Karnataka Comprehensive Nutrition Mission

Karnataka Multi-Sectoral Nutrition Pilot Project

**Project Background**

The Karnataka Comprehensive Nutrition Mission (KCNM), through the Karnataka State Rural Livelihoods Promotion Society (KSRLPS) with support from the World Bank and the Japan Social Development Fund (JSDF) is implementing the Multi-Sectoral Nutrition Pilot Project in Devadurga Block, Raichur District and Chincholi Block, Gulbarga District.

Implementation of the Pilot Project started in July 2015.

**The pilot project aims at improving nutrition outcomes by adopting an inter-generational, life-cycle approach,** through interventions focusing on the nutritional and nutrition related needs of children from 0-3 years of age, adolescent girls, pregnant and lactating women.

The Intergenerational Cycle of Malnutrition and Poverty is at Annexure -1

**The Pilot Project is not a food programme alone.** It is a comprehensive programme that first attempts to bridge the information/awareness deficit regarding proper nutritional and health practices within the family and community, and within their purchasing power.

Thereafter, it proceeds to bridge the nutritional dietary gap for the targeted groups, namely, infants below 3 years, adolescent girls, and pregnant women with the objective of preventing child underweight, stunting and wasting; low body mass index among adolescent girls; and ensuring improved weight gain among pregnant women to prevent low birth weight infants.

The Strategy begins with a strong focus on the indirect determinants of nutrition and conducting an intensive behaviour change communication campaign to improve household behaviours regarding nutritional practices and care related to infants, children, adolescents, and pregnant and lactating women, within the household budgets.

It also focuses on increasing access by families and targeted groups to the inter-sectoral services provided by prevailing Government programmes that impact nutrition, particularly sanitation, immunization and safe drinking water.
At the next stage, the strategy focuses on the proximate determinants of nutrition by providing fortified energy dense food (EDF) specifically formulated for the three inter-generational target groups, to bridge the protein-calorie-micronutrient gap in their diets. This EDF is produced by women from local Self Help Groups who are working in Production Units that have already been set up in both Chincholi and Devadurga.

Production and distribution of EDF started in Chincholi on October 22, 2016 and in Devadurga on December 26, 2016. The EDF has been well received by the beneficiaries.

Global Alliance for Improved Nutrition, (GAIN) has provided support for setting up the EDF Production Units in both Chincholi and Devadurga.

The project is being implemented in partnership with the NGO, Karnataka Health Promotion Trust (KHPT).

**Beneficiary details – Chincholi and Devadurga Blocks**

**Table-1**

<table>
<thead>
<tr>
<th>Taluka</th>
<th>Children 0-6 Months</th>
<th>Children 7-36 Months</th>
<th>Adolescent girls 11 to 18 years</th>
<th>Pregnant women</th>
<th>Lactating mothers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chincholi</td>
<td>417</td>
<td>6038</td>
<td>8107</td>
<td>783</td>
<td>1660</td>
<td>17005</td>
</tr>
<tr>
<td>Devadurga</td>
<td>152</td>
<td>6522</td>
<td>8396</td>
<td>841</td>
<td>2090</td>
<td>18001</td>
</tr>
<tr>
<td>Total</td>
<td>569</td>
<td>12560</td>
<td>16503</td>
<td>1624</td>
<td>3750</td>
<td>35006</td>
</tr>
</tbody>
</table>

*Project Interventions*

A Village Nutrition Volunteer (VNV) is appointed in each village by the partner NGO.

The VNV’s first task is to create Nutrition Cards for all beneficiaries through which there is a monthly monitoring of height and weight, and several other parameters specific to the target groups, such as, initiation of complementary feeding among children, immunization status, Vitamin A and the Iron and Folic Acid Programme, Sanitation and Safe Drinking Water.

SHGs are strengthened, and empowered through information and awareness on nutrition and health so that they can be active participants in bringing about behavior change.

VNVs motivate and assist the families to apply to the Panchayats for construction of toilets in their homes. After Mission intervention in October 2016, 909 toilets have been constructed and are being used - (430 in Chincholi and 479 in Devadurga Blocks) as at the end of December 2016.
The core activity in the project is the **regular house to house counseling regarding essential health and nutritional messages**. To prevent information overload and to ensure that the messages start getting absorbed by the families in a sustained manner, they are disseminated in phases, through household counseling, through flipcharts and charts, through radio and Cable TV and through wall paintings.

