

RESILIENT BUILDING in Flood-Prone Region of Assam

Stories of Resilience from Ordinary Communities



Case Stories documented by Guwahati Gana Seva Society (GGSS) under Global Program India

Guwahati Gana Seva Society

Table of Content

Weaving Flood Resilient Alternative Livelihood: Journey Of Mrs. Bina Bordoloi

A transformative journey of Mrs. Bina Bordoloi, weaving flood resilient alternative livelihood in the face of challenges—a beacon of inspiration for women seeking economic empowerment.

From Desperation to Innovation: Mrs. Mousimi Das's Flood Resilient Journey

Here's Assam's flood challenges and Bhalukmari's transformation post-GGSS intervention. Trained in Flood Resilient Raised-Vermicomposting, Mrs. Mousimi Das turns adversity into innovation. Beyond composting, she strategically enhances crop productivity with mustard seeds and thriving pumpkin saplings, becoming a beacon of resilience.

Raised Toilet Model: Ensuring Privacy & Dignity in Flood-Prone Morigaon District of Assam

Here's a transformative impact of the 'Raised Toilet Model' in flood-prone Assam. Guwahati Gana Seva Society's (GGSS) innovative solution ensures privacy, dignity, and resilience, addressing sanitation challenges for both genders. GGSS strong collaborations with control bodies expedite the development of the model. This replicable model sets a precedent for sustainable development, offering a blueprint for communities facing similar issues.

About GGSS

The Guwahati Gana Seva Society is the social work wing of the Archdiocese of Guwahati having its principal office at Peace Centre, G.N.B. Road, Ambari, Guwahati. It is the social development and charitable organ of Archdiocese of Guwahati. GGSS has pledge to lead the philanthropic interventions in the State of Assam by playing vital role in planning, implementing and facilitating the development focused interventions enshrined with values of Peace and Justice. As a registered society under the Society Registration Act 1860, with registration number 2163/1992-93, GGSS works for the integral development of all people especially poor and less privilege sections of the society without distinction of race, creed and religious affiliations. Since, its inception in 1992, GGSS stands for empowering the human potential through process of animation and resource mobilization. The values set out in the social teachings of the Catholic Church are the guiding principles for the organization and its members. We therefore not only value them but also manifest them in all our endeavours to make this world a better place for all especially the poor and the marginalized for which we have a preferential option. We believe in the dignity of the human persons, their right to rule and manage their own lives by developing their inherent potentials and making the optimum use of the opportunities before them.

Vision

A Self-Reliant Society based on Love, Justice, Unity and Peace

Mission

To empower the poor and marginalized ethnic groups by promoting self-reliance among them through awareness creation and people's Organization



About Global Program India

The Global Program India supported by (DCV) the German Caritas Association coordinating with Caritas India (CI) with the implementing partner has been initiated in the month of January 2021. The Global program India is supported 75% by BMZ, 15% by Caritas Germany and with 10% local contribution with the technical guidance supported by Caritas India. The program has 4 overall development objectives envisioned to reduce poverty and provide Food security, promoting social inclusion to particularly Marginalized section of groups, Increasing Resilience to Disasters in High-Risk Areas which will make a sustainable contribution to SDG 2 (Ending Hunger, Achieving Food Security and Better Nutrition and Promoting Sustainable Agriculture), SDG 10 (Reducing Inequality within and Between States) and SDG 13 (Sustainable Measures to Combat Climate Change and Its Impacts) and SDG 13 (Sustainable Measures to Combat Climate Change and Its Impacts). Hence, the program intends to achieve goals by the end of April 2024 of Macro, Meso and Micro level impacts. The Program has been initiated with a general survey conducted by Ms. Martina and Caritas India members in the month of January to have a glimpse of outlook for the program. A general survey was conducted in the month of April 23 rd and 24 th 2021 for the selection of villages with the help of Zonal officer Caritas India, the director of partner organization GGSS Fr. M. Martin and other 13 volunteers. The actual field activities have been started from the month of June due to lockdown imposed by government of India for Covid-19 pandemic. The activities therefore, have made a completion withing 7 months of hectic work.



Weaving Flood Resilient Alternative Livelihood: Journey of Mrs. Bina Bordoloi

A transformative journey of Mrs. Bina Bordoloi, weaving flood resilient alternative livelihood in the face of challenges—a beacon of inspiration for women seeking economic empowerment.

Assam's Flood Impact on Agri-dependent Communities

In the northeastern region of India, Assam grapples annually with the devastating impacts of floods, a natural phenomenon exacerbated by climate change. The Brahmaputra River, a lifeline for the state's agriculture, swells during the monsoon season, inundating vast areas and displacing communities. The socio-economic repercussions of these floods are particularly pronounced among the agriculture-dependent populace.

Data from recent years illustrates the severity of the flood situation in Assam. According to the Assam State Disaster Management Authority (ASDMA), an average of 2,500 villages are affected annually, impacting over 10 lakh hectares of agricultural land. The floods not only lead to crop losses but also result in the displacement of thousands, disrupting their traditional way of life.

