# **Application of Geographic Information Systems for Coastal Resources Management in**

#### Phetchaburi Province

Narong Vongpanich

Faculty of science and the Technology , government officer Phetchburi university , district , farm , district [ teacher city ] , province , Phetchburi ,

086-6071234/032-493266/narong vong@hotmail.com

The background and the importance of a problem

Now the institute please resource coast worldly event and of Asia , and in the country , Thai , ing stay in critical condition, this problem happens 1. from the natural disaster by oneself, such as, condition glass house occurrence, worldly upland temperature go up to make sea tall water goes up to cause erosion problem erodes to follow shore line , beach area and , the residence is down , Tsunami occurrence, many times, make the structure of world skin changes to, shore resource was destroied all is late a hand March 2554 s at , a city not , on an island raises , Japan , have an affect on both of of the economy, and the livelihood, of people goes to the worldwide, and in 2547 end of a year, be born Tsunami Tsunami in Thailand has an affect on to build [ wasp ] 6 coast Andaman province, cause the change of coast line at most, and 2. born from the behaviour begs for a human, such as will sand mine , wall construction waves , dam , harbour , and the scoop drills a well , be that make coast cause was musting scoured go to continually, area mangrove forest lead goes to do shrimp farm is again one that make erosion cause erodes the coast increases , ( , an office conserves the resource by sea and the shore , :2549 , infront 1-2) Thailand has coast area , cover more than 378,000 kilometer policeman , which , compose 12 territorial waters mile areas by from sea the shore , and economy special border of the two country in three of the area, (252,000, kilometer policeman), stay area Gulf of Thailand area, and remainder area, (126,000, kilometer policeman), stay in 2,614 all river Andaman line coast temple medicine way kilometer banks cover 23 a province, by divide 954 river Andaman kilometer banks, cover 6 a province , and 1,660 river uncle Thai kilometer bank , cover 17 a province , there are 12 million residence peoples follow coast line more than a person , ( , report document assesses the status and make fragility map beg for natural resources and area bay house highland environment and Pang-nga project bay manage shore resource (CoastaHabitats and Resources Management Project: CHARM), Ministry of Agriculture and Cooperatives, : 2549, infront 1),

In each year , coast of Thailand area generally scoured go to very arrive at two the table , kilometer , think damage cost year vacate about spill to involve million a baht , or , about 150 million federation coin , danger king occurrence condemns many times , as a result , cause the damage to coast resource , ( , lay situation environment Thai ivory , :2554) , the effect that happen from resigned temperature worldly change , cause flood condition follows to come to , because , the water level in tall sea goes up , affect build [ wasp ] the livelihood of people , and build [ wasp ] economy system follows coast line ,

Natural resources follows coast line of Thailand , have an affect on go to with , ( , resource journal by sea and the shore ,2554 , infront 4-5) a problem that meet , about natural resources and the environment , be a problem about , the ecology by sea , important problem is for example , , bleaching in the coral , which , cover both of river bank Gulf of Thailand area , and Andaman sea , and unless , , ( , the research institute and develop the resource by sea ,2553 , infront 1-2) this still get into trouble about the deterioration of the real estate , using resource extravagantly , and pertaining to development all problem , at born in seaside area which , have an affect on the way (s minus,erase ) a lot of build [ wasp ] natural resources and the environment , now shore important various kinds resources , such as , mangrove forest , real beach estate , coral line , sea grass , and the sea water has near the shore was destroied and deteriorate down then until is in a level that want the interest , and manage hastily ,



Phetchburi which , be a province where have length line of 82 long kilometer coasts , since , amphur keen house , arrive at , amphur Chaum , get into trouble about using and resource coast administration , alluvion problem of sediment from Phetchburi estuary down in the Gulf of Thailand , wood slitting destroys the mangrove forest , area forest man lead comes to do shrimp farm , building dam separates sea water waves , make the direction of water hand changes , be born the erosion erodes shore line more and more , and , area coast development is the tourist attraction , from a problem aforementioned the researcher , then want to study collect the data , and make bamboo fish trap situation resource coast website of Phetchburi province , which , will one far trick , to help announce the data and reinforce the knowledge , the understanding about the situation , and , problem state of coast resource of Phetchburi province in the sense of all , by the lead takes , information geography system , ( Geographic Information System : GIS) , be a tool for the accumulation , the saving records , the calling uses , modifying , analysis , and data manner area show from the thing that appears to go up of Phetchburi province , for bring study , assess ,arrive at all state of coast resource of Phetchburi province .

### The word is important

- 1. Applicability system way geography information,
- 2. Administration,
- 3. coast province Phetchburi resource,

## Much are how much is how is a question researches

- 1. Resource coast province Phetchburi situation?
- 2. Information way geography system that brings applied in resource coast province Phetchburi effective administration ?
- 3. Information way geography system that s bring applied in resource coast province Phetchburi administration s highclass the contentment ?

