



## **MAHAN Trust Annual Report of project for reducing malnutrition and child deaths.**

**(January 2022 – December 2022)**

### **Title of the project-To improve health and nutritional status of children and women of Melghat**

MAHAN (Meditation, AIDS, Health, Addiction, and Nutrition) is a non-government organization established in 1998 to improve health care in Melghat region. MAHAN was touched by Gandhian teaching that “youths should go to the villages to serve as real India is in villages”. Melghat is the hilly forest area in the beautiful Satpuda mountain ranges. Population is 300,000 & 75% of them are tribal. Korku is the major tribe of Melghat. Most of the tribal (>90 %) are farmers or laborers, living below poverty line (>75%) & very hard life in huts (>90%), many without electricity & semi/illiterate (>50%). Medical facilities are grossly inadequate in Melghat as compared to rest of Maharashtra. Due to inadequate medical facilities & superstitions, tribal goes to traditional faith healers/quacks (pujari & bhumkas) for treatment of illness. Skin is burnt with red hot iron rod for reducing pain known as Damma. This lead to very high under 5 children mortality (>90 per 1000 live births) especially Malnutrition related deaths and very high mortality in age group (16-60 years) & maternal mortality. Moved by such things, we started the project in Melghat in November 1997. MAHAN Trust has dedicated its work to reduce malnutrition and mortality among women and U5C.

#### **Project Objectives:**

1. To reduce the Neonatal mortality rate (NMR), Infant Mortality rate (IMR) & Under 5 children mortality rate (U5MR) to less than 25, 40 & 70 per 1000 live births respectively in population of 29619 from 30 tribal villages of Melghat at the end of 5 years.
2. To reduce the Maternal Mortality Rate (MMR) to less than 200 per lakh live births in above setting.

3. To reduce the prevalence of severe malnutrition of under 5 children (SMC) to less than 15%. in above setting.

### A) BASELINE SURVEY

#### (New 23 Villages)

- Neonatal Mortality rate (NMR) is 50
- Infant Mortality rate (IMR) is 76.19
- Under 5 Mortality rate(U5MR) is 88.09
- Maternal Mortality Ratio (MMR) is 556.58
- Prevalence of SMC (SAM + SUW) is 22.26%

### B) TRAINING

#### Training details

	Particulars	Targets to be achieved	Achievements
	Training of VHWs from 3 new villages for normal and high-risk new-born care, management of birth asphyxia and neonatal sepsis.	66% of project VHW and project staff will be trained for normal and high-risk new-born care, management of birth asphyxia and neonatal sepsis.	89.15% of VHW and staff trained.
	Refresher training of project VHW and project staff from 30 villages.	80 % of project VHW and project staff are competent for BCC and supervision and 80% are competent for referral and treatment of patients.	90% of VHW and staff are competent.

Attendance	Topics Covered	Assessment
83.1%	Home Based Child Care, Breastfeeding (cross cradle) census, SAMMAN, village mapping, Newborn Care in Delivery Room, Preterm, LBW (Newborn care), Birth Asphyxia, Neonatal Sepsis, COVID 19, Breastfeeding, Hypothermia, SAMMAN, Review of VHW on field work and indicators, Anthropometry assessment, Non respondent SMC follow up, COVID Discussion.	Average marks Pre- test = 69.0% Post-test = 80.9%

## Kangaroo Mother care Training



Demonstration: how to tackle birth asphyxia of new-born .



*Training of VHW for child examination and*



*Training of VHW for blood testing for malaria.*



*Training of VHW for auscultation.*







*Training of VHW for anthropometry.*

**C) BEHAVIOR CHANGE COMMUNICATION (BCC):** In 33 villages

Particular	Figures	Target	Achievement
No. of Awareness programs conducted	8448	122	>100%
No. of Beneficiaries in awareness Programs	28006	6092	>100%
Beneficiaries reporting Programs useful	17860	4892	>100%



Figure: Group health education by flip chart.

### C) ANTHROPOMETRY

January 2022- Dec 2022

Particulars	Numbers
Total 0-5 years Children episodes	26228
Anthropometry of 0-5 Year Children episodes (measured)	22873
(%) of measured children	87.21



Figure: VHW measuring height of child

<b>Total Prevalence of SMC (December 2022)</b>	<b>5.41%</b>
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Hence, we achieved the target of prevalence of SMC <15%.