**Communication messages in the first phase focused on:**

1. The inter-generational cycle of malnutrition

2. Improving dietary practices within family budgets and encouraging consumption of traditional nutritionally rich local foods, such as, green leafy vegetables, tomatoes, local grains and pulses, commonly grown fruits like papayas, bananas etc.

3. Exclusive breastfeeding for infants during the first six months and complementary feeding after 6 months

4. Proper care of the girl child throughout her life cycle, with particular reference to intra-family food distribution and health care, and to improve the body mass index among adolescent girls and women

5. Prevention of anaemia among girls and women.

**The communication materials for the 2nd Phase have been finalized.** They focus on 6 subjects:

1. Educating pregnant women about the importance of proper birth weight of the infant and ideal weight gain during pregnancy and prevention of low birth weight

2. Advocating behavioural change in the family for additional nutrition to pregnant and lactating women

3. Providing families information regarding proper age of marriage for girls and of first pregnancy

4. Importance of weight monitoring and anaemia monitoring during pregnancy and also among adolescent girls. Encouraging consumption of IFA during pregnancy and lactation

5. Importance of institutional deliveries

6. Importance and benefits of consuming the Energy Dense Food (EDF) supplied under the Project

All interventions of the project have now been initiated and are in operation. Early results emerging from the projects from December 2015, (baseline) to July 2016 are very encouraging. *(Annexure 2)*
It may be safely concluded that these nutritional improvements can be related only to behavioural change resulting from the household messaging and communication strategy developed by the Mission for the Pilot Projects.

It is expected that nutritional improvements will accelerate even faster during the next few months, after consumption of EDF by the beneficiaries has started in October 2016 in Chincholi, and December 2016 in Devadurga.

**EDF Composition for target groups**

**Table-2**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Age Group</th>
<th>Portion (grams per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole wheat (50g)</td>
<td>6-12 months</td>
<td>50</td>
</tr>
<tr>
<td>Ragi (15g)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green gram dal (15g)</td>
<td>1-3 years</td>
<td>75</td>
</tr>
<tr>
<td>Defatted soya (10g)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar (10g)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin Mineral Premix</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whole wheat (45g)</td>
<td>Adolescent girls</td>
<td>100</td>
</tr>
<tr>
<td>Ragi (15g)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green gram dal (15g)</td>
<td>Pregnant women</td>
<td>110</td>
</tr>
<tr>
<td>Defatted soya (10g)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Groundnut (10g)</td>
<td>Lactating Mothers</td>
<td>110</td>
</tr>
<tr>
<td>Sugar (10g)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin Mineral Premix</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For more information, please visit our website: [http://karnutmission.org](http://karnutmission.org)
The Inter-generational Cycle of Malnutrition and the Cycle of Calorie Protein and Micro-nutrient Deficit (CPMD) and Poverty

The Two Concentric Cycles:
Inter-generational Cycle of Malnutrition & Cycle of Calorie Protein Micronutrient Deficit (CPMD) and Poverty

- Inadequate foetal nutrition
- Multiple pregnancies
- Gender discrimination
- Poor diet and ANC **
- Female literacy

Low Birth Weight

- Inadequate growth
- Low weight gain
- Poor Diet
- Gender discrimination
- Early marriage & pregnancy

Malnourished Mother

- No feeding of colostrum
- Lack of EBF* for first 6 months
- Delayed & inadequate com food
- Frequent infections & prolonged diarrhea

Female illiteracy

Poverty

- Poverty
- Lack of awareness
- Infections
- Gender discrimination
- Inadequate food & health care

Stunted Child

- Poverty
- Lack of awareness
- Infections
- Gender discrimination
- Inadequate food & health care

Low working capacity

Malnourished Girl

- Poverty
- Lack of awareness
- Infections
- Gender discrimination
- Inadequate food & health care

Low income generation

Protein calorie micronutrient deficit

ANC: Antenatal Care
EBF: Exclusive Breast Feeding