

# থলুৱা বীজ

Indigenous Seeds



**MISEREOR**  
IHR HILFSWERK



 **Caritas**  
INDIA  
*The Joy of Service...*



# থলুৱা বীজ

Indigenous seeds

Knowledge Product  
GGSS, 2019

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**Most Rev. John Moolachira**  
Archbishop of Guwahati

## MESSAGE

Guwahati *Gana Seva* Society under FARM Northeast Phase II, published in the year 2018 a book on traditional medicinal practices with identified plants having medicinal value. It has come up again with another booklet on indigenous seeds. It has identified and documented indigenous seeds with the support of local farmers from 15 villages of Dimoria block of Kamrup Metro District.

The purpose of documenting the indigenous seeds in a form of a booklet is to preserve the indigenous varieties that are losing out to new high-yielding varieties and at the same time encouraging the farmers to grow them so that they do not become extinct. As the population is increasing day by day the demand to fulfill their food-needs is also increasing at a very fast rate, and as a result high-yielding seeds are being promoted to boost the production. The local farmers also prefer the same as more production means more profit. If this trend continues, the states' indigenous seeds varieties will become extinct. Therefore, it is high time to preserve and conserve indigenous seeds as local variety of crops is not only better in taste but has more nutritious value; it will not just improve the health of the people, but it will also contribute to the nation's economic growth. With this purpose GGSS has come up with a booklet having information of 50 varieties of indigenous seeds of paddy, vegetables, pulses, cereals etc.

It is my privilege to congratulate each and every member of GGSS staff working under FARM Northeast for their community-based initiative. We hope this booklet will be useful to whole farming community.

With best wishes,

**Archbishop John Moolachira**  
President  
Guwahati *Gana Seva* Society





## MESSAGE



Seeds are the basis of life. In this modern era, we are mostly exposed to the so called artificially engineered food and these foods come from genetically modified seeds that are coupled with pesticide and chemical fertilizers. I am happy to know that Guwahati Gana Seva Society (GGSS) is coming up with a booklet on indigenous seeds.

Seeds are an important component of food sovereignty. Farmers cultivating with indigenous seeds are not dependent on external sources for their food security. Food produced from indigenous seeds has always been a part of our ancient culture and are healthy as well. Caritas India has been celebrating the farmers cultivating with indigenous seeds.

I congratulate Fr. Maya Martin, Director GGSS and his team for publishing this knowledge product. I also congratulate the Caritas India North East Zonal team for the support extended to GGSS.

Fr. Paul Moonjely  
Executive Director  
Caritas India



# GUWAHATI GANA SEVA SOCIETY

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**'PEACE CENTRE'**  
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## Message



Dear Friends,

Guwahati Gana Seva Society has come up with a new booklet on indigenous seeds. One of the main objectives of the FARM Northeast Phase II was to revive the traditional agricultural practices through collective efforts of the community.

Presently, more emphasis is given towards high-yielding seeds and as a result the indigenous seeds are on the verge of getting extinct. Some of the indigenous varieties of seeds may not give high yielding, in comparison to the hybrid seeds, but they have unique properties. During earlier days, the food that was consumed was far more superior to the hybrid variety of crops, since it had several nutritional and medicinal values. It also had multiple use, such as fuel, fiber, fertilizer, craft materials, feed for animal and religious arty-crafty. These indigenous seeds that are getting extinct should be preserved because the revival of indigenous seeds will also ensure food security especially to the poor farmers.

We are happy that apart from other developmental and community empowerment activities, GGSS has taken initiatives towards identification and promotion of indigenous seeds. It will help more and more farmers to go back to their traditional ways of preservation of Indigenous seeds and using them in their agricultural farming.

We express our gratitude to Caritas India & MISEREOR for their partnership and support, staff for their commitment and dedication, communities for their whole hearted co-operation and collaboration.

With Good Wishes,

**Fr. Maya Muchahary**  
Director  
Guwahati Gana Seva Society





# Introduction

Foods are a part of our culture and way of life. Our seeds contain histories of our people and the security of future generations. According to the Indigenous Food Sovereignty Network (IFSN), food is a gift from the Creator; in this respect the right to food is sacred and cannot be constrained or recalled by colonial laws, policies and institutions. Indigenous seeds carry the genetic keys to biodiversity and climate change resilience, and are records of cultural knowledge, reflecting historical breeding practices. Indigenous food sovereignty is fundamentally achieved by upholding our sacred responsibility to nurture healthy, interdependent relationships with the land, plants and animals that provide us with our food. Seeds are the foundation of global food systems, but the United Nations (UN) Food and Agriculture Organization's working document on food sovereignty hardly mentions them. The right to healthy, sustainably produced food is the cornerstone of food sovereignty.

