

# ANNUAL REPORT

2021-2022

---



*Transforming India into a better place of living...*

---

**Global Institute of Sustainable Development (GIOSD)**



---

## EXECUTIVE SUMMARY

As India faces cascading and interlinked global crises and conflicts, the aspirations set out in the 2030 Agenda for Sustainable Development are in jeopardy. With the COVID-19 pandemic in its third year, the downfall in markets and business exacerbated food, energy and other crisis – all against the background of a full-fledged climate emergency. The Sustainable Development Goals Report 2022 provides evidence of a stoppage in the progress of the Sustainable Development Goals (SDGs). The COVID-19 pandemic has directly or indirectly endangered progress in many folders and the lives of millions of people. The health systems have been overwhelmed and many essential health services have been disrupted, posing major threats to progress in fighting other deadly diseases. Many millions more people slipped back to extreme poverty and suffered from increased hunger compared to pre-pandemic levels. Children missed more than half of their in-person instruction over the past two years, significantly affecting their learning and well-being. Women have been disproportionately affected by the socioeconomic fallout of the pandemic, struggling with lost jobs, increased burdens of unpaid care work and an intensifying silent epidemic of domestic violence.

The current economic recovery is fragile and patchy, with concerns related to new COVID-19 variants, rising inflation, major supply-chain disruptions, growing labour market pressures and unsustainable debt in many parts of the country.

COVID-19 vaccines and new treatments began to blunt the deadly impacts of the virus in 2021, enabling widely vaccinated societies to tentatively reopen. But unequal access perpetuated the inequalities the pandemic had already deepened. Just 1 in 6 people in low-income countries has been vaccinated with at least one dose, compared to 3 in 4 in high-income countries. The situation in India is similar to other countries. Its relentless progression fueled natural disasters, water scarcity, and poverty, threatening well-being and security – especially those from the poorest, most disadvantaged communities.

The pandemic has exacerbated risks and cut opportunities for marginalized communities where climate change impacts have already devastated. The interconnected challenges reinforced the urgent need for a reinvigorated multilateralism. To enable the service delivery system to provide more effective, coordinated support to everyone, the Global Institute of Sustainable Development (GIOSD) is putting its best endeavour to equip communities with the required skill, knowledge, and abilities to become self-reliant. Despite complex challenges, GIOSD is working with the rural communities and local government to transform rural societies into better places persistently. In 2021, we carried out a mission across the communities of our project areas to bring together all stakeholders to collectively recommit with a new spirit of urgency to achieve equity, inclusion and sustainability.

GIOSD has built a successful partnership with Krishi Vigyan Kendra to support the farming communities to advance their agriculture methods and technology to multiply incomes. Communities that lacked access to



---

safe drinking water were supported by the project of connecting every household with a tap. Schools that cater for children from marginalized communities (Scheduled Caste and Schedule Tribe) were supported with water supply for drinking and other purposes. Solar power was successfully demonstrated as an alternative option to meet the energy need for water supply. Women were supported to practice kitchen gardening to grow vegetables and improve their dietary diversification.

We, on behalf of GIOSD, extend our sincere gratitude to local government departments, KVKs, the Agriculture Development Department, the Department of Agriculture of Visva Bharati University, Community people and donors for their contribution to the effort of transforming rural societies into a better place.

#### OVERVIEW OF THE ORGANIZATION:

The Global Institute of Sustainable Development has been established as a Not-For-Profit organization on 20<sup>th</sup> November 2021 to work for Sustainable Development.

Our vision is a planet free from hazards and pollution, where everyone lives together with equality, prosperity, and peace; forever. As designed, GIOSD is committed to contributing to the mission of a better and more sustainable future for all. We are working to alleviate poverty, reduce inequality, increase sustainable livelihoods, create green jobs, promote green investment, address climate change, protect natural capital, manage resources efficiently, and foster policy coherence.

