in by District Chief, Heads of local government agencies, and community leaders. For this year, the hospital is giving importance to road crashes on secondary roads especially village roads. Thus, the work is focusing on identifying risk spots within village area, data collection, community cooperation, and information analysis for further reducing road crashes on secondary roads. The objective is to reduce and prevent road crashes in 6 sub-districts of Tha Luang District where the local organisations such as schools or factories have to get involved in road safety management within their organisations. It aims to also include local administrative organisations involvement in road crash prevention and reduction and data management by all relevant road safety agencies from all 6 sub-districts.

From statistics to working inspiration

Despite a decrease on road crash statistics in 2014, the number is still strikingly high. Therefore, the working group committee feels that there is the need for a team of multi-disciplinary professionals to share the same road safety objective and dedication in order to be able to reduce numbers of road crashes. This is done with a view point that road safety is everyone's responsibility and not adding a burden to their routine work, but rather a proactive working approach to address the issue. The job is focusing on community road safety level work being carried out by a multi-disciplinary team in sub-district level. The main working group is comprised of 1) Tha Luang District, 2) Tha Luang Public Health Office, 3) Tha Luang District Police Station, 4) Hua Lam Health Promoting Hospital, 5) Thaluang Hospital, 6) Lop Buri Highway District 2, 7) Putthai Sawan Foundation, 8) Rural Road Office, 9) Nong Phak Waen Administrative Organisation, 10) Ban Tha Luang Sub-district Municipality, 11) Hua Lam Sub-district, and 12) Tha Luang Administrative Organisation. Those members are well supportive for one another since they have known each other through meetings that are held regularly.



From inspiration to powerful work

Following the establishment of a working group committee, a meeting for the district working group and sub-district working groups were held once or twice a month to share and discuss about road crash situation and particularly road crash data and statistics from different agencies. All information is compiled and analysed with information and feedback from the local people who are directly impacted. Following a risk spot identification for its location and suitable treatment decided for treatment. There are a total of 15 risk spots in Tha Luang District area; 1) in front of a convenience store, 2) at intersection to sugar miller, 3) on the way down from Pa Sak River bridge, 4) Borku Intersection, 5) intersection to the water fall local road, 6) intersection next to Thaluang Hospital, 7) in front of District Highway Office, 8) Intersection near Shell gas station, 9) a curve road at Nognpradong Village, 10) Waterworks Authority intersection, 11) Niyomchai intersection on Road No. 2338, 12) Niyomchai-Nongsai intersection on Road No. 2338, 13)a curve road at

Makok Village (Thale Wang Wat Sub-district), 14) Sapchampa intersection, 15) Ban Lam Phaya Mai Village intersection to Hua Lam Sub-district. Risk spot treatment that is agreed by all stakeholders and cost-effective had been applied on 10 risk spots so far, which has resulted in road crash reduction in Tha Luang District.

From district to community...from reactive to proactive approach

The District Working Group Committee has recognised that in order to be effectively solving road safety problem issues, it has to start from sub-district level operate in an integrated fashion where all relevant agencies are being involved and connected to become a road safety network at community level. This is a form of partnership between district authority and local administrative organisation which establishes an open floor to knowledge and experience sharing between 6 sub-district local administrative organisations in Tha Luang District. The aim for the project is to promote ownership among local communities to gain better understanding on the issue and ways forward to resolve it with knowledge and guidance support from district working group committee. This district working group committee is also acting as a coordinator to liaise information back and forward between community and responsible agencies in case that the community cannot carry out tasks such as risk spot treatment by themselves. Another role played by the district working group committee is to conduct a follow up, monitoring, and evaluation of the work periodically to ensure that the work is done continuously. This has been receiving good cooperation from the local people. Moreover, there were other activities related to the project that had been carried out, which include the revival of First Responder (FR) training for Village Health Volunteers, a public campaign on Emergency Medicine Service (EMS), and follow up on initial information for road crash incidents. The type of crash is also being analysed through the use of restructuring of the incident through the use of a model. Another activity was 1-Day community training for Mass-Casualty Management, whereby a knowledge session was conducted in the morning with a practice session conducted in the afternoon. Additionally, a helmet wearing promotion campaign was held at the sugar mill during sugarcane extraction season as well as in Thaluangwittayakom School and Chaibadanwittaya School. Another activity involved the presentation of the work done by Nong Phak Waen Sub-district as a good and concrete example for another sub-district to learn from. At the end, there was a competition held for awarding the best community model for road crash prevention and reduction innovation, in which all the community leaders/Village

Heads/Village Health Volunteers participated. The community check-point workers were also presented with a certificate.




Improving Rescue Unit Capacity Building for Road Crash Prevention and Reduction

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23 Years with Dedication towards Recue Service

Sawang Bechatham Foundation in Samut Songkhram Province has been in operation since 1994, its mission was to rescue and collect dead bodies. Its focus was to deliver the injured person to hospital without first aid treatment until 2001 when the Rescue Unit received first aid training from Narenthorn EMS Center of Rajavithi Hospital. This was conducted to increase the quality service of the rescue unit, and in 2005 the rescue vehicle was equipped with basic life support aid and equipment. The foundation has received an award for outstanding rescue unit in 2007. The rescue unit work is led by twin brothers named Polsat Laohakanwanich and Chonlatee Laohakanwanich who promote cooperative working approach with other agencies such as police, Public Health Office, Highway Office, and Rescue Unit Network in Samut Songkhram Province.