# The objective of

- 1. research for studies resource coast province Phetchburi situation in
- 2. for now build resource coast province Phetchburi database by use information way system,
- 3. geographies applied for information way geography system s in resource coast administration,
- 4. Phetchburi provinces for assess information way geography system that s bring applied in the administration , coast province Phetchburi resource ,

#### Limits of the research

In the research this time , the researcher is bound for study about applicability system way geography information in resource coast administration , Phetchburi province , by divide limits of the research , as follows

- 1. the people in the research this time , for example , , community leader is a president bakes the district , / , municipality , a deputy bakes the district , / , municipality , and pertaining to administration environment officer , in the organization governs 35 localities vacates 4 persons , 140 amounts and , the people who is university government officer Phetchburi student by choose a student from every the faculty , vacate 20 persons , be total
- 2. 140 limits persons in the sense of the area , follow shore line of Phetchburi province arrives at amphur keen house arrives at amphur Chaum , total up the distance about 82
- 3. limits side substance kilometers , in the education about coast resource of Phetchburi province , 6 all coast side resources , for example , real estate resource mangrove forest resource coral resource grass sea resource plant resources and sea all animal , and 6 animal sea scarce resource ,

### **Define the terminology**

- 1. Applicability , mean , data manner map lead that can fix a position has on the Earth's surface , at pertaining to coast resource of Phetchburi province for uses in the assessment and announce
- 2. Information geography system , (Geographic Information system , GIS) , mean , a tool for the accumulation , the saving records , the calling uses , modifying , analysis , and
- 3. Data manner area province Phetchburi administration Technology shows , mean , way , procedure , in applicability knowledge scientific systematically , for develop the produce has that to advantage build [ wasp ] the social and a human succeed to follow the aim havely the effect , economize , and the development continuously and last long
- 4. The coast , mean , skin worldly area that initiate to is the earth and the water , there is topography character and palace system that have the particularities , limits of the shore covers both of ground area and sea water area , ground part depends on spreading distance arrives at of the sea water of
- 5. Phetchburi resource shore provinces , mean , coast resource follows the meaning of government resource coast department has 6 all a side , be 1 5 4 3 2 real estate resource mangrove forest resource coral resource grass sea resource plant resources and sea all animal , and 6  $\,$
- 6. Honor sea scarce efficiency resources of information geography system , (Geographic Information system , GIS) , mean , the ability of information geography system , in data resource coast province Phetchburi administration , at people , and community leader has can to apply the advantage ,

#### Idea frame in the research

The researcher has studied the format of something applicability system way geography information in resource coast province Phetchburi administration , by have idea frame , as follows ,

- 1. The idea about coast resource of Phetchburi province , be state education and resource coast situation of
- 2. Phetchburi idea provinces about applicability system way geography information come to use in resource coast province Phetchburi administration , ,
- 3. The idea about Technology administration , be doing data , change the procedure evaluates for come out to is
- 4. Idea informations about relayying Technology , relayying Technology , be important procedure in relayying practice and Technology lead go to use are born topmost advantage to the user which , for example , community leader and
- 5. University government officer Phetchburi idea students about Technology assessment weave way geography information that apply in resource coast province Phetchburi administration ,

The advantage of that receive from the research , the research about [ story ] , applicability system way geography information in resource coast province Phetchburi administration , be valuable as follows ,

- 1.The academic,
- 1.1 Academics have the knowledge and the data about coast resource from applying system , way geography information in resource coast administration , Phetchburi province , which , can induce apply in the sense all of , planning , administration , side administration environment administration , problem obstructing prevention erodes the coast , the trespass destroys the mangrove forest , animal scarce prevention , of , the organization governs the locality , the government sector where relate , school , university , and work activity inventor has about
- 1.2 Environments messages knows about relation manner reason character and that , the variable in applicability system way geography information in
- 1.3 Resource coast province Phetchburi administrations s learn the news to are related to of manner area data , with the correct information of



- 2. Resource coast province Phetchburi side lead situations has gone to use
- $2.1\,\text{The}$  network of the community , student , in knowledge development , the data and activity behaviour accompany with in resource coast maintenance ,
- 2.2 Phetchburi provinces are well fit like  $[\![$  model  $]\!]$  , in the filtration uses and relayying Technology down to
  - 3. Saide conservation resource coast communities,
- 3.1 Get the database about coast resource that s have the justice , modernness , and can apply in planning decides , the administration manages coast province Phetchburi resource ,
- 3.2 Get resource coast database , in a picture of manner map data , which , will illustrate distinct change can apply the advantage immediately , and from a problem and the idea aforementioned come to me then will take an interest to lead information way geography system come to apply in resource coast administration of Phetchburi province ,

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