#### Leadership:

The organization is founded by diverse like-minded professionals committed to bringing a change which is free from poverty, inequality, discrimination, illiteracy, and pollution. The board of directors of GIOSD comprise of Mr. Sudhir Jain (bachelor of engineering from IIT, Roorkee, Ms. Nirupoma Rao (Anthroposophic Psychotherapist) Mr. Arun (bachelor of engineering), Mr Satya Narayan Ghosh (Master in Rural Development from Visva Bharati University, Shantiniketan) and Mr. Tarun Dasgupta (Bachelor of Commerce).



---

## Projects in Financial Year 2021-22

The financial year 2021-22 was the year dedicated to supporting underprivileged communities of Sattore Gram Panchayat of Bolpur Sriniketan Block to combat poverty and malnutrition, innovating new technologies of sustainable agriculture and addressing the crisis of drinking water. A partnership was built with the Rathindra Krishi Vigyan Kendra, the Agriculture Department of Visva Bharati University and the Agriculture Development Office of Bolpur and Block Development office. Required supports were mobilized to effectively implement the project activities.

### A. Addressing the crisis of drinking water:

A safe water supply is the backbone of a healthy economy, yet is woefully under prioritized, globally. It is estimated that waterborne diseases have an economic burden of approximately USD 600 million a year in India. This is especially true for drought- and flood-prone areas, which affected a third of India's population in the past couple of years. Moreover, two-thirds of India's 718 districts are affected by extreme water depletion. When families do not have a safe and reliable water source, preferably direct to their home, then it is often women and children that are responsible for collecting water. School attendance in India decreases when children are required to spend hours collecting water. A 22 per cent increase in school dropout rates has been reported in drought-affected states. Close to 54 per cent of rural women – as well as some adolescent girls - spend an estimated 35 minutes getting water every day, equivalent to the loss of 27 days' wages over a year. It is under the latter that in August 2019, the Prime Minister of India announced the Government of India's commitment to provide piped water supply to every household in the country by 2024 with a new national flagship programme – the Jal Jeevan (Water for life) Mission.



---

To realize this ambitious goal, a decentralized, demand-driven, community-managed water supply approach is highly important. Global Institute of Sustainable Development is committed to support the local government to roll out this policy and bring together community to drive the agenda of addressing the needs of drinking water in this community. As part of this initiative, Global Institute of Sustainable Development has successfully developed a model approach of community driven, decentralized approach of connecting every household with a tap to ensure water availability 24/7 to every household. In addition, women of every family are brought together to form a committee to ensure the effective operation and maintenance of the water supply system to ensure long term sustainability. The women were empowered to set a monthly tariff for every family to contribute for generating fund to own the maintenance and repairing of the water supply system.

**B. Combat Poverty:**

Poverty alludes to a circumstance in rural areas wherein underprivileged communities like tribal stay oppressed from the fundamental necessities of life. The majority in such communities are experiencing neediness can't bear to pay for a solitary feast a day. Our project areas in *Bolur Sriniketan block* are no exception to this. The baseline survey in the project villages re-emphasized the fact that Agriculture dominates non-agricultural activities by its potential to reduce poverty, whether the comparison is within or between communities. It's evident that more than half of the reduction in poverty achieved in the selected countries can be attributed to growth in agricultural incomes. Remittances account for over a third of the reduction in poverty and are especially important for those in extreme poverty.

