A study on the health outcomes of RO plants and Mobile Health Van services in villages of Barmer & Jalore districts, provided by Cairn India

Introduction

In Barmer & Jalore water quality and scarcity are a challenge. The most densely populated arid region in the world, much of the state is especially water scarce and drought prone. The title **"Marwar Region"** translates to **"Land of Death"**, a derivative of the harsh, water-strained area's history. Due to the scarcity of water and deprived quality of water in the desert belts of Barmer and Jalore, people are effected by various water borne disease like fluorosis & arthritis which made them live in pain and decreased quality of life. Cairn India has taken an initiative to improve the quality of life of people in Barmer and Jalore by providing safe drinking water through **"Jeevan Amrit"** project and providing access to preventive health care by **"Mobile Health Van"**

Problem Statement; -

Though safe drinking water and mobile health van services are available for the people these resources are not been fully utilized by the people, instead they are using alternative sources of drinking water like preserved rain water, canal water, tube wells etc.

Research Question; -

What is the effect of safe drinking water on the health of people in Cairn India operational area?

What is the effect of MHV (Mobile Health Van) on health of rural population in Cairn India operational area?

Objectives of the study; -

- To assess the health outcome of **"Jeevan Amrit Project"** on safe drinking water implemented through Cairn India in its operational area.
- To understand the factors which affect the utilization of RO water and MHV provided by Cairn India.
- To provide recommendations for the improvement of the schemes.

Methodology; -

Study area – Operational area of Cairn India (Barmer & Jalore district).

Sampling: - Stratified Random Sampling. (Non-Probability Sampling)

Sampling frame – 34 RO plants in location.

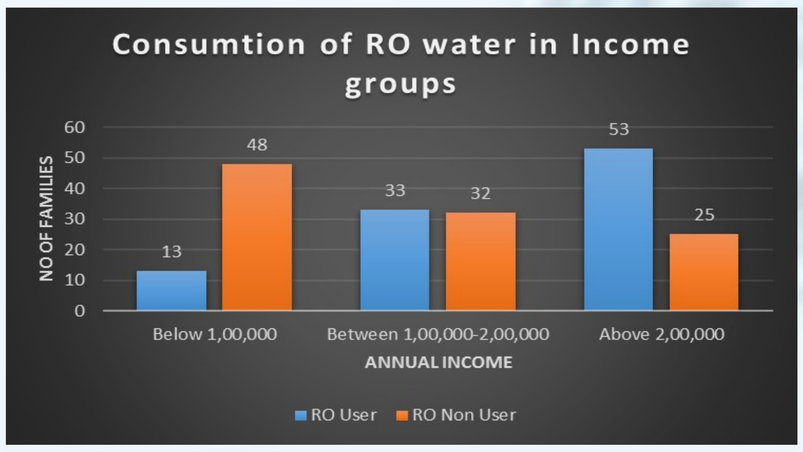
Methods of data collection; - Primary

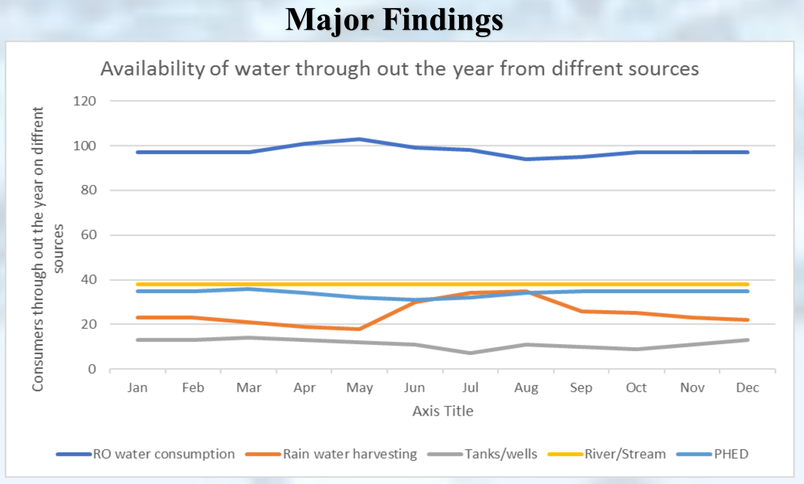
Primary Sampling unit – All the villages in which RO plants had completed 2 years and serving from the last 2 years & also where MHV is also serving.