The primary victims of this annual catastrophe are families whose livelihoods are intricately tied to the fertile plains along the Brahmaputra. As floodwaters recede, they leave behind layers of silt, rendering the soil unsuitable for immediate cultivation. This disrupts the usual agricultural cycle, contributing to a cycle of poverty for these communities, highlighting the urgent need for flood resilient alternative livelihood solutions, that serve as a source of income during and post-flood times.



“disrupts the usual agricultural cycle, contributing to a cycle of poverty for these communities..”

Traditional Handloom as an Alternative Flood Resilient Livelihood in Assam's Flood-Affected Communities

Assam's traditional handloom industry, deeply rooted in the state's rich cultural heritage, stands out as a beacon of resilience. According to data from the Ministry of Textiles, Assam is recognized as one of the major handloom hubs in India. The intricate craftsmanship and unique designs of Assamese textiles have garnered acclaim on national and international platforms. However, the industry faces challenges, particularly in flood-prone regions, where its potential as an alternative flood resilient livelihood remains largely untapped. The weaving set-up of the weavers are mostly affixed in the low level subject to flood, forcing them to pack it until the flood season passes by.

The revival and promotion of traditional handloom emerge as a promising alternative flood resilient livelihood, contributing to economic stability, cultural preservation, and the empowerment of women in the villages. Additionally, integrating handloom practices becomes a cornerstone for resilient building, enabling communities to withstand the recurring challenges posed by floods.

The economic significance of traditional handloom in Assam is monumental. As per the Handloom Census, the state boasts over 7 lakh handlooms, providing livelihoods to a significant portion of the population. This extensive value chain involves numerous artisans, spinners, dyers, and weavers, creating a network that sustains rural economies. Moreover, handloom weaving represents a traditional skill passed down through generations, deeply ingrained in the cultural fabric of Assam. Incorporating traditional handloom practices fosters resilient building in this region.



Promoting traditional handloom as an alternative flood resilient livelihood in flood-affected villages not only holds immense economic potential but also plays a crucial role in preserving and promoting the cultural identity of the communities. Women, often the primary weavers, are key contributors to the handloom sector. Empowering women through skill development in handloom weaving enhances their economic standing and contributes significantly to gender equality.

GGSS Intervention an initiation for Alternative Flood Resilient Livelihood

Initiating a transformative intervention for alternative Flood Resilient livelihoods, Guwahati Gana Seva Society (GGSS) under 'Global Program India' has been instrumental in supporting 80 beneficiaries within this village. These beneficiaries underwent comprehensive training facilitated by GGSS, empowering them to establish and expand weaving practices within their homes. In addition to their primary responsibilities in farming and household management, these 80 women beneficiaries are actively engaged in building their alternative flood resilient livelihood. Each woman dedicates approximately 3-4 hours daily, balancing their time amidst various household commitments.

In the year 2021, Global Program India conducted intensive training sessions for the 80 beneficiaries, covering diverse aspects of weaving, product creation, design intricacies, scaling up operations, and marketing finished products. The focus of these sessions was to equip the women beneficiaries with the necessary skills to master the art of weaving and establish a resilient alternative source of livelihood.



The training also encompassed essential knowledge on procuring the right set of threads, known as "Hutta," from the market, a crucial component for weaving high-quality 'gamocha,' a traditional Assamese attire. Each traditional dress features unique designs and patterns, influencing the final product's price, which is determined by the intricacies involved in the weaving process. Typically, each finished product comprises three 'hutta,' (thread) predominantly red and white in color.

Besides, with the intervention of Global Program India, in 2022 the beneficiaries also received training from Ministry of Handloom and Textile, Govt. of Assam, while acquiring the necessary skills to commence the weaving journey.

Global Program's intervention not only imparts practical skills but also underscores the socio-economic significance of traditional handloom weaving. By enabling these women to master their craft and understand market dynamics, Global Program India catalyzes the establishment of a resilient foundation for alternative livelihoods.

Meet Mrs. Bina Bordoloi: Epitome for Weaving Flood Resilient Alternative Livelihood

Following the training provided by Guwahati Gana Seva Society (GGSS) with technical support of Krishi Vigyan Kendra (KVK), 80 women beneficiaries embarked on a weaving journey, each producing approximately 25 finished products. While these products weren't initially marketed, the beneficiaries utilized the first batch for family festivities, sold a few, and distributed others to relatives on special occasions. The ability to self-produce high-quality items and share them during celebrations marked the initial steps toward resilience and the pursuit of alternative flood resilient livelihood, as acknowledged by the beneficiaries. They applauded Global Program India for not only creating a new source of income but also opening doors for cultural preservation.

With GGSS intervention, traditional weaving accessories were set up on raised platforms, intact during the seasonal flood. The beneficiaries identified a part of the household, in which they could install the weaving set up. The model enabled the beneficiaries to continue weaving as an alternative resilient livelihood even during the seasonal floods. Additionally, the beneficiaries received training in disaster preparedness, enhancing their resilience during the annual floods and benefiting their immediate families.

