



# Assessment of GNFC's Neem Project: Empowering Rural Poor Women through Neem Seed Collection in Gujarat


 36.8%

 INCREASE IN AVERAGE INCOMES  
OF RURAL WOMEN


 18%

 INCREASE IN NUMBER OF  
WOMEN WHO OWN LIVESTOCK

 DAILY WAGE EARNERS TRANSFORMED  
INTO RURAL ENTREPRENEURS

 ENHANCED ROLE OF WOMEN  
IN DECISION-MAKING

 GUJARAT HAS  
**45 MILLION**  
NEEM TREES

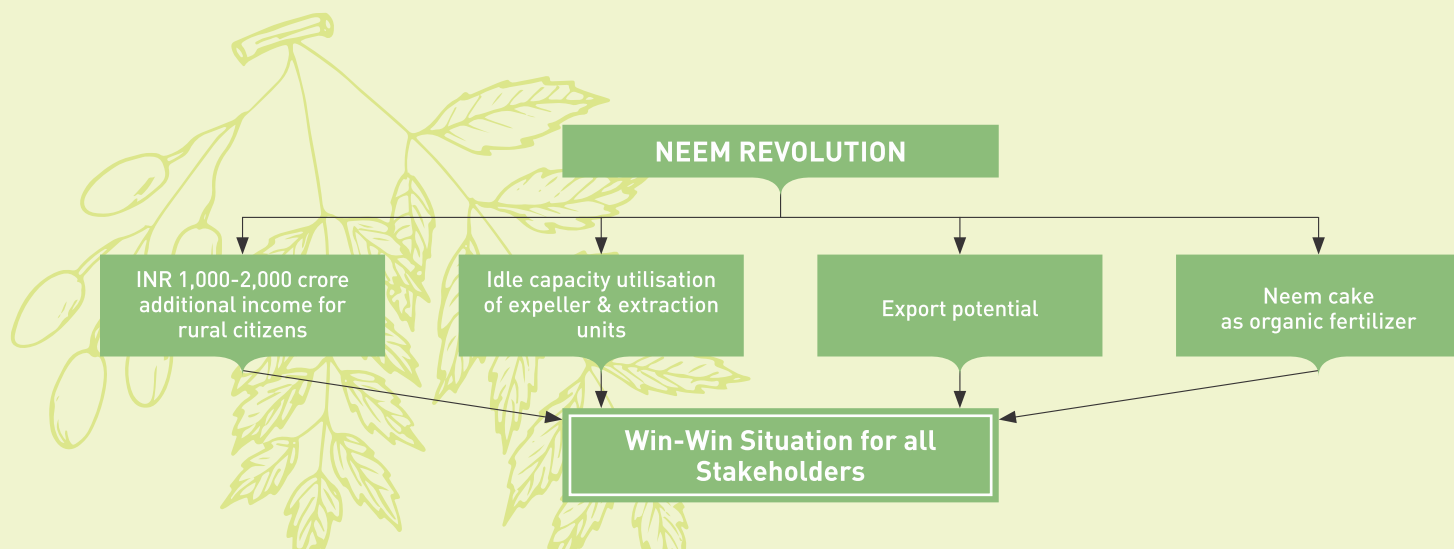
 EACH  
NEEM TREE  
YIELDS UPTO  
**25 KG**  
NEEM SEEDS

The Government of India mandated 100 percent Neem coating of Urea from May 2015 as it reduces the application of urea by 10 percent, protects crops from several diseases and is instrumental in controlling the deterioration of soil fertility in the longer term. It also helps reduce pilferage to non-farm segments and is expected to have a profound impact on the demand-supply balance, self-sufficiency in fertilizers, dependence on imports, subsidy payouts, demand for hydrocarbons, especially gas, and the environment.

Gujarat has approximately 45 million Neem trees as per the Tree Census of 2013 of the State Forest Department. The majority are in the districts of Mehsana,

Kheda, Banaskantha, Bhavnagar and Gandhinagar. Each Neem tree yields between 10 to 25 kg of Neem seeds in a season.

Gujarat Narmada Valley Fertilizers and Chemicals Limited (GNFC) turned the Indian government's decision into an opportunity and embarked on the Neem project as an integration intervention to manufacture Neem oil and organic Neem cake fertilizer. The economic empowerment of women and the rural poor by generating supplementary income was another key objective. The project banks upon the economic potential, agricultural appeal and consumer appeal of Neem agricultural products like Neem oil, Neem cake, Neem pesticides and Neem-coated urea.



