

# Project POSHAN

## Fight Against Malnutrition

### The Need:

Maharashtra has one of the highest malnourishment rates in the country. Nearly half of all deaths in children under 5 years are attributable to undernourishment. In spite of the ICDS programme, India has one of the highest malnourishment rates in children globally. In rural India, the issue of malnutrition is compounded by the socioeconomic challenges faced by the community.

Maharashtra in particular has been in the news due to the severe malnutrition and related deaths in many tribal and rural communities. As many as 83,068 children below the age of six have been categorized as severely underweight in the state in 2015-16. Few of the worst affected communities are in Raigad, barely 100 km from Mumbai, India's financial capital!



In August 2016, in Raigad district, **9,000+** children were found to be malnourished, of which **918** were severely affected as per a joint survey conducted by the state's health department and the women and children welfare department.

Chronic malnutrition has severe consequences which affect a child for the rest of his life. These may include increased likelihood of premature death, susceptibility to disease, impaired cognitive skills and academic performance, lower physical capacity and ability to work along with major long term negative impacts on brain and nerve development.

### Project POSHAN:

Project Poshan works in partnership with the Integrated Child Development Scheme (ICDS)\* in rural and urban communities. Through this project, we –

- |   |   |
|---|---|
|  <p>Identify undernourished children between the ages of 2-6 years</p>  |  <p>Capacity Building of Anganwadi** workers in safe food handling and addressing needs of undernourished children</p> |
|  <p>Ensure they receive an additional nutrition supplement of 500kcal for 5 months followed by 250kcal for another 5 months</p> |  <p>Educate parents on low cost nutrition and hygiene</p>  |
|  <p>Monitor their growth (height, weight &amp; mid upper arm circumference)</p>   |  <p>Facilitate medical referrals for children who are Severe Acute Malnourished (SAM)</p>                              |

*\*The ICDS is a government initiative aiming to provide services to preschool children from rural, tribal and slum areas in an integrated manner to ensure their proper growth and development.*

*\*\*Anganwadi is a type of rural mother and child care centre started by the government as part of the ICDS programme, to combat child hunger and malnutrition*



### The Community: Socioeconomic Context

Raigad, barely 100 KM from Mumbai has been one of the most affected areas, with high rates of malnourished children. Children from this locality hail from rural and tribal communities. The families of the affected children comprised mothers, who were housewives and fathers, who work as daily wage labourers. Early marriage and early delivery has been one of the prime causes behind malnutrition of children, combined with poverty which limited the families' access to a healthy, balanced diet and adequate healthcare.

## Our Interventions So Far



Food Supplementation & Distribution

### Identification of Undernourished Children

In conjunction with the ICDS, **837** undernourished children were mapped across **136** Anganwadis. The communities that access these Anganwadis are largely tribal and extremely impoverished.

### Distribution of Additional Nutritional Supplementation to Identified Children

A high calorific nutrition supplement was designed for the children. This supplement ensures 500 k cal of additional nutrition for the child each day. The supplement was designed based on an assessment done of current dietary practices, gaps therein and local preferences. The food is prepared as per FSSAI guidelines and safety is ensured. From March to July 2017, 1,84,140 meals were distributed to the 837 children.

### Growth Monitoring (height, weight and mid-upper arm circumference)

Growth of children is monitored on a fortnightly basis. This includes checks of height, weight and mid upper arm circumference. In addition, the food consumed on a daily basis is monitored at the anganwadi.

### Capacity Building of Anganwadi Workers (AWWs)

The AWWs were trained to identify undernourished children and address their specific needs. This included training in safe food handling, infant and young child nutrition and growth monitoring, which was overseen by a trained nutritionist. Project Poshan also promoted cleanliness and hygiene as a means to better health and nutrition. A 'Swachh Anganwadi' contest was organized and met with an enthusiastic response.

### Educating the Parents on Nutrition and Hygiene

Project Poshan worked with parents of the children to create supportive home environments. Parents were counselled on health and hygiene and low cost, nutritious foods.

### Medical Referrals for Children Who Are Severe Acute Malnourished (SAM)

Severe Acute Malnourished (SAM) children require additional medical interventions to ensure they are brought out of a high risk category. A 3 day inpatient medical camp was organized for such children at the DY Patil Hospital in Navi Mumbai. The health camp included comprehensive case history, clinical examination, basic anthropometric measurements, medical tests & examinations, medicines and counselling and referral for parents. Parents were counselled regarding dietary guidelines and the importance of cleanliness and immunization, by pediatricians, as well as a project nutritionist.