Amidst the collective progress, Mrs. Bina Bordoloi emerges as an epitome of skill mastery in weaving. Despite balancing household responsibilities like her fellow beneficiaries, Mrs. Bina weaved 40 pieces of intricate traditional attire, known as "gamocha/gamusa" (*a symbol of Assamese culture which is equivalent to towel, meaning 'Ga' means 'body' and 'mosa' means 'wipe'*). Having sold approximately 30 pieces at varying prices of Rs. 200, Rs. 350, and Rs. 500, she generated a profit of Rs. 6000. Motivated by this initial success, Mrs. Bina extended her daily dedication to 5-6 hours, despite also managing cultivation and home duties.

Mrs. Bina shared insights into her weaving process, emphasizing the importance of selecting the right raw material, "hutta," from the market, as it significantly influences attire quality. The attire typically requires three qualities of thread: one for design, one for the base, and another for the pattern. The cost of 'hutta' ranges from Rs. 70 to Rs. 150 per 'mutha' (*a unit of thread measurement*). Completing a simple attire takes Mrs. Bina one day (*approximately 12 hours*), while intricate designs, incorporating japi, flowers, shapes, and symbols, could extend to 4-5 days. Larger attire with more intricate designs command higher prices, reaching up to Rs. 1500 per piece.

Demonstrating entrepreneurial acumen, Mrs. Bina strategically planned her income flow under Global Program India guidance. With an initial investment of Rs. 2000, she aimed to earn double the profit, allocating Rs. 500 to a fixed deposit, reinvesting Rs. 1500, and contributing Rs. 1000 for family needs. The flexibility in family contributions came in through Mrs. Bina's adaptability, highlighting the potential for sustainable economic growth in her newfound alternative flood resilient livelihood.



Analysis of Income Generation of Mrs. Bina Bordoloi Before and After GGSS Intervention

GGSS intervention into Mrs. Bina's weaving, changed its dynamics. From being clueless about the potential for weaving, she began to see new income generation opportunities even during flood times. Here's a breakdown of Income Generation of Mrs. Bina Bordoloi pre and post GGSS intervention:

Periods	Investment	Procurement	Output Qty.	Sales	Profit	Savings	Re-investment
Before GGSS Intervention	Unaccounted varying from Rs. 1500- Rs.3000/-	Lower Quality with Higher Prices	15 pieces (only for consumption)	5 or less	NIL	NIL	NIL
Post GGSS Intervention	Rs. 2000/-	Best quality at Moderate price	40 pieces (Prices: Rs. 200, Rs. 350, Rs. 500, and Rs. 1500)	30 pieces	Rs. 6000/-	Rs. 500 fixed deposit; Rs. 1000 for family support	Rs. 1500/-

a) Before GGSS Intervention: Prior to GGSS intervention, Mrs. Bordoloi's income situation lacked clarity. The absence of financial tracking suggested a potential lack of awareness regarding earnings and expenditure. Despite producing 15 items, the sales were minimal, likely less than 5 pieces, resulting in a negligible profit. The absence of savings and an inability to reinvest in her business indicated financial stagnation, restricting the potential for growth or improvement in the quality of her products. The overall weaving scenario consisted in where the financial aspects of Mrs. Bordoloi's business were not optimized, hindering its sustainable development.

b) After GGSS Intervention: Following the GGSS intervention, Mrs. Bordoloi experienced a transformative shift in her income dynamics. The investment of Rs. 2000 marked a pivotal moment, enabling her to access higher-quality materials for her weaving. This upgrade in resources significantly impacted on her production capabilities, leading to an impressive increase in output to 40 pieces. The introduction of fixed pricing, ranging from Rs. 200 to Rs. 1500, brought a structured approach to her sales strategy. The consequential profit of Rs. 6000 not only signified a substantial financial uplift but also highlighted the efficacy of strategic planning under GGSS guidance.

“The attire typically requires three qualities of thread: one for design, one for the base, and another for the pattern. The cost of 'hutta' ranges from Rs. 70 to Rs. 150 per 'mutha' (a unit of thread measurement).”

Empowering Women: Unveiling the Potential for Flood Resilient Alternative Livelihood

Mrs. Bina's success story has sparked inspiration among other beneficiaries, emphasizing the significance of generating income through alternative flood resilient livelihood and contributing to their families. Despite personal challenges and time constraints, each beneficiary expressed the need for continuous training to enhance their weaving skills, scale up production, and practice effective financial management. Confident in the potential of the alternative flood resilient livelihood, these women anticipate it becoming a valuable additional source of income.

Encouraged by Mrs. Bina's journey and the support from Global Program India, other women in the community are eager to join the initiative. They aspire to master the art of weaving, recognizing its potential to create flood resilient alternative livelihoods for their families. The initiative not only fosters economic independence but also kindles a sense of empowerment and curiosity within the community, promising a brighter and more flood resilient community in future for these women.

“Despite balancing household responsibilities like her fellow beneficiaries, Mrs. Bina weaved 40 pieces of intricate traditional attire, known as "gamocha/gamusa" (a symbol of Assamese culture which is equivalent to towel, meaning ‘Ga’ means ‘body’ and ‘mosa’ means ‘wipe’).”



From Desperation to Innovation: Mrs. Mousimi Das's Flood Resilient Journey

Here's Assam's flood challenges and Bhalukmari's transformation post-GGSS intervention. Trained in Flood Resilient Raised-Vermicomposting, Mrs. Mousimi Das turns adversity into innovation. Beyond composting, she strategically enhances crop productivity with mustard seeds and thriving pumpkin saplings, becoming a beacon of resilience.

Flood Situation of Assam: An Overview

The recurring flood situation in Assam stands as an annual challenge, deeply ingrained in the region's geographical and climatic characteristics. Situated in the northeastern part of India, Assam grapples with incessant rainfall during the monsoon season, causing its rivers to swell and spill over their banks. The Brahmaputra, one of the major rivers in the region, plays a pivotal role in these floods. Its tributaries, coupled with the release of water from dams and projects like the NEEPCO Project, contribute to the escalating water levels. The topography of Assam, with vast low-lying plains, becomes a vulnerable canvas for the annual inundation.

Communities residing along the riverbanks and low-lying areas bear the force of this natural phenomenon. The floods not only impact their lives but also disrupt agriculture, the backbone of the region's economy. Crops are submerged, and the fertile soil, which usually contributes to the state's agricultural prosperity, becomes a victim of erosion.

Despite being an annual occurrence, the flood situation in Assam often catches communities off guard. Inadequate infrastructure, limited resources, and the sheer magnitude of the floods make it challenging for authorities to provide timely relief and rehabilitation. The aftermath of the floods leaves families displaced, homes damaged, and livelihoods shattered.



Katahjarì Gaon's (Bhalukmari) Agrarian Society: Battling the Devastating Floods

Nestled in the heart of the Morigaon District of Assam, the village of Bhalukmari (an extended Kathjarì Gaon revenue village) bears the annual effect of the relentless flood conditions that afflict the region. As the monsoon season descends upon Assam, the families of Bhalukmari find themselves ensnared in the clutches of a recurring natural calamity, leaving a trail of devastation in its wake.

Bhalukmari, like many villages in Assam, lies in the low-lying plains along the riverbanks, particularly susceptible to the swelling waters of the Brahmaputra and its tributaries. The onset of monsoon heralds not just rain but a cascade of challenges for the residents of this quaint village. The annual deluge disrupts the normal rhythm of life, instilling fear, and uncertainty among the villagers.

The floodwaters infiltrate the village, submerging homes and fields, eroding the very foundations of the community. Bhalukmari, primarily an agrarian society, witnesses its fertile lands succumb to the inundation, leaving behind a wasteland where once lush crops stood tall. The livelihoods of the families, intricately tied to agriculture, face a severe blow as their crops are swept away by the merciless currents.

Homes, the sanctuaries that shielded generations of Bhalukmari residents, stand vulnerable in the face of the rising waters. The annual flood becomes an existential threat to the very structures that represent security and continuity. Families scramble to salvage their possessions, seeking refuge on higher ground as the flood engulfs their homes, turning them into islands in a sea of muddy waters.

The aftermath of each flood leaves an indelible mark on the psyche of Bhalukmari's inhabitants. Displacement becomes a recurrent theme as families are forced to evacuate, leaving behind the remnants of their lives. The lack of proper infrastructure exacerbates their plight, rendering the provision of timely relief and rehabilitation a daunting task.

“Bhalukmari, like many villages in Assam, lies in the low-lying plains along the riverbanks, particularly susceptible to the swelling waters of the Brahmaputra and its tributaries. The onset of monsoon heralds not just rain but a cascade of challenges for the residents of this quaint village. The annual deluge disrupts the normal rhythm of life, instilling fear, and uncertainty among the villagers.”

Global Program India (GPI) Intervention and Introduction of Resilient Model

Mrs. Mousimi Das, a resident of Bhalukmari, in Oct 2022, learnt about a Flood Resilient Raised-Vermicomposting training offered by Guwahati Gana Seva Society (GGSS) a partner organization with the technical support of KVK Morigaon, in a neighboring village. Intrigued by the resilient model, market potential, and the promise of high-quality organic produce, Mrs. Das, accompanied by Mrs. Junti Das, embarked on a journey to attend the scheduled training, and acquire expertise in this innovative technique.

Upon returning from the training, GGSS under Global Program India supported crucial assistance to Mrs. Mousimi Das and Mrs. Junti Das. They identified suitable raised platforms impervious to floods, received Vermibed support, and obtained the necessary worms, at Rs.1000/Kg, for composting. GGSS under Global Program India extended support to two groups of women, each consisting of 10 members, fully engaging them in agricultural activities to establish two composting units. Simultaneously, a third composting unit, supported by Global Program India, was managed individually by a farmer for his farming endeavors.

The two groups successfully marketed 11 quintals of ready compost at Rs. 5 per kilogram, generating a commendable initial profit of Rs. 5500. Currently, there are approximately 20 bags of ready compost, each weighing 50kg, readily available for sale or for utilization in their individual farming endeavors. Furthermore, the two compost pits managed by these groups of women are actively processing an additional 10 quintals (*equivalent to 1000kg*) of compost, showcasing a sustained commitment to the Flood Resilient Raised-Vermicomposting initiative.