## Project Objectives

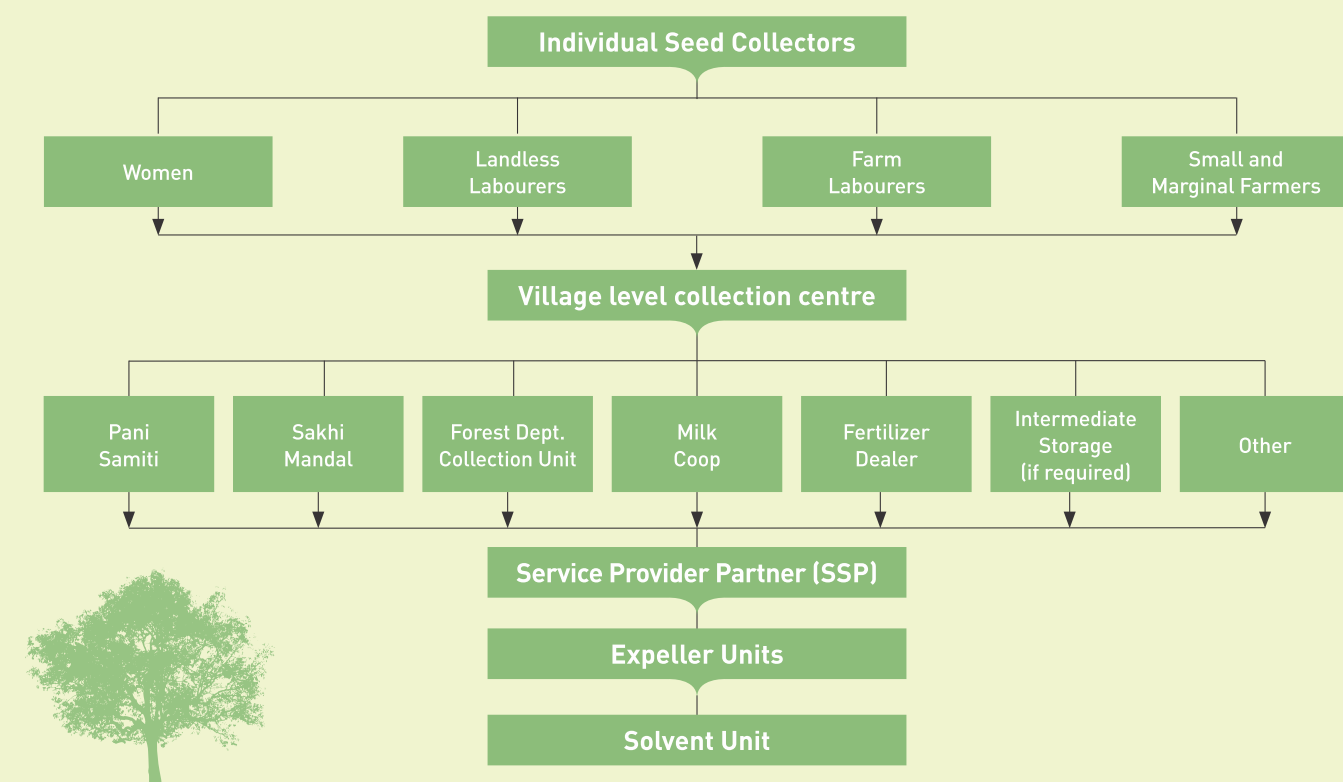
- To supplement income of rural poor, especially women, by way of Neem seed collection
- To promote the use of organic fertilizers for the larger interest of farmers and increase their availability
- To encourage people to protect and nourish Neem trees
- To strengthen village level societies, milk cooperatives, sakhi mandals, pani samitis etc. for acting as collection centres for Neem seeds and providing livelihoods to rural people
- To plant one million Neem trees over the next 4-5 years and create awareness about environmental protection
- To empower more rural poor women by involving them in various forward integration activities like Neem soap manufacturing.

## About the 'Neem Project'

Women, primarily agricultural labourers, have no source of income during post-harvest dormancy, when there is no agricultural activity. The Neem seed collection project initiated by GNFC provides a source of income for these women during this period.

GNFC is implementing this project through a network of 69 Narmada Khedut Sahay Kendra (NKSK) outlets across the state. Through this network, a supply chain for Neem seed collection has been created with a focus

on employment-generation opportunities for women. Various women's collectives like self-help groups, milk cooperatives, sakhi mandals, pani samitis, NGOS etc. have been included in the supply chain. These village level collection centres (VLCCs) serve as the primary collection centres. More than 2,200 VLCCs have been set up. After collection, the VLCC transports the Neem seeds to the authorized service provider. The seeds are then stored at designated places for drying and then processed through expellers and solvent units at GNFC.







**In its very first year, the project led to the collection of 10,000 metric tons of seeds, creating INR 10-12 crore of supplementary income for approximately one lakh rural women and landless laborers across Gujarat.**

## Impact Assessment

The United Nations Development Programme (UNDP) conducted an assessment of the socio-economic impact of the Neem Project on rural poor women since its inception. The key objective was to understand the changes brought about by interventions in the livelihood situation and decision-making roles of rural women, and better understand the factors driving those changes, as well as the level of participation of the community and of other stakeholders.

