Impact Evaluation of the Rice Fortification Initiative in Andhra Pradesh

Addressing the malnutrition and Micro Nutrient deficiency (MND) challenge in the Indian context is one of the key focus areas for the Trusts. Tata Trusts has adopted a multi-pronged approach to be able to address the above issue effectively and at scale. To address this issue, Tata Trusts initiated a rice fortification initiative in three districts of Andhra Pradesh as a pilot initiative to combat the malnutrition and Micronutrient deficiency issue.

Any intervention will only succeed if it yields a positive outcome and creates a visible impact on people’s lives. Tata Trusts envisages that the rice fortification initiative in Andhra Pradesh will help in combating the prevalence of anemia among children and pregnant and lactating mothers through MDM and ICDS schemes.

Through the rice fortification initiative, we have reached to 10,53,141 children and 1,47,652 pregnant and lactating women by providing fortified rice in MDM and ICDS schemes in both Krishna and West Godavari districts of Andhra Pradesh. Around 7000MT’s of fortified rice has been blended and supplied to AWCs, Schools and social welfare hostels with the support of Tata Trusts. In continuation with current efforts to eradicate Malnutrition in the state, we are planning to replicate the same intervention in Guntur district. To measure the efficacy of RFP Intervention, we have planned an evaluation study in the state.

In this regard, we have initiated a Randomised Control Trial (RCT) study to capture the longitudinal impact of rice fortification initiative on School children in Andhra Pradesh. RCT is a technique which provides a comprehensive understanding of how intervention can be effective in reaching beneficiaries. RCT aims to provide which treatment is best by making a fair comparison between a new treatment and control groups.

As part of this study, students from treatment group will receive Hostel meals cooked with micronutrient fortified rice and control group will receive hostel meals cooked with natural rice grains (non-fortified rice) for the period of one year.

For this RCT study, preliminarily we have selected two schools from Prakasam district as a control group and two schools from Guntur district as a treatment group. The Sample size for size would be 50 from each school and the with the total of 200 students. The expected duration of this study will be for 12 months.

**CONTROL GROUP**
Under the control group, we have selected the following schools for the study

1. Andhra Pradesh social welfare residential school(Boys), Darsi, Prakasam Dist, AP.
2. Andhra Pradesh social welfare residential school (Girls), Addanki, Prakasam Dist, AP.

**TREATMENT / INTERVENTION GROUP**
Under the Treatment/Intervention group, preliminary we have selected the following two schools for the study (there may be variance as per government request).

1. Andhra Pradesh social welfare residential school(Boys), Adavitakkella Padu, Guntur dist., AP.
2. Andhra Pradesh social welfare residential school (Girls), Amaravati, Guntur Dist, AP.

**Targeted outcomes of the Study**

**Primary**
Compare the change in blood levels of SF, between the two groups at the end of the intervention period

**Secondary**
Compare change in prevalence of anemia, iron deficiency and iron deficiency anemia between the two groups at the end of the intervention.
PARTNERSHIPS & COLLABORATIONS

Partnership with “Sight and Life” to capture the innovative Blending practices of Rice fortification in Andhra Pradesh

Andhra Pradesh, a coastal state in Southern India, has a high burden of vitamin and mineral deficiencies leading to night blindness, anaemia and various birth defects. To combat malnutrition, in early 2018, Andhra Pradesh announced its plans to distribute fortified rice through government feeding programs in three districts in the first phase and later scale it up to the entire state.

Currently, the rice fortification program includes a batch blending system to blend fortified rice kernels with regular rice. However, there are shortcomings with the batch blending system, which created the need for a new system. To support this effort, Sight and Life, in partnership with Tata Trusts and the Government of Andhra Pradesh, has pioneered an innovative, cost-effective blending process, called continuous blending. This is the first of its kind in India and the first time a continuous blending process is being employed to fortify rice for large-scale government programs.

This Knowledge has been captured in a technical brief, “Rice Fortification in Andhra Pradesh: Pioneering an Innovative Blending Process to Improve Nutrition Outcomes” and included a step by step guide for operationalizing rice fortification using the continuous blending model.

The six membered team of Tata Trusts and Sight and Life Foundation co-authored this technical brief.

Web link for above mentioned article: