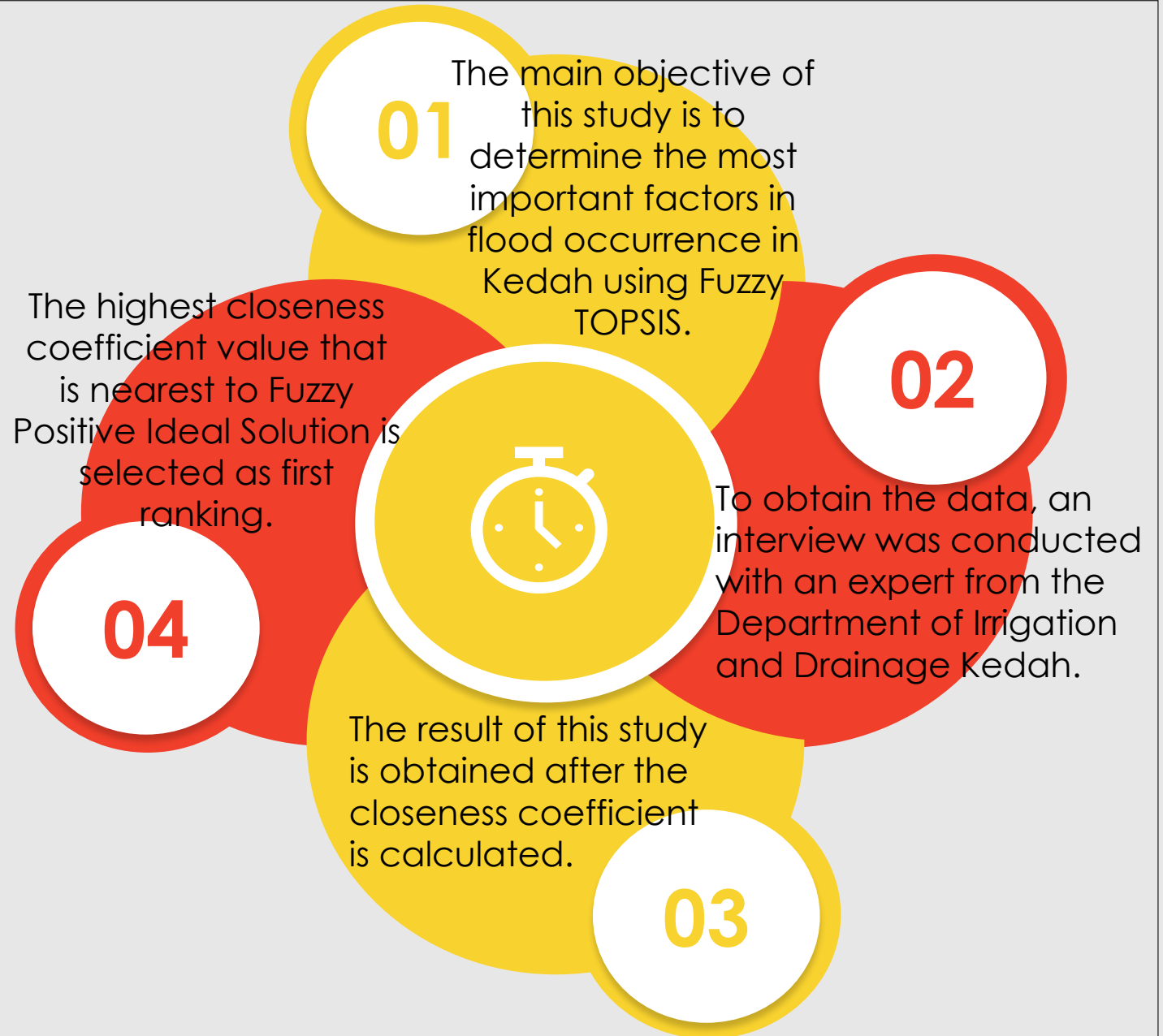




FUZZY TOPSIS
APPROACH FOR
RANKING FLOOD
FACTOR IN KEDAH

ABSTRACT

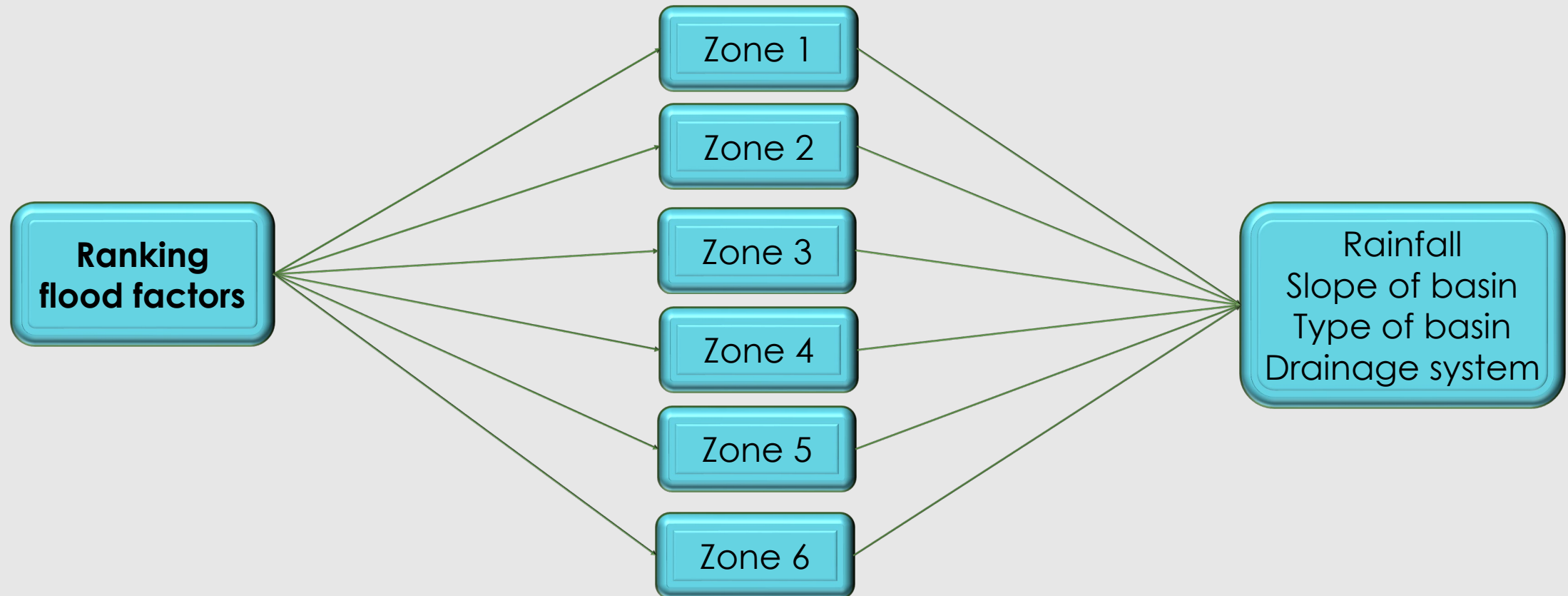
Flood is a common natural disaster in Malaysia. This phenomenon is mainly triggered by continuous heavy rainfall causing the water in a river or sea to cross the danger level, resulting to flood.



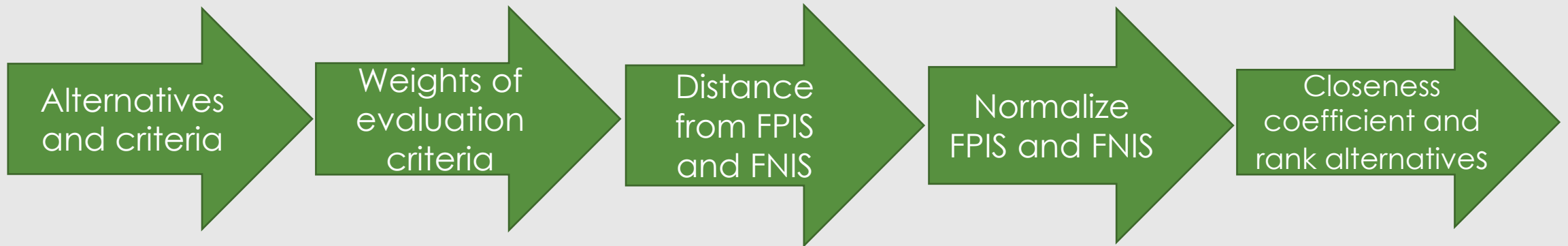


INTRODUCTION

METHODOLOGY



Hierarchy of ranking flood factor



Steps of Fuzzy TOPSIS

RESULTS

Alternatives	A1 (Rainfall)	A2 (Slope of basin)	A3 (Type of soil)	A4 (Drainage system)
Results				
Closeness coefficient	0.318	0.227	0.260	0.295
Rank	1	4	3	2

Closeness coefficient and rank alternatives

CONCLUSIONS & RECOMMENDATIONS

The most important factor for flooding in Kedah is rainfall.

By using Fuzzy TOPSIS, the value of closeness coefficient of rainfall is 0.318 which is the highest value compared to other factors.



For future study, it will be interesting to study the ranking of flood factor if this method develops a formula for ranking the criteria and alternatives simultaneously.

The result can help the Department of Irrigation and Drainage Kedah to beware when rainfall continuously occurs in Kedah.



THANK YOU