Enhancing the effectiveness of the Common Risk Assessment (CRA) for Port Inspection

Department of Fisheries, Thailand





RISK

PIPC

Background: CRA

The CRA system is the system that the Thai DOF uses to select the target fishing vessels to be inspected at port, based on the

determination of risk criteria.

PO

Background: CRA

No. of notify for PI-PO : 29,828 trips/month

[Approximately 10 trips/day from No. FV 5,699 vessels]

Can not Perform 100% Port inspection



PO

Ρ

High No. Port

Can inspection ~70%



Officer



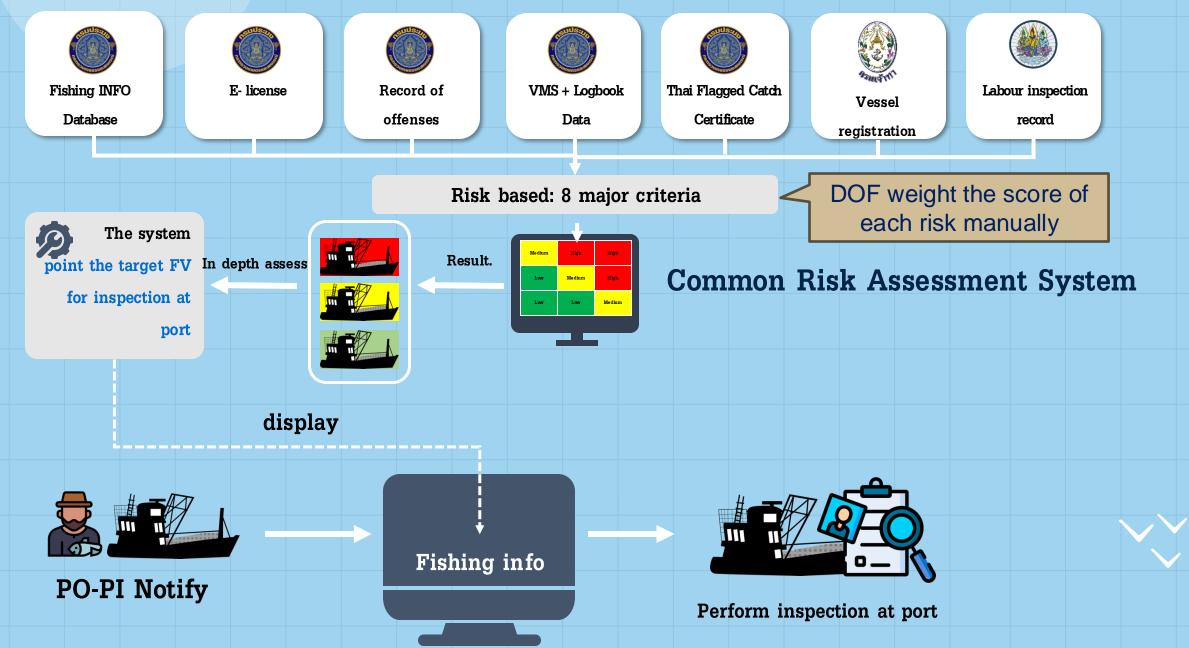
Transportation

Budget



Standard of Inspection

Structure of current CRA



Leading to the need of improvement the CRA System



Risk based Criteria

Using Machine Learning (AI) to develop algorithms and statistical models by

using the data of the past 8 years

to predict fishing vessel risk from indicators and

to group the risk vessels

Advantages

Know the Accuracy score of the model [Enhance the Accuracy of the prediction]

- No need to weight the score of each risk manually [Reduce human bias]
- Easy to use / Time-saving: Leave the tough tasks to Al