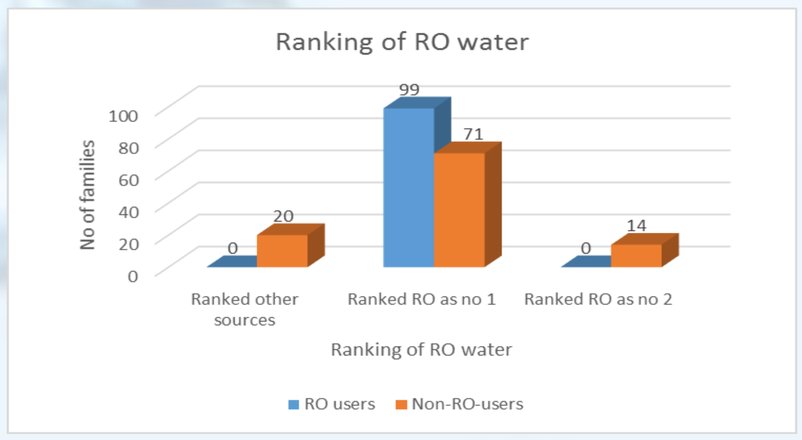
Sample size – 30 HH from each village

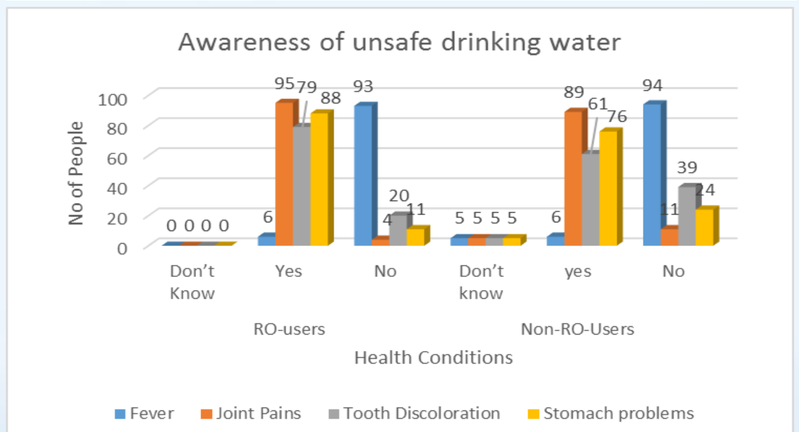
Tools of data collection – A structured schedule was made to collect the data from households of the village through qualitative and quantitative questions.

