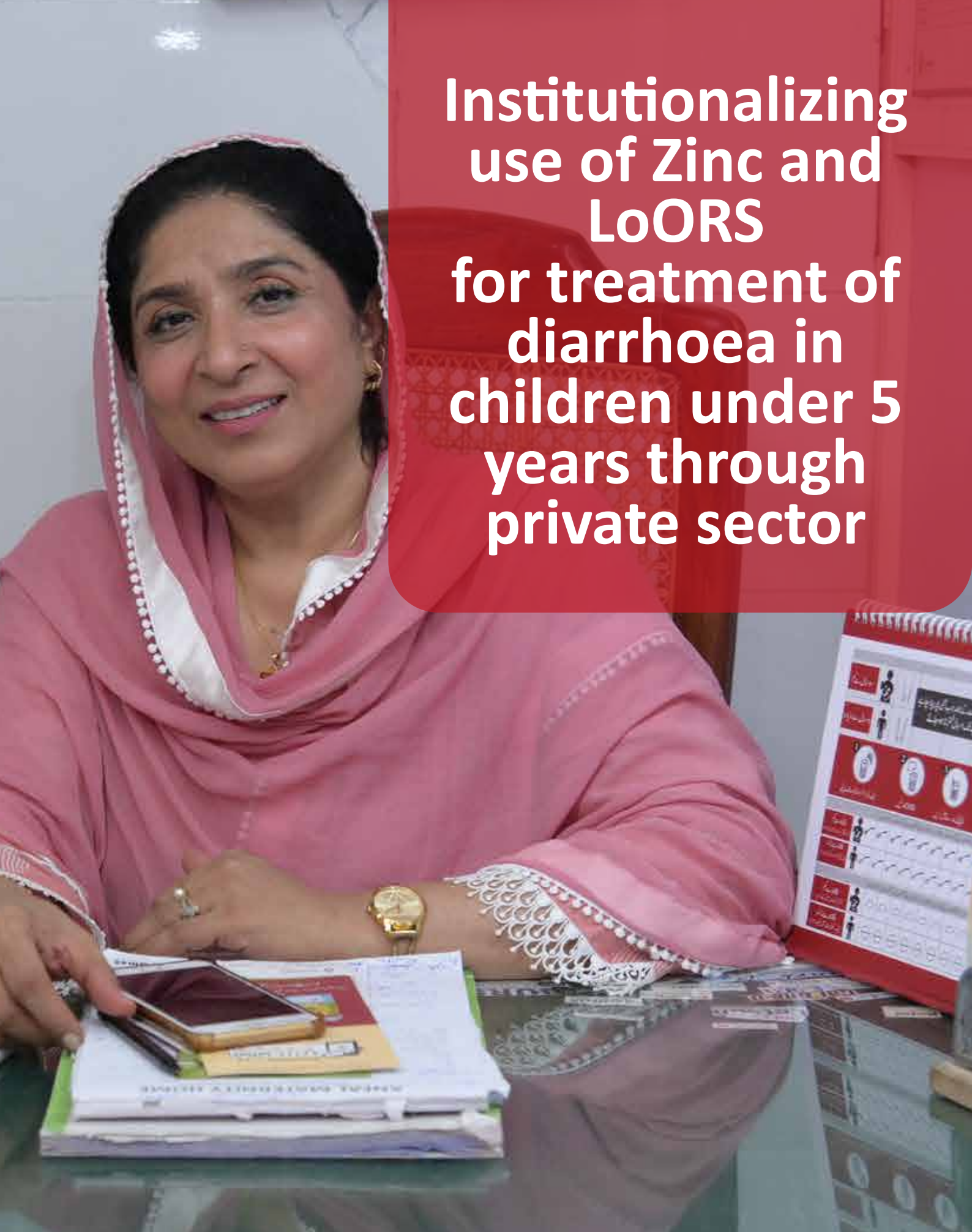


# Institutionalizing use of Zinc and LoORS for treatment of diarrhoea in children under 5 years through private sector



# NUTRITION INTERNATIONAL

Nutrition International has been working in Pakistan since 2001 to improve the health of people in need, especially women and children, through better nutrition. Working in partnership with national and provincial government, Nutrition International focuses on improving access to much needed micronutrients for the most disadvantaged.

# GREENSTAR SOCIAL MARKETING

Greenstar Social Marketing Pakistan is a not-for-profit organization established in 1991 to contribute towards the development of Pakistan through Family Planning and Family Health Solutions. Greenstar Social Marketing (GSM) has the largest network of private sector healthcare providers in Pakistan. Around 7,000 Sabz Sitara Franchised clinics, 3,000 General Practitioners, 40,000 chemists, 3,000 female and male community mobilizers are serving the communities across Pakistan to provide family health solutions.



