

BAB V

KESIMPULAN DAN SARAN

5.1 Kesimpulan

Memperhatikan hasil penelitian penerapan metode *fuzzy* TOPSIS pada penentuan daerah prioritas dan metode *exponential smoothing* untuk prediksi sebaran kasus HIV maka dapat di simpulkan beberapa hal sebagai berikut:

1. Metode *fuzzy* TOPSIS melakukan perankingan kecamatan berdasarkan empatbelas kriteria. Perankingan berdasarkan nilai preferensi kumulatif kriteria menunjukkan bahwa Kecamatan Bandungan menjadi prioritas pertama dengan nilai preferensi kumulatif sebesar 6.674952.
2. Penghitungan prediksi sebaran kasus HIV sangat bergantung pada pemilihan nilai konstanta *smoothing* (α) yang merupakan rata – rata nilai konstanta *smoothing* (α) dengan nilai MSE terkecil pada perhitungan prediksi seluruh kecamatan menggunakan nilai konstanta *smoothing* (α) antara $0 < \alpha < 1$. Pada penelitian diperoleh nilai α sebesar 0,61 yang menghasilkan prediksi penambahan kasus HIV di Ambarawa sebanyak 5 orang.
3. Sistem yang dihasilkan berhasil menentukan daerah prioritas penanggulangan AIDS dan prediksi sebaran kasus HIV kecamatan di Kabupaten Semarang dengan hasil ditampilkan pada peta digital berbasis internet.

5.2 Saran

Manfaat sistem akan lebih terlihat dengan penambahan alternatif berupa perluasan sampai dengan tingkat desa. Penambahan kriteria terutama kriteria kualitatif akan lebih menonjolkan keunggulan sistem. Pada prediksi kasus sebaiknya menggunakan metode peramalan kausalitas karena kasus HIV sangat dipengaruhi oleh faktor tingkat resiko baik perilaku maupun lokasi.

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