Resilient Building: Raised Model Vermicomposting

Raised Model Vermicomposting and ordinary Vermicomposting differ, particularly in their suitability for flood-prone regions like Assam. In Raised Model, a structured, elevated platform is utilized to prevent contact with the ground, while the ordinary vermicompost is built typically on the ground.

This distinction becomes crucial in flood-prone areas such as Assam, where heavy rains and river overflows lead to frequent inundation. Ordinary Vermicomposting is vulnerable to submersion, causing a disruption in the composting process and potential loss of the compost. In contrast, the Raised Model Vermicomposting protects the composting setup from floodwaters, ensuring its continuity.

People in flood-prone regions of Assam prefer the Raised Model due to its resilience against inundation. This method safeguards their efforts even during the monsoon season, contributing to a more sustainable and reliable composting practice. The elevated structure shields the vermicomposting setup from floods.

Beyond the mere processing of compost, Mrs. Mousimi Das discerned the significant potential locked within the enriched soil. Faced with recurring floods that hampered traditional farming and led to losses, especially concerning the expense of purchasing seedlings from the market, Mrs. Das decided to integrate the Flood Resilient Raised-Vermicomposting into her own cultivation practices.

This strategic decision proved transformative for her agricultural endeavors, as she witnessed a notable increase in productivity across all her crops.

Undeterred by the challenges of annual flooding, Mrs. Mousimi Das, in 2023, embarked on a cultivation journey with mustard seeds and utilized the nutrient-rich compost as manure. Impressively, she nurtured over 200 pumpkin saplings, attesting to the efficacy of the Flood Resilient Raised-Vermicomposting model. The pumpkin saplings thrived under her care, presenting a vibrant and promising yield.

Confidence in the resilience of the model propelled Mrs. Das to envision a future where she invests more in high-yielding crops, ensuring a sustainable income for her family despite the looming threat of floods. Her proactive approach reflects a strategic mindset, adapting to the unpredictable environment while seeking financial stability through innovative agricultural practices.

Moreover, Mrs. Mousimi Das expressed her intention to initiate her own funded compost pit, notwithstanding her continued participation in the women's group. Motivated by the tangible benefits observed in her own crop yields, she aims to incentivize her produce by independently managing a compost pit. As a family deeply committed to agriculture, she sees the Flood Resilient Vermicomposting model as an asset to be capitalized upon.

“Undeterred by the challenges of annual flooding, Mrs. Mousimi Das, in 2023, embarked on a cultivation journey with mustard seeds and utilized the nutrient-rich compost as manure. Impressively, she nurtured over 200 pumpkin saplings, attesting to the efficacy of the Flood Resilient Raised-Vermicomposting model. The pumpkin saplings thrived under her care, presenting a vibrant and promising yield.”



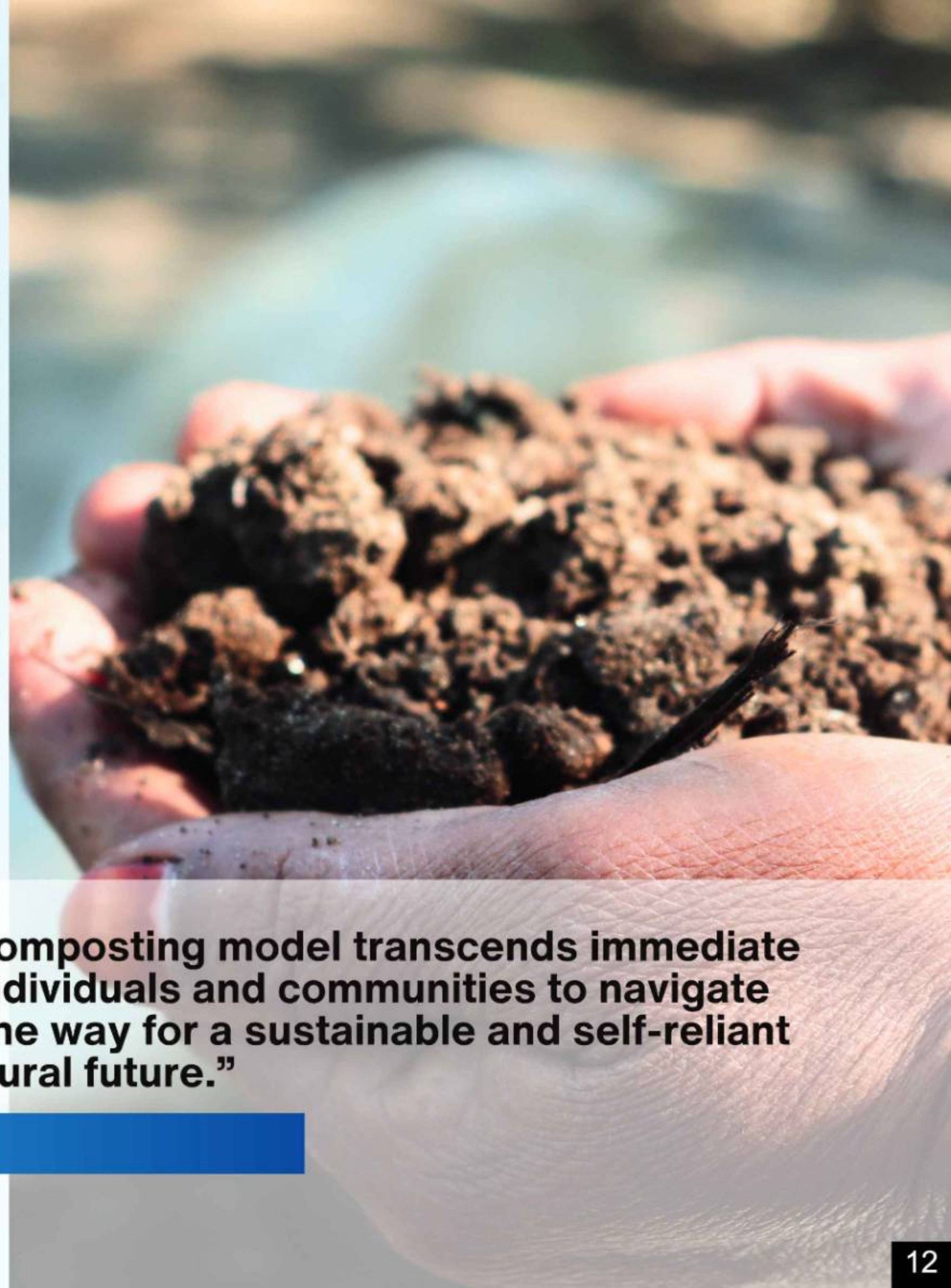
Fostering Resilient Agricultural Approach