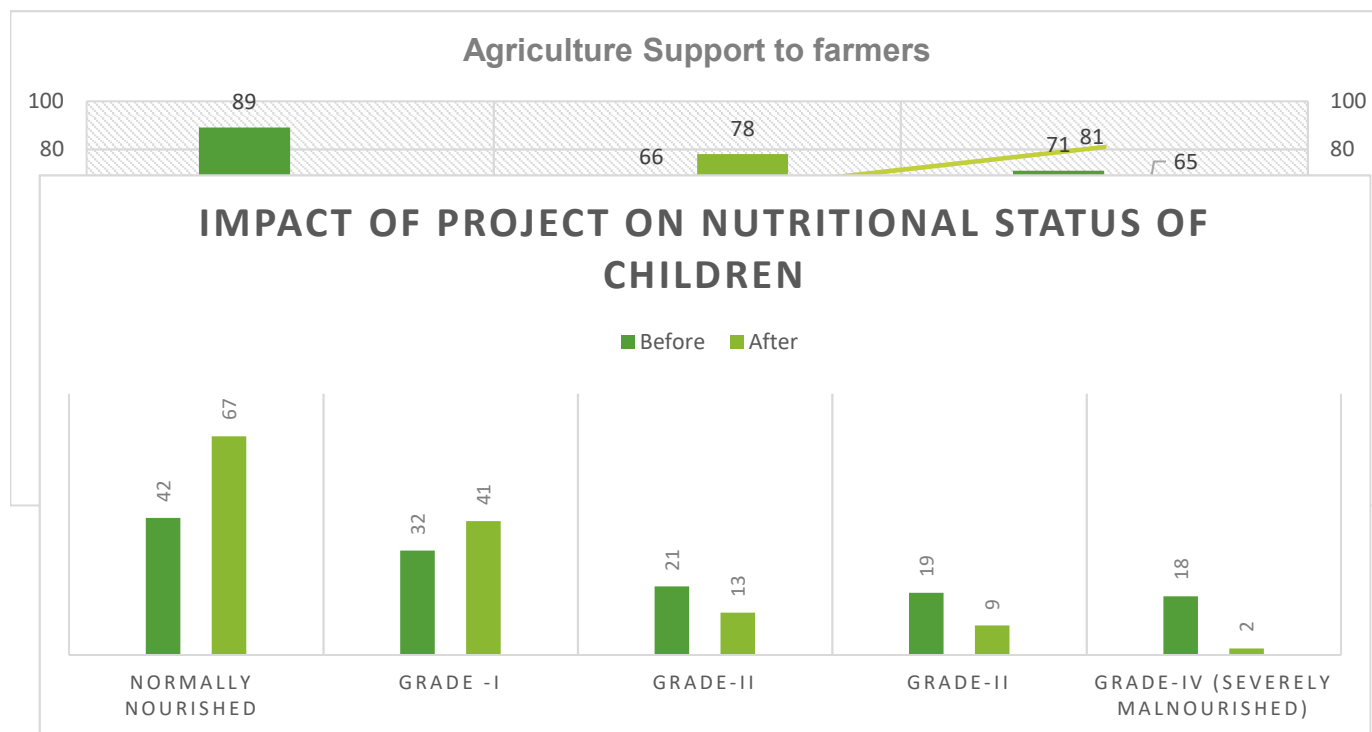




The baseline study also emphasized the point that higher rural income is a prerequisite for sustainable poverty reduction and reduced hunger. The project was therefore designed for most marginalized families to enhance their agricultural income by adopting advanced, environment-friendly agriculture technologies such as Bio-Mulching as well as creating business opportunities. In the Financial year 2021-22, a total of 612 farmers were supported with the high-yielding seeds of Paddy, and oilseed and 65% of them are from Schedule Tribe and Schedule Cast communities. Besides, the 20 selective farmers were supported with the training and inputs to adopt advanced technology (Mulching) for growing vegetables. Post harvesting, it was found that the inputs of high-yielding seed and mulching have led to 10 - 15% increase in agriculture income.

### C. Combat Malnutrition

Child malnutrition is a chronic problem and a longstanding challenge in India. The first National Family Health Survey (NFHS) in 1992-1993 alarmed India for it being the worst performing country on child health indicators. It also reported that more than half the children under five were underweight and stunted. One in every six children was excessively thin (wasted). All these conditions could be attributed to the prevalence of chronic malnutrition in children. Despite decades of investment to tackle this malaise, India is yet placed at the 94th



spot among 107 countries. The bane of child and maternal malnutrition is responsible for 15 per cent of India's total disease burden. Such problems are high in underprivileged communities, especially in Schedule Tribe and Schedule Cast. The baseline study revealed that more than 50% of the children in the project villagers are malnourished.

Hence, the project was designed to capacitate and enabled the communities to fight against malnutrition in a sustainable manner.