A generation perception held is that organic farming has crops grown with any chemical fertilizers. However, if the seeds used in such farming are genetically modified or even a hybrid variety then whether the produce can be claimed as organic or not is a question that remains to be answered. Using genetically modified or hybrid variety of seeds pose a threat to the existing diversity of indigenous seeds. Farmers see to be falling prey to such seeds, thus discontinuing their cultivation with indigenous seeds. Genetically modified or hybrid variety of seeds not only cost dearer to the farmers because of their high input but also pose a threat to the health.

Traditional or indigenous seeds are those produced, growing or living naturally in a country or climate. They are seeds that have been selected and managed by local people in the local growing environment. Indigenous could well be the medium to strengthen food sovereignty of the local populace. Native crop varieties are not only drought and disease resistant but are nutritive and retain the soil fertility as they do not need chemical fertilizers and excessive water. The conservation of indigenous seeds is important to prevent the exploitation of already distressed farmers. Indigenous crops are likely to become extinct as large seed companies promote and patent hybrid seeds. Indigenous seeds are not only being used by the farmers, but they are also strengthening their reserves by going back to their traditional roots of maintaining individual seed banks in their households.

Guwahati Gana Seva Society (GGSS) with support from Caritas India has spearheaded the conservation of indigenous seeds in the Kamrup metro district of Assam under the Facilitating Agricultural Regeneration Measures (FARM) North East Phase II programme funded by Misereor, Germany. GGSS while working in 15 villages under FARM NE II programme had given food for thought to the hard working farmers of the project intervention area. GGSS facilitated the awareness of farmers on how to avoid genetically modified or hybrid variety of seeds and use only indigenous seeds. The farmers responded to the call and today, by the end of the FARM NE II programme at least 90% of farmers are cultivating with indigenous seeds.

With the purpose to popularize the concept of using indigenous seeds, GGSS facilitated the farmers to come forward and identify the indigenous seeds in their area. Meetings and group discussions and interactions were held among the farmers followed by house-hold visits. GGSS with the help of Caritas India instilled the idea of food sovereignty where indigenous seeds have a very important role to play. Farmers under the programme intervention area began to think alike. They also began to think about what holds in future for them and the upcoming generations. ***“According to Minoti Teron, a farmer from Taloni village, indigenous seeds provides her family with more nutrients and cultivation with indigenous seeds requires less input.”***



Having motivated the farmers to use indigenous seeds, GGSS encouraged a few groups of such farmers to hit the local market. GGSS had initiated a weekly market during the month of November 2018 involving a group of farmers. This weekly market is now completely managed by the farmers. Interestingly buyers coming to this market seldom bargain with the sellers. These buyers rather demand that the frequency of the market should be daily than being only weekly. *“Brojen Bhuyan, a local citizen and a regular buyer from the weekly market is very happy to buy chemical free products from indigenous seeds and wants the frequency of the market to be regular rather than once in a week”*. These farmers and even more were also part of Kisan Mela (Farmers’ Fare) organized under the FARM NE II programme. This helped the farmers to earn from what quality products they grew using indigenous seeds. Close to 75 to 80% of the families in the programme villages have their kitchen gardens restructured and GGSS also encouraged the farmers to strengthen the individual seed banks in each of their households. The farmers from nearby villages exchanged seeds between themselves and this further helped to increase the number in the inventory of gene pool. The farmers were supported with technical back up by the experts from the department of agriculture. System of Rice Intensification (SRI) was successfully promoted in the cultivation of some indigenous paddy varieties. GGSS has also gone a long way to promote and strengthen the backyard gardens for upscaling the nutritional demands of the families.

