Abstract
This paper proposes the energy harvesting scheme for wireless sensor network by proper selection of relay node by base station. The sensor node transmits the information to base station and to all the nearby sensor nodes. Upon failing the direct transmission, cooperative ARQ techniques are used for retransmission. The selection of relay is based on counting the number of retransmission carried out by the particular relay, so that highest energy level consisting in a relay will be permitted to transmit the information received from the sensor node. If the energy level of the relay goes below threshold level then next relay is selected on the same basis. In this way the threshold energy level is maintained for sensor nodes (relay) for recharging purpose. Proposed a DF-HARQ (Decode and forward hybrid ARQ) protocol enhances throughput of the system. Cooperative diversity exists across the throughput performance of the network. This paper demonstrates the protocol model and performance analysis to evaluate the throughput of the network.

Reference

- M. Chiani and D. Dardari, "Improved exponential bounds and approximation for the

**Index Terms**

Computer Science Wireless

**Key words**

FEC Hybrid ARQ

Ad-hoc sensor network cooperative protocol