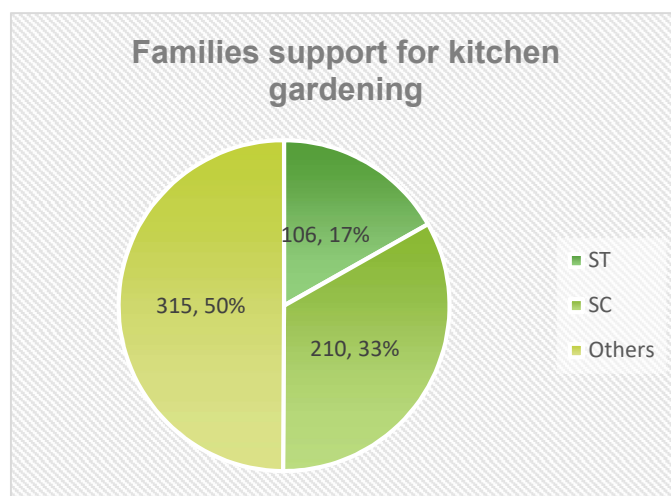
In the financial year 2021-2 a total of 631 families were supported with vegetable seeds and saplings for kitchen gardening. Of which, 92% of the families successfully grew 3 types of vegetables and diversified their diet.

In the Last 12 months. 88% of malnourished children turned to grade II from the severely malnourished category. 60% of children turned normally nourished from grades II and III.



#### D. Transforming Agriculture with advanced technologies

The notion that agriculture, as a global practice, has been exploiting resources faster than they could be renewed has been a topic of debate for decades. Symptoms of imbalance have been seen in the form of pollution, soil erosion/loss, wildlife population decline/shifts, and general alteration of a "natural" flora/fauna as a result of human intervention. Indeed, agricultural practices are undeniably "unnatural" in India and many other countries. Of course, an equally unnatural and parallel phenomenon has been the exponential growth in the human population, with associated demands for both food and shelter, which have often exceeded the "natural" feeding capacity of the land.



However, technologies can play important roles in addressing this problem if applied at scale. Technology has enabled human civilization to an ever-increasing scale. The applications of technology have not only increased food production in real terms but have dramatically reduced the disguised unemployment in Agriculture and improved the quality of life. The indiscriminate or inappropriate use of chemical

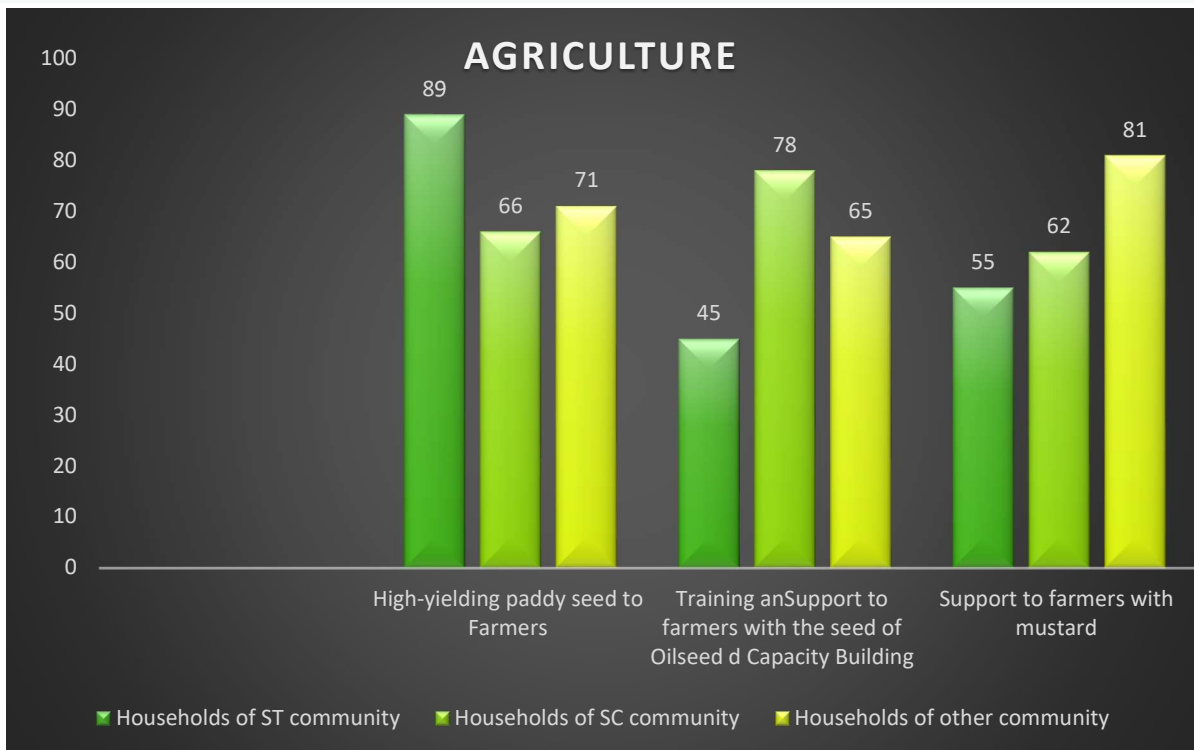
and biological technology, however, can clearly produce negative consequences to the ecosystem. The central issue of sustainability, therefore, is the preservation of nonrenewable resources. If the motivation of sustainability is optimization of production and resource conservation objectives, then progress can clearly be achieved. Sustainability in agriculture relates to the capacity of an agroecosystem to predictably maintain production through time. It is proven that technology has a significant ability to enable *Sustainable Agriculture*.