The Flood Resilient Raised-Vermicomposting initiative emerged as a game-changer for Assam's flood-prone communities, offering tangible solutions to long-standing challenges. Mrs. Mousimi Das, embodying the community's transformation, not only reaped economic gains but strategically applied the model to bolster crop productivity, showcasing its versatility.

For the community, the model brought economic relief, evident in successful compost marketing and sustainable practices. Mrs. Mousimi Das, inspired by resilience, not only embraced the initiative but integrated it into her agricultural pursuits, signaling a shift from despair to innovation.

The model's replicability is underscored by the establishment of composting units and Mrs. Das's intent to manage an independent pit. This adaptability demonstrates the potential for widespread adoption, offering communities a resilient agricultural approach. The Flood Resilient Raised-Vermicomposting model transcends immediate economic benefits, empowering individuals and communities to navigate environmental challenges, paving the way for a sustainable and self-reliant agricultural future.

“The Flood Resilient Raised-Vermicomposting model transcends immediate economic benefits, empowering individuals and communities to navigate environmental challenges, paving the way for a sustainable and self-reliant agricultural future.”



Analysis of Income before and after GGSS Intervention

Income before GGSS Intervention:

Before the intervention by Guwahati Gana Seva Society (GGSS) under the Global Program India (GPI), Mrs. Mousimi Das and the community of Bhalukmari faced significant economic challenges due to the recurrent floods in Assam. As an agrarian society, their livelihoods depended heavily on agriculture, the fertile soil was severely affected by the annual inundation. The floods submerged homes and fields, leading to crop loss, displacement of families and living behind piles of unfertile soil unfit of cultivation. This resulted in a loss of income as crops were destroyed, and the lack of proper infrastructure hindered their ability to recover and generate income. Mrs. Das, like others in her community, faced economic instability and uncertainty due to the cyclical nature of the floods and the challenges they posed to traditional farming practices.

Income after GGSS Intervention:

Following the intervention by GGSS under GPI, Mrs. Mousimi Das experienced a notable improvement in her income and economic stability. The Flood Resilient Raised-Vermicomposting training provided her with new skills and techniques to adapt to the challenges posed by the floods. With the support received from GGSS, Mrs. Das was able to establish composting units and successfully market the compost, generating an initial profit. This initiative not only provided immediate economic relief but also empowered Mrs. Das and her community to actively participate in agricultural activities despite the recurring floods. By integrating the Flood Resilient Raised-Vermicomposting model into her cultivation practices, Mrs. Das significantly increased her crop productivity, leading to a more sustainable income. Her proactive approach and vision for the future, including the intention to initiate her own funded compost pit, demonstrate her commitment to capitalizing on the benefits of the intervention and securing a resilient source of income for herself and her family.



‘Raised Toilet Model’: Ensuring Privacy & Dignity in Flood-Prone Morigaon District of Assam

Here's a transformative impact of the 'Raised Toilet Model' in flood-prone Assam. Guwahati Gana Seva Society's (GGSS) innovative solution ensures privacy, dignity, and resilience, addressing sanitation challenges for both genders. GGSS strong collaborations with control bodies expedite the development of the model. This replicable model sets a precedent for sustainable development, offering a blueprint for communities facing similar issues.

