SUMMARY: The present study was conducted in the year 2011-12 with specific objectives to study the adoption of different improved storage practices of farm produce to assess the constraints perceived by the household in adoption of improved storage practices. For this study Bikaner district was selected purposely. Bikaner district consists of 6 Panchayat samities. Out of them 3 Panchayat samities namely, Bikaner, Durgagarh and Nokha were selected on the basis of maximum area and production under food grain crops. From these Panchayat samities nine Gram Panchayat were selected randomly. From this two villages from each Gram Panchayat were randomly selected hence 180 respondents from 18 villages constituted the sample for the study. Ex-post facto research design was used for the study propose. The study reveals that majority of the respondents were using traditional storage structures (76.12%) followed by 69.45 per cent were using prevailing practices i.e. mixing of ash and neem powder in store grain and 61.12 per cent households were adopting neem products to save grain in store. Whereas more than half of the households adopted scientific rodents control practices, sun drying, use of improved storage structure and care while stacking grain bags during storage. The major constraints faced by the house holds of Marwari area in adoption of stored grain practices were not having knowledge about chemicals that are used to keep farm produce free from the insect pests, fungus, bacteria and yeasts, etc., lack of information about stored grain pests and losses caused by them, lack of the knowledge about fumigation practices. Non-availability of modern storage structure at local market, non-availability of chemicals for fumigation at village level market, chemicals are harmful for health, lack of knowledge about precautionary measures to be taken during storage of farm produce in godown, not aware about care to be taken during stacking of gunny bags, lack of knowledge sanitation and maintenance godown and another constraints were also perceived by the respondents i.e. reluctant to leave traditional methods, non-access to mass media at village level and lack of training to farm women about improved post harvest technology. The study also highlighted, majority of the respondents expressed their views in using indigenous storage practices because no required specialized knowledge, easy and safe in use, adopted since forefather perceived no need to change, easy in availability, easily accessible and fear in use of chemicals and hazardous to health are the main reasons which are responsible to adopt indigenous storage practices in the locality in comparison to scientific storage practices.