# Sabz Sitara Clinics Facility based Intervention



# Problem statement

Diarrhoea remains one of the leading public health issues globally. Diarrhoeal diseases alone account for 1 in 9 child deaths worldwide, making it the second leading cause of death among children under the age of 5 years.<sup>1</sup> Almost 60% of these deaths occur in only 10 countries of Asia and Africa region including Pakistan. It is one of the major contributors to morbidity and mortality in the country among children under five years of age with approximately 53,000 deaths every year<sup>2</sup>. These deaths can be prevented by simple, cost-effective intervention at the household level, if all children suffering from diarrhoea receive timely treatment of Zinc and LoORS combination.



Inadequate availability of the Zinc and LoORS at the primary healthcare level in both public & private sectors and caregiver recognition of the need for help or their ability to seek care resulted in poor control of the disease in Pakistan. According to the National Nutrition Survey, onset of diarrhoea in under-five children is around 22%<sup>3</sup>.

PDHS (2017-2018) revealed that 19% of the mothers reported that their children suffered from Diarrhoea in the past two weeks; out of these, 41% received LoORS, and only 8.0% of children received the recommended treatment with Zinc and LoORS in combination.

The main causes of diarrhoea are unimproved sanitation and poor practices like failure to breastfeeding, using contaminated water, using infant feeding bottles, poor domestic hygiene, improper disposal of children's feces, and no handwashing after defecation.

The health care delivery system in Pakistan consists of public and private sector, but despite an elaborated and extensive public health infrastructure, the health care delivery suffers from some key issues like high population growth, long distances, and un-trained health professionals. Inappropriate diarrhoea case management at primary care level, increases burden and severity of disease that ultimately add pressure on tertiary care and eventually results in increased child mortality.



# Solution

Major proportion of population in Pakistan seek healthcare from private health sector including private clinics, hospitals, and chemists or medical stores, but the availability of Zinc and LoORS in combination is hardly accessible at these service delivery channels. Therefore, there is a huge potential to enable and engage the private health sector to bridge the gap between service need and service provision. By focusing on the capacity of existing health service providers from private sector for diarrhoea-appropriate treatment and by ensuring availability of Zinc and Low Osmolarity ORS in combination, 53,000 deaths of children under 5 years can be prevented.

# 84%

of children under age 5 with diarrhea receive advice or treatment from a private facility (5).



# Greenstar initiative



Greenstar Social Marketing (GSM) has the largest network of private sector healthcare providers (social franchised clinics) in Pakistan. Around 7,000 Sabz Sitara franchise clinics are serving the communities across Pakistan. Greenstar Social Marketing (GSM) initiated a diarrhoea management project in collaboration with Nutrition International (NI) to contribute in reducing child mortality in Pakistan. The objective of project was to promote the use of Zinc and LoORS as the first-line of treatment for Diarrhoea through its franchised network of private healthcare providers (Sabz Sitara Clinics) and community-based health workers (Sitara Baji). Project was implemented from December 2020 to August 2022 in 3 provinces (Khyber Pakhtunkhwa, Punjab, and Sindh) of Pakistan