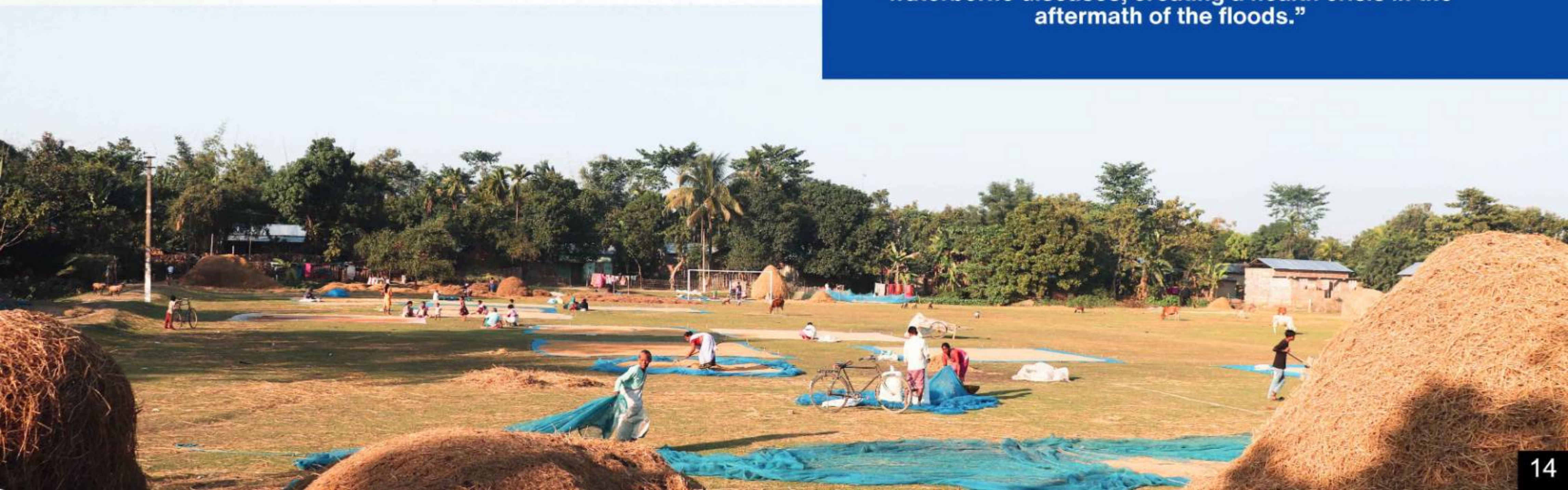
Assam's Flood and Impact on Sanitation Infrastructure: Overview

Assam annually faces the destructive impact of floods during the monsoon season, posing severe challenges to the region's sanitation infrastructure. The recurrent inundation disrupts normal life, causing extensive damage to various aspects of community living, with sanitation facilities, particularly toilets, bearing a significant brunt.

In the wake of the floods, traditional toilet structures face substantial threats. Pit latrines and septic tanks, commonly used in rural areas, become vulnerable to contamination as floodwaters breach their confines. This not only renders these facilities unusable but also increases the risk of waterborne diseases, creating a health crisis in the aftermath of the floods. Communities are left with little choice but to resort to open defecation, exacerbating sanitation challenges and compounding the overall impact on public health.

The pressing need for innovative and resilient sanitation solutions becomes apparent, emphasizing the necessity of raised toilet models.

“traditional toilet structures face substantial threats. Pit latrines and septic tanks, commonly used in rural areas, become vulnerable to contamination as floodwaters breach their confines. This not only renders these facilities unusable but also increases the risk of waterborne diseases, creating a health crisis in the aftermath of the floods.”



Glance into Sanitation Challenges in the Flood-Prone Region

Communities, particularly in flood-prone regions like Morigaon District in Assam, face significant sanitation challenges, particularly in the realm of toilets, due to a combination of environmental, infrastructural, and socio-economic factors.

The geographical vulnerability of certain areas makes them prone to annual flooding, disrupting the normal functioning of sanitation infrastructure. Traditional toilet structures, such as pit latrines and septic tanks, are often located at ground level, rendering them susceptible to damage and contamination during floods. The inundation of water not only compromises the structural integrity of these facilities but also leads to the spread of waterborne diseases, creating a public health crisis.

The lack of resilient infrastructure exacerbates the sanitation problems faced by these communities in Morigaon District. In many cases, the existing toilet structures are not designed to withstand the impact of natural disasters like floods. The absence of elevated or flood-resistant toilet models means that communities are left without functional sanitation facilities during and after flooding, compelling them to resort to unsanitary alternatives, such as open defecation.

Moreover, socio-economic factors play a crucial role in compounding sanitation challenges. In economically disadvantaged areas of Morigaon district, communities lack the resources to invest in resilient toilet infrastructure or repair and maintain existing facilities. The financial constraints further hinder their ability to adopt modern, flood-resistant toilet models, perpetuating the cycle of vulnerability.

The convergence of environmental susceptibility, inadequate infrastructure, and socio-economic constraints contributes to the sanitation problems faced by communities, particularly in flood-prone regions.