## Documentation

An effort has been made by GGSS to document the indigenous seeds that they have come across in the past three years of programme implementation. The seeds have been documented cautiously in consultation with the lead farmers and elderly in the communities. We have documented in the seeds in different categories like Cereals, Pulses and Vegetables. Information was also collected on the time of sowing and harvest of these seeds and the yield per bigha (14,400 square feet). Nutritional analysis of five popular varieties of indigenous paddy have also been done.

| Paddy Variety | Protein (%) | Calcium (%) | Carbohydrate (%) |
|---------------|-------------|-------------|------------------|
| Mainagiri     | 5.38        | 2.26        | 0.056            |
| Baw Dhan      | 4.17        | 2.88        | 0.057            |
| Bora Dhan     | 7.58        | 6.35        | 0.070            |
| Tingiri       | 6.25        | 6.49        | 0.094            |
| Kuni Dhan     | 8.83        | 16.98       | 0.099            |

## Conclusion

GGSS with support from Caritas India have initiated this noble process of bringing the indigenous seed back into the system. GGSS extended its support to the farmers and tried to help them to understand then benefits of indigenous seeds. The results are here to see today as we have atleast 90% of the families using indigenous seeds due the FARM NE II programme intervention. At the time of the intervention only 50% of the families were using indigenous seeds. Thanks to the people who took the burden to walking the extra mile by supporting us. GGSS intends to follow up these farmers and see to it they become a role model for others to follow. Thanks to the unconditional support extended by Caritas India and Misereor, Germany.

## Reference

<http://sierraseeds.org/indigenous-seed-sovereignty/>

<https://www.thebetterindia.com/114951/maharashtra-seed-mother-conservation-native-varieties/>

<https://sustainablefoodtrust.org/articles/food-sovereignty-seed/>



## DOCUMENTATION



**Category :** Cereal  
**Vernacular Name :** Kuni Dhan (Aromatic)  
**Sowing Time :** March-April  
**Harvest Time :** September-October



**Category :** Cereal  
**Vernacular Name :** Bora Dhan (Aromatic)  
**Sowing Time :** June-July  
**Harvest Time :** November-December



**Category :** Cereal  
**Vernacular Name :** Baw Dhan  
**Sowing Time :** March-April  
**Harvest Time :** November-December



**Category :** Cereal  
**Vernacular Name :** Sobok Aar Dhan  
**Sowing Time :** April-May  
**Harvest Time :** October-November



**Category :** Cereal  
**Vernacular Name :** Nol Baw Bora (Aromatic)  
**Sowing Time :** March-April  
**Harvest Time :** November-December



**Category :** Cereal  
**Vernacular Name :** Sapor Aijong  
**Sowing Time :** June-July  
**Harvest Time :** November-December



**Category :** Cereal  
**Vernacular Name :** Gurund Pakhi  
**Sowing Time :** June-July  
**Harvest Time :** November-December



**Category :** Cereal  
**Vernacular Name :** Bhusuri Dhan  
**Sowing Time :** June-July  
**Harvest Time :** November-December





**Category :** Cereal  
**Vernacular Name :** Aijong  
**Sowing Time :** June-July  
**Harvest Time :** October-November



**Category :** Cereal  
**Vernacular Name :** Sobok Bora pahariya  
**Sowing Time :** April-May  
**Harvest Time :** October-November



**Category :** Cereal  
**Vernacular Name :** Dang Bora  
**Sowing Time :** June-July  
**Harvest Time :** November-December



**Category :** Cereal  
**Vernacular Name :** Kekua Baw  
**Sowing Time :** March-April  
**Harvest Time :** November-December



**Category :** Cereal  
**Vernacular Name :** Kunkuni Joha (Aromatic)  
**Sowing Time :** June-July  
**Harvest Time :** November-December



**Category :** Cereal  
**Vernacular Name :** Mekerasali Baw  
**Sowing Time :** March-April  
**Harvest Time :** November-December



**Category :** Cereal  
**Vernacular Name :** Naga Bora (Aromatic)  
**Sowing Time :** June-July  
**Harvest Time :** November-December



**Category :** Cereal  
**Vernacular Name :** Joha (Aromatic)  
**Sowing Time :** June-July  
**Harvest Time :** November-December





**Category :** Cereal  
**Vernacular Name :** Tingiri  
**Sowing Time :** June-July  
**Harvest Time :** November-December



**Category :** Cereal  
**Vernacular Name :** Batiyasora  
**Sowing Time :** June-July  
**Harvest Time :** November-December



**Category :** Cereal  
**Vernacular Name :** Moinagiri  
**Sowing Time :** June-July  
**Harvest Time :** November-December



**Category :** Cereal  
**Vernacular Name :** Buka Dhan (Aromatic)  
**Sowing Time :** June-July  
**Harvest Time :** November-December



**Category :** Maize  
**Vernacular Name :** Makoi  
**Sowing Time :** March-April  
**Harvest Time :** July-August



**Category :** Maize  
**Vernacular Name :** Khoru Makoi Pahariya  
**Sowing Time :** March-April  
**Harvest Time :** October-November