**Sustainable agriculture**

A striking link exists between growth in agriculture and the eradication of hunger and poverty. Agriculture broadly understood – crop and livestock production, fisheries, and forestry – provides income, jobs, food and other goods and services for the majority of people now living in poverty.



Agriculture sector in India meets the growing food demand as well as generate employment of many rural people. Agriculture that fails to protect and improve rural livelihoods and social well-being is unsustainable. Sustainable agriculture must enhance the resilience of people, communities and ecosystems, especially to climate change and market volatility.



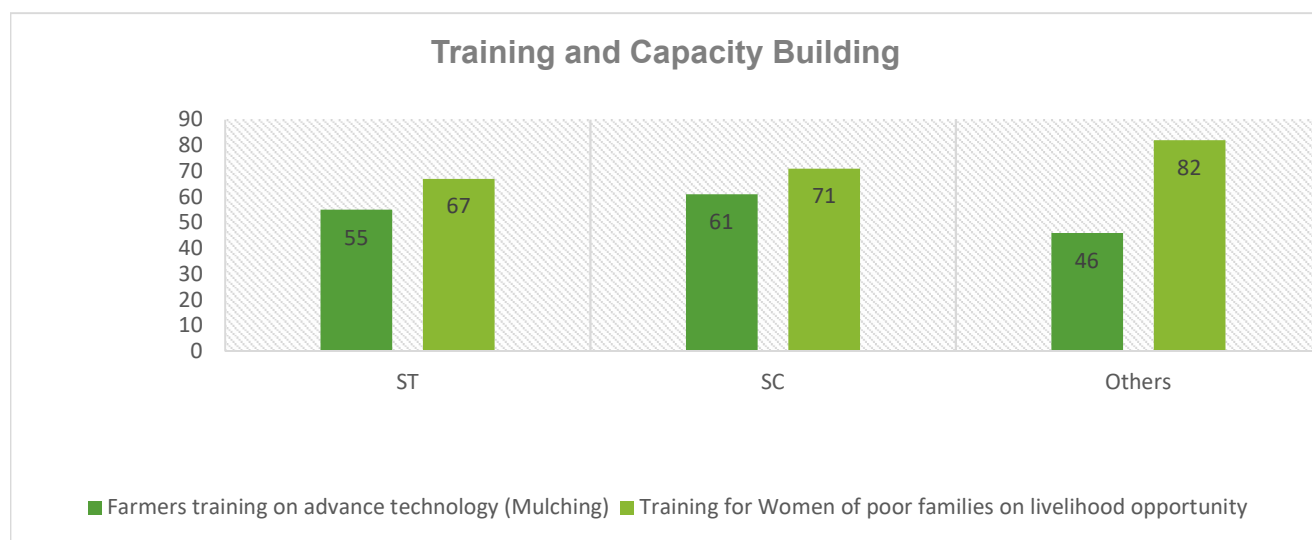


The year 2021-22 has the year of consistent effort of the Global Institute of Sustainable Development to capacitate farming communities to adopt *sustainable technologies* in agriculture.