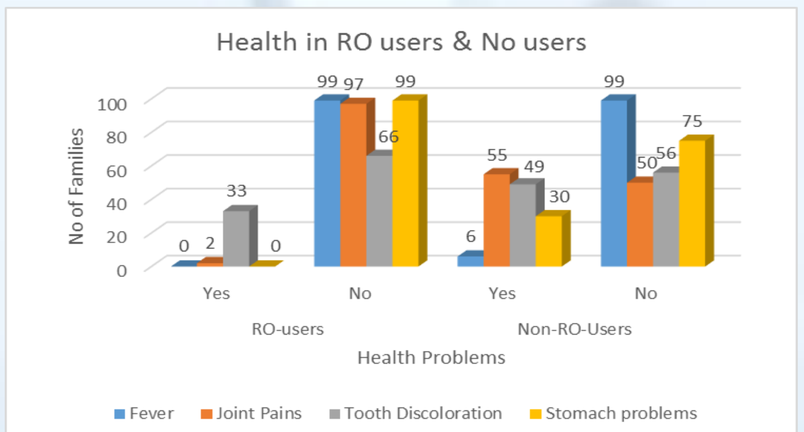
Major Findings

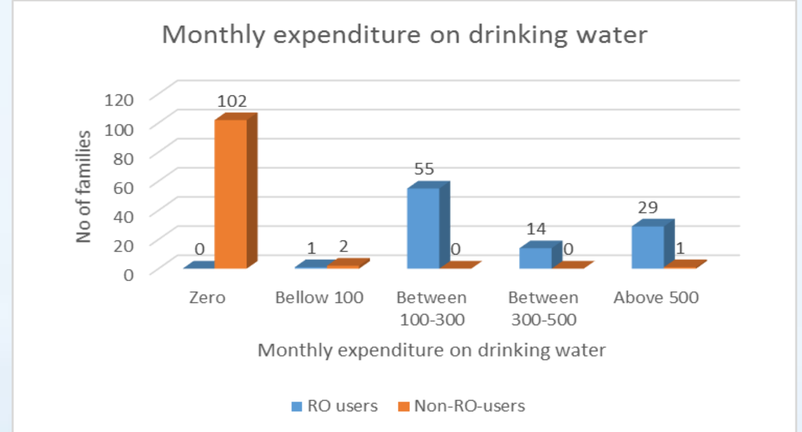


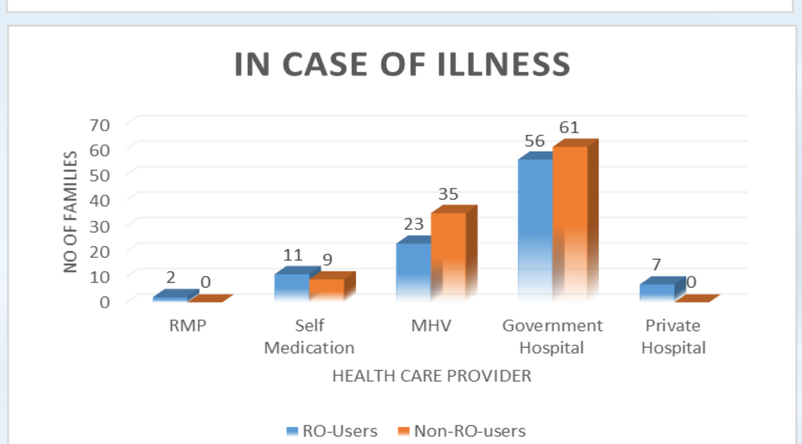


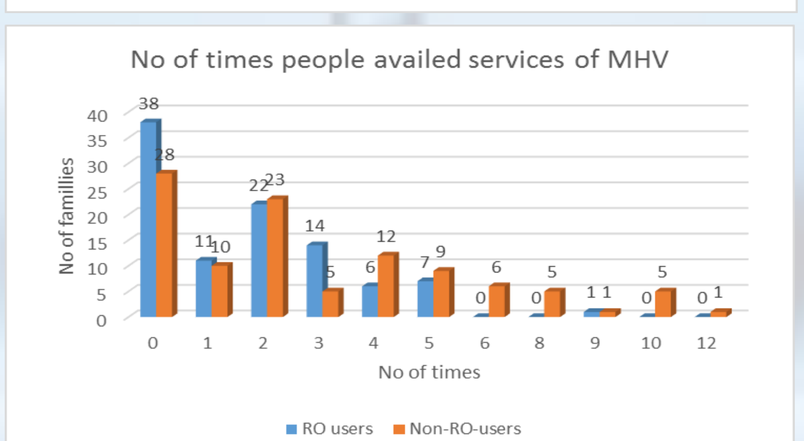


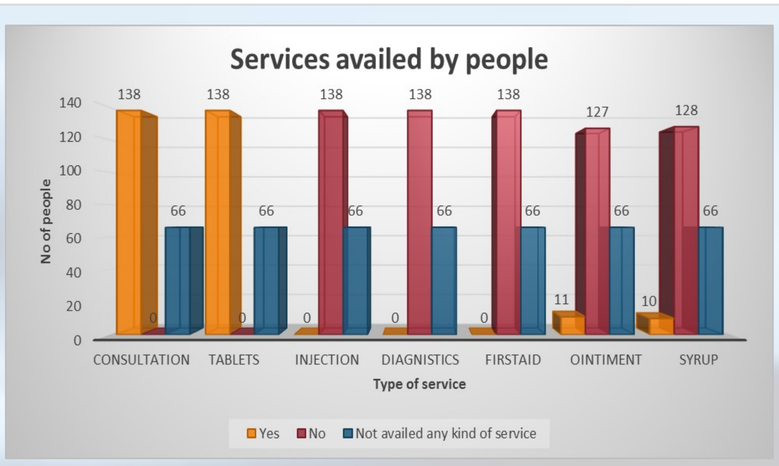












Hurdles affecting the utilization of RO water and MHV services provided by Cairn India; -

1)**Economic status of people -** In our study 30% of the population falls under lower income group spending ample amount of money on drinking water is not possible for them.

2) **Operational issues of RO plants** - Though it is a community based model communities are failings to maintain it, raising a question in peoples mind ***what if you stop providing us RO water when we get used to it.***

3) **Distribution mechanism of RO water** - **"JAL RATH'S"** distribution mechanism of RO is not proper, raising a question ***"Today you are providing water for 5/- on later stages what if you charge more for the same 20 lit of water?***

4) **Type of the services provided in MHV -** Ideally MHV can be compared with a PHC providing Curative, Reproductive & Child, unfortunately these Mobile Health Vans are not providing all these services. Not only these services basic services like parenteral administration of drugs, first aid and diagnostic test (except rapid diagnostics) are also not provided by these MHV's.

5) **Availability of Government Hospitals -** A Mobile Health Van should serve in an underserved or unreachable area, but out of 7 villages only 3 villages were found where a government or private health provider is not present and far from the village.

Recommendations; -

- **Organization should uphold the responsibility of maintenance and monitoring instead of providing full control to community, it should ensure to hire some people from the community to monitor the plants and by this they can empower the lower income group and reduce the operational issues.**
- **Proper distribution mechanism should be maintained through Jal Raths.**
- **Mobile Health van services should be stopped in areas were hospitals are present & Curative, Reproductive & Child services should be provided in underserved areas.**

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