Conducted in rural areas of four districts with different agro-climatic zones— Gandhinagar, Bharuch, Patan and Banaskantha, the study adopted

a mixed method approach, using both quantitative and qualitative methods. The study included 2,000 in-depth interviews of women involved in Neem seed collection, 200 interviews with women not involved in the project (to understand the extent of intervention impact), and focus group discussions with 74 stakeholders. Eight semi-structured interview schedules were used to evaluate the impact at the individual, community, control as well as household levels. Efforts were made to interact with key officials from GNFC, different government departments, NGOs and other related institutions.



### Areas of improvement

- Neem seed collectors should be made aware of and trained in sustainable harvesting practices, cleaning, grading and value addition to the seeds to promote diversified use and to increase shelf-life



### Conclusion

Neem Project has huge potential to provide a substantial supplementary income to poor and vulnerable households. Despite the trend of increasing collection in 2015-16, GNFC demand is still higher for Neem seeds and Neem oil. Therefore, there is scope for this activity to be scaled up and for more women to get involved. The project can also be adopted by other states where Neem trees are in abundance and in which urea-based fertilizer companies operate.

## Summary of Key Findings and Recommendations

### The study indicates:

- **Increased Income:** The women engaged in Neem seed collection are mostly from socio-economically backward groups that traditionally depend on agricultural labour as the primary source of income. During the lean season, when there are fewer livelihood opportunities, the income from Neem seed collection is an important lifeline. The monthly average income is around INR 7,000 per month, making Neem seed collection a viable rural income generating activity. The average income of women before Neem seed collection was INR 12,000 per year, which means collecting Neem seeds has increased their average annual income by 36.8 percent.

- **Reduction in Migration:** As most of the family members are engaged in labour, they migrate to other places in search of work during the lean period. Because the family members engaged in Neem seed collection have supplementary incomes, migration has reportedly declined. Cases of mortgaging land to money lenders has also reduced.

- **Enhanced Decision-making Role:** Many women, especially those in tribal areas, reported that the income

they earned by collecting Neem seeds makes them feel more respected within their families and society. They felt empowered to take control and manage their income and expenditure. There is also an increasing and encouraging trend of women investing in assets.

- **Asset Creation:** Most women report investing in assets such as livestock and stoves. Eighteen percent women reported owning assets because of the project and 30 percent said they now have savings they control. Income is generally spent on food, health, children's education, asset ownership and personal luxuries, including accessories. The pattern of expenses reveals that most of the total earnings from Neem seed collection – as much as 71 percent – is used on food, 7 percent on clothes, 10 percent on education, and around 6 percent on health.

- **Reduction in Domestic Violence:** Almost 13 percent of women respondents shared that there had been a reduction in domestic violence after they joined the project. Women also reported greater aspirations to improve their social and economic conditions and voiced their interest in enhancing their skills.



## BUSINESS MODELS FOR SCALABILITY

### Women entrepreneurs

In many villages, women work as service providers, purchasing Neem seeds from the collectors and selling it to the GNFC centre at a profit. These women entrepreneurs act as links between the collectors and the collection centre, thus facilitating the collection process. The revenue generated through this business model contributes substantially to their livelihood. This model is viable and can be replicated in areas with no VLCC.

### Sakhi mandal – the SHG

Most villages have self-help groups with many of members engaged in Neem seed collection. These groups can work as service providers at the village level and facilitate the collection and purchase of Neem seeds, with the revenue distributed among members.

### NGO model

In some villages, NGOs are facilitating livelihood-related support by providing training to rural women for better collection of Neem seeds. These NGOs also arrange for the logistics for the transfer of collected seeds from the women's homes to the collection centre. After service charges are deducted, the revenue can be distributed among women collectors.

### Going beyond collection

SHGs involved in collections of Neem seeds can ally at a higher level – such as at the block or district levels – and can bring in value addition and diversify product range with technical support from GNFC or other NGOs, and supply the finished product to the market.



## TESTIMONIALS



Amishaben Patel, a women entrepreneur of Gajera village in Bharuch district, supplied 80 tons of Neem seeds to GNFC last year.

Jamnaben, a native of Vedaj village in Bharuch district, facilitated Neem seed collection by purchasing all of the village's collected seeds and supplied 20 tons of Neem seeds to GNFC in a season.



Janakben B. Rathod of Umedpur village in Gandhinagar district earned INR 18,000 from Neem seed collection. She bought a buffalo with her additional income.

Parvatiben S. Rathod of Dehgam taluka in Gandhinagar district earned INR 20,000 and also invested the extra income in a buffalo.