A total of 521 small and marginal farmers were trained on sustainable agriculture with the help of Rathindra Krishi Vigyan Kendra. Support was provided to the farmers to pilot Mulching technology with vegetables. It was found that the mulching technology has significant potential to reduce the cost of production, especially the cost of irrigation and labour leading to an increase in profit margin. The mulch was used for growing tomatoes, brinjal, chilli cultivated on a total of around 3 acres of land. The use of mulching for growing vegetables led 25% increase in the profit margin and 10% in productivity.

### E. Training and Capacity Building

To enhance the skill and capacity of the farmers to apply advanced technologies in agriculture as well as capacitate women to develop modern kitchen gardens to ensure a diversified diet for their children, pregnant and lactating women, intensive training was organized together with the agriculture research institute (Krishi Vigyan Kendra). A total of 200 farmers and women were trained in the use of advanced technologies in agriculture.



### F. Water Supply in School and hostel of ST students.

More than 42,000 government schools across the country don't have drinking water facilities. Many schools across the country have reopened after a yearlong shutdown due to the Covid19 pandemic, and reopening safety protocols require routine handwashing and proper sanitation. But despite several government schemes and the campaign, only half of government schools and anganwadis have a tap water supply (though schools without tap water may have other water supplies, like wells). Around 11% of schools in West Bengal

have it have tap water in school. The schools that do not have access to safe drinking water and improved and clean toilets are in rural areas. The report also says that more than half of the government school toilets built by central public sector enterprises did not have even a basic handwashing facility — an even greater necessity in the pandemic. Schools across the country still faced a lack of running water, poor maintenance, and the unavailability of separate toilets for girls. Handwashing facilities were not available in 55% of the toilets, 72% of them did not have running water.



The provision of water at schools is one of the most highly effective practices in increasing access and learning outcomes. Not only it is necessary to maintain personal and environmental hygiene, but also reducing student dehydration in schools has been associated with improved cognitive abilities. The lack of proper toilets in schools threatens the education of thousands who are at risk of getting sick due to poor hygiene, and subsequently missing school. Globally, lack of school toilets puts 620 million children in danger of diarrhea. This problem is amplified for girls, many of whom miss school monthly when they're menstruating because of a dearth of sanitation facilities — in India, 23 million girls drop out of school when they start menstruating. Moreover, "children are more susceptible to water-borne diseases, more so, when there is also a need for repeated washing of hands as a precautionary measure during the pandemic. Global Institute of Sustainable Development has made a commitment to work with the local government, schools and communities to address this water crisis in the school. In the financial year 2021-22, one high school of 1400 children were supported with the water supply including providing water to the hostel of tribal children. Our support to the

school for water supply includes restoration of the borewell, overhead tank, and water filter and enhancing the water storage capacity to 5000 liters.

