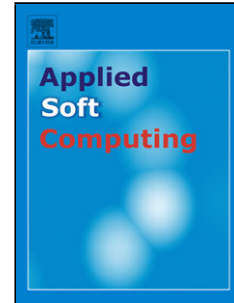# Accepted Manuscript

Title: Commentary on "Evaluating the criteria for human resource for science and technology (HRST) based on an integrated fuzzy AHP and fuzzy DEMATEL approach"

Author: Asmita Pandey Amit Kumar

Please cite this article as: Asmita Pandey, Amit Kumar, Commentary on "Evaluating the criteria for human resource for science and technology (HRST) based on an integrated fuzzy AHP and fuzzy DEMATEL approach", Applied Soft Computing Journal http://dx.doi.org/10.1016/j.asoc.2016.12.008

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Commentary on ''Evaluating the criteria for human resource for science and technology (HRST) based on an integrated fuzzy AHP and fuzzy DEMATEL approach''

Asmita Pandey[1a], Amit Kumar[b]

[a]Computer Science and Engineering Department, Thapar University, India

[b]School of Mathematics, Thapar University, India

Abstract Chou et al. (Applied Soft Computing 12 (2012) 64-71) used combination of fuzzy AHP (Analytic Hierarchy Process) and fuzzy DEMATEL (Decision Making Trial and Evaluation Laboratory) in human resource for science and technology (HRST). For applying the fuzzy DEMATEL method there is a need to find the multiplicative inverse of a fuzzy matrix. In this paper, it is pointed out that the method, used by Chou et al. for evaluating the multiplicative inverse of a fuzzy matrix, is not valid. Hence, the method, proposed by Chou et al., is not valid. Furthermore, it is pointed out that this flaw can be resolved by using the existing method (International Journal of Computer Mathematics, 86(8), (2009) 1433-1452) to find the multiplicative inverse of a fuzzy matrix.

Keywords: Fuzzy set, AHP, DEMATEL, Human Resource

1. Introduction

Chou et al. [1] pointed out that HRST are the crucial survival and growth factor for economics, therefore, evaluating the performance of HRST in each country is the critical research topic. Keeping the same in mind, Chou et al. [1] used a combination of fuzzy AHP and fuzzy DEMATEL in HRST. In this method, firstly the weight of each criteria is evaluated using fuzzy AHP and then DEMATEL is used to establish the relationship between the dimension and

---
[1] Corresponding author
Email: pandey.asmita@gmail.com, amitkdma@gmail.com