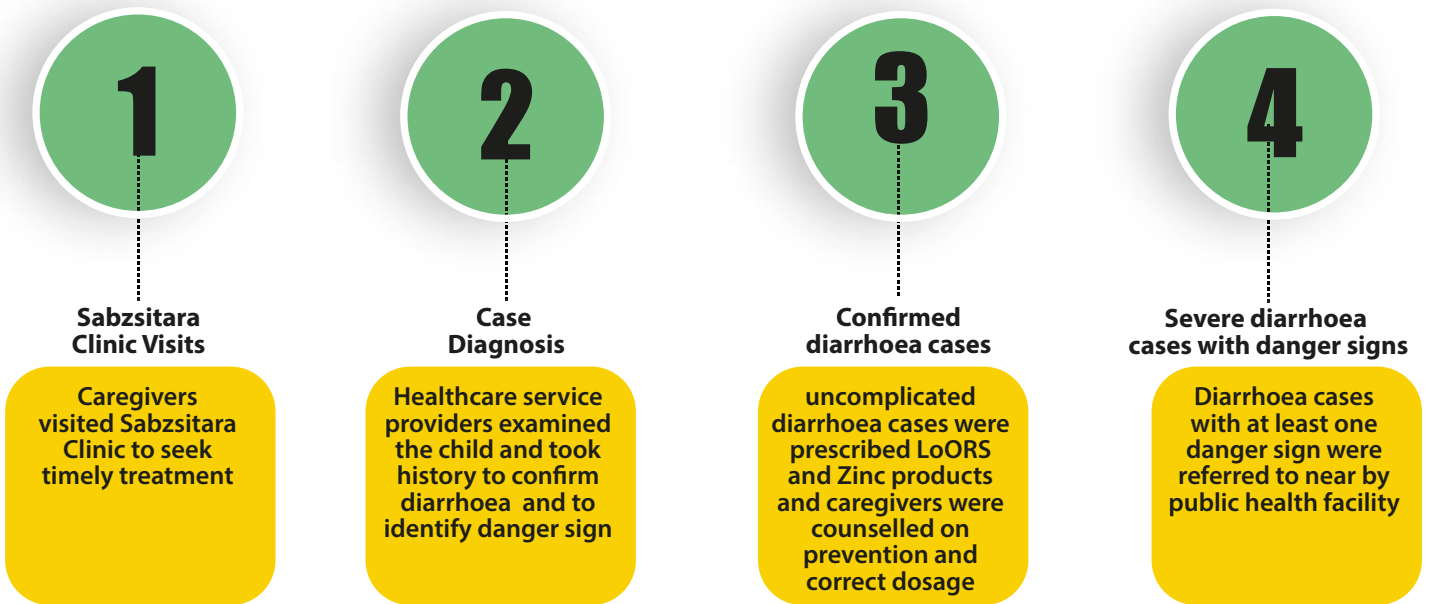
# Sabzitara healthcare providers - facility based model

Sabz Sitara is flagship social franchise brand of Greenstar, through which mid-cadre women healthcare providers in underprivileged areas are supported to build and run a high quality maternal and child health clinic. They are supported through capacity building, subsidized commodity, and Sabz Sitara branding. Greenstar currently has a network of 7,000 Sabzsitara healthcare providers. Under this project, 3,085 Sabz Sitara providers were provided with technical training for case management of diarrhoea through Zinc and LoORS combination use. They are being supported with IEC material and social mobilization activities surrounding their clinics to improve footfall of diarrhoea cases. These clinics have a significant caseload of childhood diarrhoea, but due to limited capacity and access to Zinc and LoORS at the clinic, most of the children are not able to get proper WHO/UNICEF recommended treatment for diarrhoea.

Each health care provider receive the supply of Zinc and LoORS with a profit margin per pack, which helped them to receive regular monthly earnings and ensure the sustainability of the program beyond any donor support. GSM, through its network of Community Health Officers (CHOs), and Quality Assurance Mangers provided supportive supervision and supply of product (zinc and LoORS) to these service providers on regular basis.



## Diarrhoea Case Management in Sabzsitara Clinic

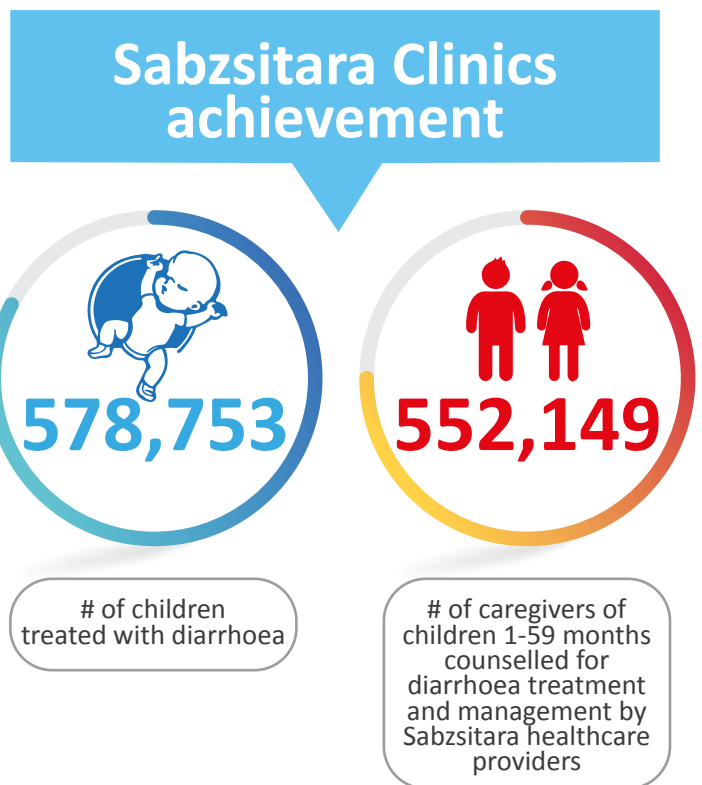


## Key Results

Overall, the training intervention to the Sabzsitara health care providers had been very effective in changing their behavior towards Zinc and LoORS use in combination for treatment of diarrhoea.