National Highway 35 (Thon Buri- Pak Tho Route) or Rama II Road is the main road heading to the southern region of Thailand. It cuts through Bangkok Province in Chom Thong District and Bang Khun Thian District, Samut Sakhon Province, Samut Songkhram Province before ending its route at Wang Manao Interchange in Pak Tho District, Ratchaburi Province. The 4-line highway stretches over 84.041 kilometers in a generally straight line with U-turn spots along the road as well as tourist attractions such as Bang Khun Thian Beach, Don Hoy Lhod sandbar. The road is also a direct route to beaches in Phetchaburi and Prachuap Khiri Khan Province. Drivers are often found to be driving over speed limit. This resulted in high number of road crashes along the route, which clearly is seen by Sawang Bechatham Foundation who is involved in rescuing operations. Thus, it prompted the foundation to

begin working in a more proactive approach in 2011 by doing more than just assisting the injured and collecting the bodies. It has joined a project to establish a systematic cooperation on road safety along Rama II Road, Samut Songkhram - Bang Phae Road, and Ekkachai Road where all relevant road safety agencies in Samut Songkhram Province have come together to form a road safety network. The network received funding support from Road Safety Group Thailand (RSG) of Thai Health Promotion Foundation. The key objective is to collect data and information of risk spots to be presented to responsible agencies for further correction and improvement in parallel to promoting road safety conscience in children and youth.

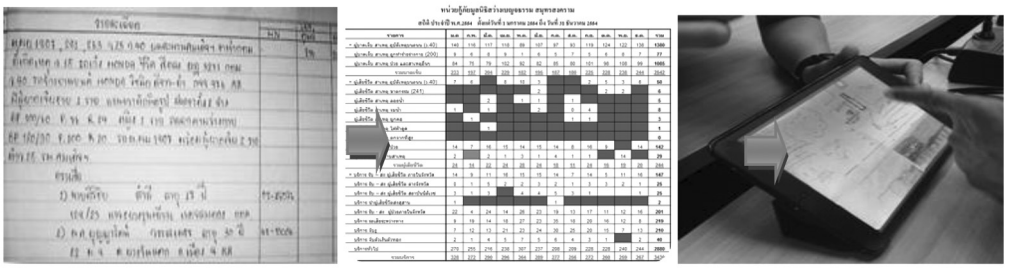
The aim for the new approach is to support road crash preventive measures, for which the Rescue Unit Network received further training and funding support from Thai Road Safety Network in 2013 under the project called Rescue Unit Capacity Building for Road Crash Prevention and Reduction. The Rescue Unit Network along the Rama II Road stretches over four provinces of Samut Songkhram, Samut Sakhon, Phetchaburi, and Prachuap Khiri Khan. The rescue units are Sawang Bechatham Foundation, Sappharachen Foundation, Samut Sakorn Foundation, Sri Samut Radio Center, Sawang Sanpetchayatham Sathan Foundation (Khao Yoi District and Wang Manao Sub-district Station), Sawang Prachuap Thammasathan Foundation, and Nursing Student Volunteer Club of Phetchaburi Rajabhat University. An additional foundation from Phetchabun Province named Sawang Mongkol Satta Thammasathan Foundation has also participated in the training. The project mandate was to move rescue unit work into data collection at the crash site and gain a better understanding on basic road crash investigation as well as being aware of risk spots. The information being collected is particularly important for identifying the cause to the crash, severity of the crash, and ways for preventing it. The training involved both theory and practice. A database is set up using a mobile application under android system in order to send the information to the relevant agencies on a real time basis. The information being collected consists of crash incident, location, name of road, photos of crash scene, number of injuries and death.

Network establishment...Rescue Unit Capacity Building

Source: Rescue Unit Capacity Building for Road Crash Prevention and Reduction

After project participation, the rescue unit team members have started making changes on their road using behaviours. For example, they are now wearing helmets to be a good example for general public as well as attending every road safety promotion activities in schools and during public holidays. The rescue unit capacity building on road crash data collection and related activities have continued to expand with the support from Thailand Road Safety Network together with Thai Health Promotion Foundation in 2015. During this time, the project training and practice on data collection and analysis for the cause of the crash, and risk spot identification and treatment is expanded into provincial level. A new application called EMT Alert Mobile Application is also developed and people have been trained. Road safety promotion campaigning, and road safety networking and partnership building is also extended into a provincial level.

Power of proactive approach...leading to database development



Written Record *Excel Programme* *Mobile Apps*

Ever since road crash preventive work has been mobilized in 2012, road crash data collection has never been the same. It changed from a written record in a notebook that showed just the information on the calling time, rescue team dispatch time, crash location,

injurers' information, number of victims and vehicle, and an initial cause to the crash in 1994 to a new data recording method. Data entry was then changed to computer use in 2005 when a case note was produced and submitted to a hospital for monthly and yearly data summary. In 2007, the database called ITEM was used by the National Institute for Emergency Medicine (NIEM), Ministry of Public Health in cooperation with Road Accident Victims Protection Co., Ltd. (RVP) data base on insurance claim cases. From 2013 to present, the database called GEO-ITEMS Mobile Application is used together with Thai Roads Foundation database since it is currently under construction. Today data information can be collected and sent through a mobile application, which is faster and more user friendly compared to the past. All data collected is presented to all relevant agencies for final analysis and resolution.

Source: Road crash data and positioning reporting system prototype development by Thai Roads Foundation