“The lack of resilient infrastructure exacerbates the sanitation problems faced by these communities in Morigaon District. In many cases, the existing toilet structures are not designed to withstand the impact of natural disasters like floods”

Global Program India's Strong Collaboration with Control Bodies in Combating Sanitation Challenges

Under the Global Program India intervention, Guwahati Gana Seva Society (GGSS) built a strong collaboration with various control bodies, namely the Panchayat, Block Development Officer (BDO), and the Public Health Engineering Department (PHED) of Morigaon district, Assam. This strong collaboration resulted in addressing the critical issue of sanitation challenges exacerbated by floods in the region.

Recognizing the urgency of the sanitation problem in flood-prone areas like Morigaon district, GGSS in collaboration with Global Program India, developed a raised model toilet, and proactively engaged with the Block Development Officer by submitting a comprehensive proposal for the creation of a Raised Toilet Model. This proposal, aimed at mitigating the adverse effects of annual floods, emphasized the need for collaboration with relevant authorities. Through persistent efforts and dialogue, GGSS, along with GPI successfully gained approval from the Block Development Officer, laying the groundwork for a collaborative approach to tackling sanitation challenges.

Furthermore, GGSS worked closely with the Panchayat, understanding the importance of local governance and community involvement in finding sustainable solutions. This partnership extended beyond mere conceptualization, as GGSS actively involved the Panchayat in the practical aspects of developing the Raised Toilet model. The shared commitment to addressing the sanitation crisis was evident in the financial contributions, with both the Global Program India and the Panchayat equally investing Rs. 10,000/- in the development of the model. What sets it apart is its elevated nature, strategically positioned 11 feet above the flood landscape on a raised platform. This elevation ensures that the toilet remains intact during flood, providing a reliable and resilient sanitation solution for the community even in the face of annual natural disasters.

The collaboration of GPI with the Public Health Engineering Department (PHED) of Morigaon district further strengthened the initiative's impact and reach. GGSS leveraged the expertise and resources of PHED in ensuring the feasibility and effectiveness of the Raised Toilet model. Through consultations and joint planning sessions, GGSS and PHED worked hand in hand to address technical challenges and optimize the design for maximum resilience in flood-prone areas.

The Raised Toilet model promoted by GGSS, in collaboration with Global Program India and through building strong collaboration with control bodies like the Panchayat and PHED, represents a paradigm shift in community-led sanitation initiatives. Unlike traditional approaches, this innovative model prioritizes strong collaboration and local engagement, recognizing the importance of leveraging resources and expertise from various stakeholders.



Raised Toilet Ensuring Privacy & Dignity for Male & Female Users

The raised toilet model developed by GGSS with strong collaboration with control bodies, has emerged as a transformative solution, effectively addressing the distinct sanitation challenges faced by both male and female members of flood-prone communities. Elevated 11 feet above the flood landscape, this innovative approach has provided immediate relief and established a foundation for a sustainable and replicable solution.

For male community members, the raised toilet model ensures enhanced hygiene and dignity during times of flooding. The elevated structure protects the facility from contamination, preventing waterborne diseases that often arise from inundated traditional toilets. The increased privacy and security provided by the raised design contribute to a healthier environment, safeguarding the well-being of male users. Furthermore, the community's reliance on open defecation during floods is significantly reduced, mitigating the risk of diseases, and fostering a safer living environment.

Similarly, the benefits extend to female members of the community. The raised toilet model addresses the specific sanitation needs of women, offering a secure and hygienic space that remains unaffected by floodwaters. The toilet is designed to suit the needs for women regardless of age. This not only preserves the dignity of female users but also minimizes health risks associated with waterborne diseases. The privacy and safety considerations embedded in the raised toilet design empower women during vulnerable times, contributing to their overall well-being and emphasizing the importance of gender-sensitive sanitation solutions.



An Effective Model for Replicability: 'Raised Toilet'

Looking towards the future, the success of the raised toilet model serves as a blueprint for replicating similar solutions in other flood-prone regions. The community's active involvement, coupled with strong collaboration with local authorities establishes a model for sustainable development. The financial contribution from both the Global Program India and the Panchayat showcases a shared commitment to addressing communal challenges, setting a precedent for replicability in other regions with similar needs.

The raised toilet model's replicability is underscored by its adaptability to diverse geographical and community contexts. By prioritizing flood resilience, privacy, and hygiene, the model can be tailored to meet the specific requirements of different communities facing similar challenges. The raised toilet initiative serves as an inspiration, encouraging other communities to explore innovative solutions for their sanitation needs, fostering a collective effort towards building resilient and sustainable infrastructure. As communities learn from and adapt this innovative solution, the raised toilet model paves the way for a more resilient and dignified approach to sanitation in flood-prone regions.



“The raised toilet initiative serves as an inspiration, encouraging other communities to explore innovative solutions for their sanitation needs, fostering a collective effort towards building resilient and sustainable infrastructure.”

Connect With Us!

GUWAHATI GANA SEVA SOCIETY

Peace Centre, G. N. B. Road Ambari,
Guwahati – 781001 Assam – India

Phone: +91 361 351 5542
+91 995 469 7185

Email Us: abhggss@yahoo.com

Website: www.ggss-guwahati.org

• • •