**D) Treatment of PATIENTS: -**

Particular	Figures	Target	Achievement
Treatment of Under 5 Children and New Born illness episodes in 30 villages.	6858	3046	>100%
Total Severely Malnourished Children treated with LTF, Antibiotics & MN (in all Villages)	350	369	100%

Total Pregnant women in 33 villages	619		
Providing home based antenatal care to pregnant women	554	80%	89.51%
<b>Case fatality rate (CFR) for Treated SMC: 0%</b> <b>We have achieved WHO target of CFR of treated SMC &lt;4%.</b>			



Figure :Treatment of children by VHW.



Figure: Treatment of SMC with LTF by VHW



**F) Changing Trends in Mortality Rates: - Achieved the targets of U5MR, IMR, NMR and MMR, prevalence of severely malnourished children (SMC) and low birth weight babies (LBW).**

	23 New villages			
	Sept 2016- August 2017- Baseline	2019	2021	Jan-Dec 22
U5 Mortality rate	88.09	51.9	41.9	<b>38.46</b>
Infant Mortality Rate	76.19	37.8	34.4	<b>33.33</b>
Neonatal Mortality Rate	50	24.7	24	<b>20.51</b>
Maternal Mortality Rate	556.58		0	256.4
Prevalence of SMC	22.26%	8.1%		5.41%

Case fatality rate of SMC has been reduced to 0%.

**Counselor program**

- 1) Benefitted 256952 poor tribal patients. Significantly increased hospitalization of severely malnourished children (500 admitted and 339 were treated in OPD) and hospital deliveries to 4195.
- 2) It has saved 17,509 patients including children, pregnant mothers, severe malnourished babies.

## Success stories

- 1) A boy, Raja Sakhilal Metakar from Village Pohra was in grade SUW/N(starting weight 9.43gm and Height 80 cm) on 9/04/2022. He was enrolled in SAMMAN program for 6 months and our village health worker treated him with localized therapeutic food with micronutrients for 6 months with antibiotic and Albendazole as per standard protocol. After 6 months of SAMMAN (end date 11/10/22), he recovered from severe malnutrition and now he is healthy.



1<sup>st</sup> Month in SAMMAN



Last Month In SAMMAN

- 2) Kavin Rakesh Darsimbe , a boy of village Bhandum, was enrolled in SAMMAN for 6 months. During that time village health worker and team noticed the boy had had extensive scabies on the scalp with secondary infection and pyoderma. The village health worker and medical supervisor repeatedly visited the boy, gave him antibiotics (Amoxyclav) and anti-scabies treatment for 3weeks. The infection was completely treated. Now he is also recovered from Severe malnutrition.



- 3) A boy from Sawalkheda was severely underweight (SUW) (starting weight 9.190 kg and height 82.5 cm) on 17/12/2021. He was enrolled in SAMMAN program for 6 months and our village health worker has started local therapeutic food with antibiotic. At the very beginning he was not responding to the treatment; hence our team continued our interventions and regular follow up. After 6 months of SAMMAN (end date 16/06/22), he recovered from severe malnutrition (Weight 10.220gm and height 86.5cm).



- 4) A girl from Pohra, Devika Rajesh Kasdekar was in grade SUW/SAM (starting weight 9.75gm and Height 90 cm) on 31/03/2022. She was enrolled in SAMMAN program for 6 months and our village health worker has started with local therapeutic food with vitamin, osteo calcium (for

entire duration of SAMMAN) and antibiotic treatment for 7 days and albendazole as per prescribed dose. After 6 months of SAMMAN (end date 28/09/22), she was in MUW/N grade (Weight 10.540gm and Height 92.5cm). She recovered from severe malnutrition and now she is completely healthy.



**At the beginning phase**



**End Phase of SAMMAN**

- 5) Rani Ratram Dhikar, had birth weight-2.555 k.g, During 15<sup>th</sup> day of new-born visit by our VHW, she noticed few boils on her body with redness in other part of body. She diagnosed it as a case of neonatal sepsis. She has started her treatment with Amoxiclav for 7 days as per baby's weight. Due to early diagnosis and prompt treatment, the baby is completely health now.





- 6) One 31 months child was severely malnourished. Weight of child was 6.3 kg . Parents were not ready for hospitalisation. Counsellors did intensive counselling and convinced parents for hospitalisation of child. The parents admitted the child. Now the condition is better and weight is improving.

