

$$X_A^m = \frac{X_n^{m+1} + f_1 \times (u_1 \times x_{suitable} - u_2 \times x_k^m) + f_2 \times \rho_1 \times (u_3 \times X2_n^m - X1_n^m) + u_2 \times x_{r1}^m - x_{r2}^m)}{2}$$

$$X_n^{m+1} = X_A^m$$

$$X_A^m = \frac{X_{suitable} + f_1 \times (u_1 \times x_{suitable} - u_2 \times x_k^m) + f_2 \times \rho_1 \times (u_3 \times X2_n^m - X1_n^m) + u_2 \times x_{r1}^m - x_{r2}^m)}{2}$$

$$X_n^{m+1} = X_A^m$$

Local Escaping Operator: It is second GBO based operator. Its basic objective is to make GBO useful in complicated issues. With various solutions, it can be define as suitable position (best position is considered as suitable position) $x_{suitable}$, $X2_n^m$ and $X1_n^m$ and $x_{r1}^m - x_{r2}^m$ which are considered two random solutions. In this x_k^m is new randomly yielded solution. In X_A^m , this A is equal to Local Escaping Operator which is given as: