

2 Methodology

2.1 Objective of the Study

The major objective of this work is to study the application and adoption of e-governance to mitigate the challenges faced by the Government in providing food security to its citizens.

2.2 Research Questions

- i. How e-governance can be used to mitigate the challenges of diversion faced in delivery of the Public Distribution System for ensuring food security to its citizens?
- ii. Can e-governance be applied to enable secure identification at ration shops at fair price shops and secure farmer identification in the Public Distribution System of the Government of India?

2.3 Research Design

For the purpose of this study, a flexible research design has been adopted using case study method. Starting from a historical background and evolution of the Public Distribution System, the Government's biggest food security programmes in India, this study discusses the challenges that are faced in implementation of the Public Distribution System and how with the use of e-governance some of these challenges can be overcome. An attempt is made to put forth some recommendations for successful adoption of e-governance in India. These recommendations are based on four published case studies relevant to the topic. According to Creswell, data collection in a case study occurs over a "sustained period of time."

One approach sees the *case study* defined as a *research strategy*, an empirical inquiry that investigates a phenomenon within its real-life context. Case-study research can mean single and multiple case studies, can include quantitative evidence, relies on multiple sources of evidence, and benefits from the prior development of theoretical propositions.

The research design for this study comprises of:

- Case study of the following successful adoption of e-governance as a step towards improving Food Security environment in the country..
- Secondary Data collection: The secondary data collection comprises of:
 - Review of policy documents: Important related documents and reports had been studied such as National Food Security Act 2013, National e-Governance Plan (NeGP), National Policy on Information Technology, 2012 (NPIT 2012), Status Paper on TPDS Computerisation, Report of Food Corporation of India , JUSTICE WADHWA COMMITTEE REPORT on PDS, Report of the High Level Committee on Reorienting the Role and Restructuring the Food Corporation of India , E –Book Ministry of Food Procurement and Reports of Department of Electronics and Information Technology (DeiTY) (2013).
 - Websites/databases/reports: Data has also been collected from agencies such Department of Food and Public Distribution, Food Corporation of India , websites of State Governments, NIC and Deity , Unique Identification Authority of India.
 - Extensive use of a number of articles that have been published in newspapers and magazines, and books , periodicals , journals – both Indian and foreign and available literature for arriving at some observations and conclusions.

Visit to Food Corporation of India and to a food bank in Balmuri district in Karnataka has also been undertaken to study the use and application of e-governance for implementation of Public Distribution system of the government.

2.4 Scope/ Limitations/ Delimitations

The scope of the research is to ascertain and carry out an analysis of the challenges faced in the food security schemes of the Government and based on case studies recommend ways to improve the food security through effective use of E-Governance and by using the secondary sources. However, due to the logistics constraints including paucity of time and resources, the study has been carried out based on case studies and the information received from them and by using the available secondary sources. Moreover, Pilot study cannot be conducted.