

Supplementary Table S1. Initial criteria comparison matrices for fuzzy PIPRECIA and Inverse fuzzy PIPRECIA method

| PIPR | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 |
|---------|-----|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| DM1 | | (0.400,0.500,0.667) | (1.400,1.600,1.650) | (1.000,1.000,1.000) | (0.667,1.000,1.000) | (0.400,0.500,0.667) | (1.300,1.450,1.500) | (1.000,1.000,1.000) | (0.667,1.000,1.000) | (1.300,1.450,1.500) |
| DM2 | | (1.100,1.150,1.200) | (1.500,1.750,1.800) | (1.300,1.450,1.500) | (0.400,0.500,0.667) | (1.200,1.300,1.350) | (1.000,1.000,1.050) | (1.000,1.000,1.000) | (1.000,1.000,1.000) | (1.100,1.150,1.200) |
| DM3 | | (1.000,1.000,1.000) | (1.400,1.600,1.650) | (1.000,1.000,1.000) | (0.400,0.500,0.667) | (1.300,1.450,1.500) | (1.000,1.000,1.000) | (1.000,1.000,1.000) | (1.000,1.000,1.000) | (1.000,1.000,1.000) |
| DM4 | | (0.400,0.500,0.667) | (1.500,1.750,1.800) | (1.000,1.000,1.000) | (0.667,1.000,1.000) | (0.400,0.500,0.667) | (1.300,1.450,1.500) | (1.000,1.000,1.000) | (1.000,1.000,1.000) | (1.100,1.150,1.200) |
| PIPR -I | C10 | C9 | C8 | C7 | C6 | C5 | C4 | C3 | C2 | C1 |
| DM1 | | (0.333,0.400,0.500) | (1.100,1.150,1.200) | (1.000,1.000,1.000) | (0.333,0.400,0.500) | (1.200,1.300,1.350) | (1.000,1.000,1.050) | (1.000,1.000,1.000) | (0.286,0.333,0.400) | (1.200,1.300,1.350) |
| DM2 | | (0.667,1.000,1.000) | (1.000,1.000,1.000) | (1.000,1.000,1.000) | (0.667,1.000,1.000) | (0.400,0.500,0.667) | (1.200,1.300,1.350) | (0.333,0.400,0.500) | (0.250,0.286,0.333) | (0.667,1.000,1.000) |
| DM3 | | (1.000,1.000,1.000) | (1.000,1.000,1.000) | (1.000,1.000,1.000) | (1.000,1.000,1.000) | (0.333,0.400,0.500) | (1.200,1.300,1.350) | (1.000,1.000,1.000) | (0.286,0.333,0.400) | (1.000,1.000,1.000) |
| DM4 | | (0.667,1.000,1.000) | (1.000,1.000,1.000) | (1.000,1.000,1.000) | (0.333,0.400,0.500) | (1.200,1.300,1.350) | (1.000,1.000,1.050) | (1.000,1.000,1.000) | (0.250,0.286,0.333) | (1.200,1.300,1.350) |

Criteria abbreviations provided under Table 2. PIPR: fuzzy PIPRECIA, PIPR -I: inverse fuzzy PIPRECIA, DM: decision-maker response.