Anthropometry & Growth Monitoring



Training of Anganwadi Workers



3-Day Health Camp for Severely Malnourished



Preparation of a Nutritious Meal



Meal Assessment



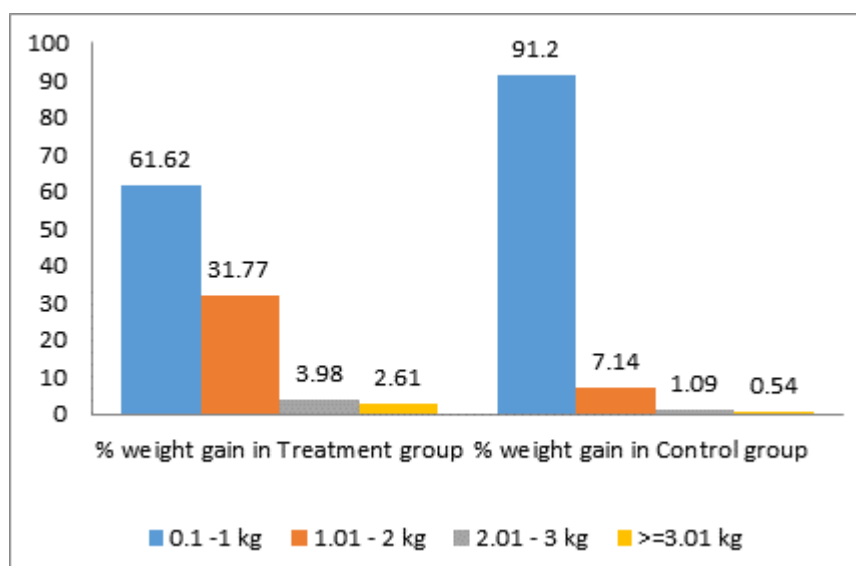
Children being fed the nutritional supplements



## Comparative Analysis of Project Poshan Beneficiaries (undernourished children) and Control Group (healthy children, who were not on Project Poshan food supplementation)

Health gains after 5 months of complementary feeding	Undernourished children receiving Project Poshan food	Healthy Children from same Anganwadi Centres not receiving Project Poshan Food
Average weight gain	955 g	604 g
Average increase in weight among girls	978 g	536 g
Average increase in weight among boys	935 g	662 g

### Graphical representation of weight gain is as follows:



The health gain made by undernourished children is remarkable. Project Poshan beneficiaries showed weight increase of as much as 1 to 3 kg and, in some cases, even more, which is a very positive outcome of the project. As seen in the graph, around 62% children receiving Project Poshan food gained 0.1–1 kg, whereas the % of weight gain is ~90 % in the control group. However, Project Poshan beneficiaries showed higher growth in terms of 1-2 kg, 2-3 kg, and 3 kg+ categories. Also, it is imperative to note that the comparison of growth is between undernourished and healthy children, making the growth difference is noteworthy.

### Unique approach adopted for project Interventions:

- All these interventions are undertaken in an integrated manner to create an enabling environment for the overall development of undernourished children. Parents' counselling and family management of undernourished children lead to lifestyle modification ensuring that the children receive a nutritious diet at home. Capacity building of Anganwadi workers has proved to be of great help in the management of the undernourished children at the Anganwadi centres.
- Project POSHAN focuses not only on severely undernourished children, but also those children who are moderately undernourished or are on the borderline, so that they do not fall in the malnutrition category. This helps in reducing the incidences of malnutrition.



## Impact

**837** CHILDREN

enrolled in the project,  
from **136 AWCs**

**301** AWWs

underwent capacity  
building along with  
**108 families**

**955** GRAMS

Avg increase in weight  
and **3.4 cm** avg increase  
in height after 5 months

**1,84,140** MEALS  
served from **March – July 2017**

*"The complementary food is being received well by children and their families. Increase in the weight of many children has been observed post-intervention."*

Opinion expressed by Mr. Rajan Sambare, Child Development Project Officer, ICDS Panvel Block II, Raigad

## Plan Ahead: POSHAN Phase II



### Project Poshan to be scaled up to impact 1600+ undernourished

- The learning from Phase 1 will help in further fine-tuning the interventions in Poshan Phase II. 837 children from existing interventions will continue to receive 250 k cal nutritional supplements, which will act as maintenance nutritional supplementation, to ensure that they do not fall back into a state of malnourishment. The capacity building of Anganwadi workers and community members will also continue to maintain the efficacy of the programme.
- 800 new undernourished children to be covered in Karjat I & Karjat II blocks in Raigad district.