DETERMINATION OF DISTRIBUTION CENTER LOCATIONS / 
WAREHOUSE SUPPLIES OF EMERGENCY DISASTER 
RESPONSE WITH MULTI CRITERIA GOAL PROGRAMMING 
APPROACHMENT AND SET COVERING 
(Case Study: Flood Prone Areas Potential of Bengawan Solo 
Downstream)

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Abstract

This research concerns to problem of optimizing 
distribution center for warehouse of public disaster especially for 
flooding area. Due to distribution center must consist many criteria 
of location evaluated, a model of multi criteria approach is 
proposed to utilize. A integrated of Multi Criteria Decision 
Making (MCDM) models are developed based on goal 
programming, AHP and set covering model.

The set covering model optimize the setting of locations alternative. Then goal programming is used to determine the best 
alternative location for warehouse. Based on the evaluation for 
many alternative for setting location of warehouse center. The best 
alternative decision is Padangan, Kapas dan Laren districts.

Keyword: Multi Criteria Decision Making, Set Covering, Multi 
Criteria Goal Programming