Through this training, healthcare providers were able to provide treatment to most diarrhoea cases at the primary care level. If scaled-up, this intervention can contribute to reduce childhood diarrhoea mortality and morbidity. The results of this facility-based intervention were evaluated based on data from June 2021 to August 2022.

Total 578,753 children under 5 were treated with Zinc and LoORS at the Sabzsitara clinic.



# Success Factors

## Adaptability

This facility based model successfully addressed the critical bottlenecks of affordability, accessibility, adaptability and availability

## Accessibility

Sabzsitara clinics are located in the heart of the communities across the three provinces. These clinics are easily accessible and serve as a primary contact for mother and child health.

## Affordability

Trained service provider and product availability at Sabzsitara clinic has improved access to timely, low cost and appropriate treatment at primary care level.

## Availability

Availability of the Zinc and LoORS supplies at Sabzsitara clinic was effectively managed through social marketing channel of GSM to ensure the delivery of these products throughout the country. Community Health Officers (CHOs) and Sitara Bajis were responsible for timely coordination with health care providers and stock monitoring to ensure uninterrupted supply chain.

Training of Health care providers helped in changing their behaviour to manage diarrhoea cases as per the WHO guidelines.

**Ms. Nazira Bibi (Age: 26 years)**, is associated with Greenstar for the last 1.5 years as a "Sabzsitara Healthcare Provider" in the district of Pakpattan in Punjab.



"There are no nearby clinics for the community, and most of the mothers consults me for their children's health-related problems. Diarrhoea is one of the main problem in the community and low maternal knowledge makes the situation worse, as most of the mothers seek diarrhea treatment in only severe conditions or after visible danger signs. I was not trained and was just referring them to the district headquarters hospital, which is far away from the community and takes more than 1 hour one side travel.

Training on WHO guidelines for diarrhoea case management helped me to understand the importance of Zinc and LoORS, and it provided me with skills to manage diarrhoea cases with confidence. Now I am managing average 20 cases in a month. I hope if it continues there will be some decrease in hospitalization due to diarrhoea in our catchment area. When I started the diarrhoea treatment, convincing the mothers for Zinc and LoORS treatment was not an easy step, however, behavioral change and communication materials in the local languages played an important role to tackle this issue effectively.



**Ms. Shabana (Age: 32 years)** has two daughters aged 17 and 38 months respectively, both had complain of diarrhoea from time to time. When she heard from a woman in her village about effective diarrhoea treatment, she decided to visit Sabzsitara clinic for counselling.

*"My younger daughter was suffering from diarrhoea for 2 days, but we did not seek treatment and tried to manage it through home remedies. But nothing was working for her. I heard from a mother that the Sabzsitara clinic in our area is now also treating diarrhoea. I discussed this with my husband and mother-in-law and visited the clinic immediately. After a complete check-up of my daughter, she gave me Zinc and LoORS package and guide us on the correct dosage.*

*Initially, I was not sure that my daughter will recover, but after a day, condition of my daughter improved, and we completed the full dosage of Zinc for 10 days as suggested by the service provider. It has been 2 months, my daughter is healthy.*



## Lesson Learned

This pilot project vastly contributed to strengthening private sector capacity to manage childhood diarrhoea using zinc and LoORS. Project results demonstrated that combination of Zinc and LoORS can be successfully adopted by caregivers as the first line of treatment for uncomplicated diarrhoea if they have access to care at the household or primary care level.

Another key learning from the pilot project was that the availability of Zinc and LoORS in Combi packaging/Diarrhoea treatment kit could have been easier to get the quick buy-in from the providers and ensure usage compliance by the end users.

## Conclusion

Approximately 70% of caregivers seek treatment for childhood diarrhea either from public sector or private sector and of these more than 84% seek care from the private sector. Considering intensity of problem, there is a growing need to scale-up community-based intervention by capitalizing on the potential of private health sector to prevent and control diarrhoea or other preventable diseases at the primary care or household level. This may lead to the reduction of hospitalization costs incurred for the treatment of a severe cases of diarrhoea and can contribute to reducing the mortality rate of children under 5 in the country.

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