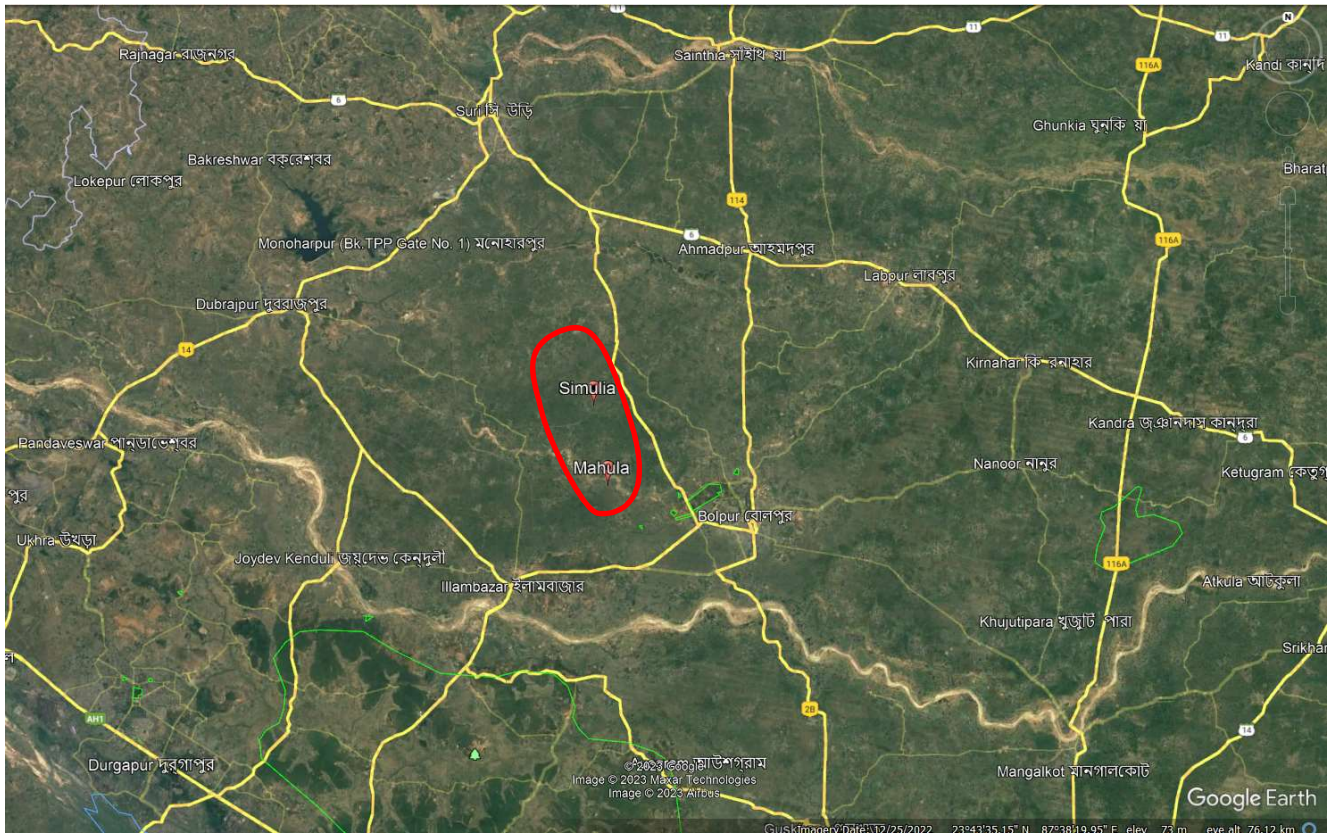
***In 2021, Our projects were implemented in Simulia and Mahula village, located in the Bolpur-Sriniketan Block in the Birbhum District of West Bengal in India.***

Our goal is to develop Bolpur Sriniketan as a model block and then replicate our success in other blocks within the district, state, and other places in the country.



***Fig1a: Location of two Projects-villages of Simulia and Mahula, located in the Bolpur-Sriniketan Block in the Birbhum District of West Bengal in India.***





**Fig1b** : Location of two Projects-villages of Simulia and Mahula, located in the Bolpur-Sriniketan Block in the Birbhum District of West Bengal in India.

## Some glimpse



- Providing access to safe drinking water by bringing a freshwater tap to everyone's homes.



- Visit of Scientist from Agriculture Research Institute to farms of pulses.
- Farmers cultivated vegetable through mulching technology





- Farmers cultivated vegetable through mulching technology



- Supporting marginal farmers to increase productivity and food security from the current 6-8 months a year.





- Hamlet Level Meeting at Simulia to Select the Households to be Supported for Kitchen Gardening.





- Training passionate local community members to further raise awareness within the district on health, hygiene, environment, and gender / justice.



- Training women's support groups to grow vegetables to enhance nutrition and facilitate cash income.

