round number, the DGBEED algorithm presented node number of survival is higher than DEEUC algorithm. And the DEEUC algorithm of node premature death and survival number reduced quickly, and DGBEED algorithm of node death late and periodically drop, so wireless sensor network (WSN)'s performance is better than the DEEUC algorithm under the DGBEED algorithm. At the same time, also can see all the network nodes of the DEEUC algorithm earlier will not work, network will be able to get more lasting working life time under the DGBEED algorithm.

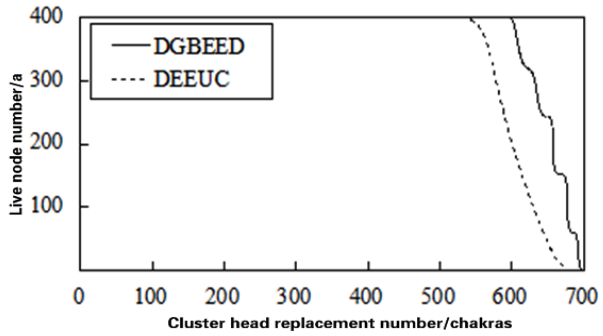

Fig. (2). Increase number change of network survival node with round number.

CONCLUSION

Data fusion is an effective energy-saving technology in wireless sensor network (WSN), but the collected data is mainly consisted of cluster head by the data fusion, which creates a cluster head nodes energy consumption speed up the possible early failure. It may result in the network performance decrease of energy consumption and cause unbalanced and short network life cycle. We propose the DGBEED algorithm in this paper. Through the lattice area of network partitioning size, the farther the distance between the base station is, the larger the lattice area becomes. The rotation of cluster head nodes can be a good balance between the cluster energy consumption. Energy consumption between the members of cluster, the cluster head, the network performance, network energy use efficiency and life span can make the network achieve longer balanced. The energy consumption target has a very good practical application value.

CONFLICT OF INTEREST

The authors confirm that this article content has no conflict of interest.

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