**Category :** Pulse  
**Vernacular Name :** Rohor Dal  
**Sowing Time :** March-April  
**Harvest Time :** September-October



**Category :** Vegetable  
**Vernacular Name :** Suka Saak  
**Sowing Time :** October-November  
**Harvest Time :** December-January





**Category :** Vegetable  
**Vernacular Name :** Mesta Tenga  
**Sowing Time :** February-March  
**Harvest Time :** April-May



**Category :** Vegetable  
**Vernacular Name :** Vhendi  
**Sowing Time :** March-April  
**Harvest Time :** May-August



**Category :** Vegetable  
**Vernacular Name :** Lai Saak  
**Sowing Time :** November-December  
**Harvest Time :** December-January



**Category :** Vegetable  
**Vernacular Name :** Jika  
**Sowing Time :** March-April  
**Harvest Time :** April-May



**Category :** Vegetable  
**Vernacular Name :** Lofa Saak  
**Sowing Time :** November-December  
**Harvest Time :** December-January



**Category :** Vegetable  
**Vernacular Name :** Sil Kumurah  
**Sowing Time :** March-April  
**Harvest Time :** October-November



**Category :** Vegetable  
**Vernacular Name :** Pani Law  
**Sowing Time :** October-November  
**Harvest Time :** January-February



**Category :** Vegetable  
**Vernacular Name :** Bangi  
**Sowing Time :** March-April  
**Harvest Time :** June-July





**Category :** Vegetable  
**Vernacular Name :** Joha Bhool  
**Sowing Time :** March-April  
**Harvest Time :** May-June



**Category :** Vegetable  
**Vernacular Name :** Joha Kumura Pahariya  
**Sowing Time :** March-April  
**Harvest Time :** May-June



**Vernacular Name of Seed :** Khorio (kola)  
**Category :** Vegetable  
**Month of sowing :** October-November  
**Month of harvesting :** December-January



**Category :** Vegetable  
**Vernacular Name :** Datha  
**Sowing Time :** March-April  
**Harvest Time :** May-June



**Category :** Vegetable  
**Vernacular Name :** Boga Khorio  
**Sowing Time :** October-November  
**Harvest Time :** December-January



**Category :** Vegetable  
**Vernacular Name :** Dighal Bhool  
**Sowing Time :** March-April  
**Harvest Time :** May-June



**Category :** Vegetable  
**Vernacular Name :** Dhaniya  
**Sowing Time :** October-November  
**Harvest Time :** December-January



**Category :** Vegetable  
**Vernacular Name :** Anguli Urohi  
**Sowing Time :** March-April  
**Harvest Time :** November-December



**Category :** Vegetable  
**Vernacular Name :** Mora Pat  
**Sowing Time :** March-April  
**Harvest Time :** Jun-July





**Category :** Vegetable  
**Vernacular Name :** Till ( Pahariya)  
**Sowing Time :** March-April  
**Harvest Time :** October-November



**Category :** Vegetable  
**Vernacular Name :** Bhoot Jolokia  
**Sowing Time :** October-November  
**Harvest Time :** January-February



**Category :** Vegetable  
**Vernacular Name :** Tiya  
**Sowing Time :** March-April  
**Harvest Time :** May-June



**Category :** Vegetable  
**Vernacular Name :** Gul Jolokia  
**Sowing Time :** All Season  
**Harvest Time :** All Season



**Category :** Vegetable  
**Vernacular Name :** Bhat Kerela  
**Sowing Time :** February-March  
**Harvest Time :** May-June



**Category :** Vegetable  
**Vernacular Name :** Rongal Pahariya  
**Sowing Time :** March-April  
**Harvest Time :** June-August



**Category :** Vegetable  
**Vernacular Name :** Lesera (pahariya)  
**Sowing Time :** March-April  
**Harvest Time :** May-June



**Category :** Vegetable  
**Vernacular Name :** Baro Mah Bengena  
**Sowing Time :** All Season  
**Harvest Time :** All Season



**Category :** Vegetable  
**Vernacular Name :** Kushiya Bengena  
**Sowing Time :** All Season  
**Harvest Time :** All Season



## *The Team*



**Fr. Maya Muchahary**  
Director



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## *Acknowledgement*

Guwahati Gana Seva Society (GGSS) sincerely extends its gratitude to MISEREOR Germany for funding this programme. GGSS sincerely conveys its thanks to Caritas India for extending support for the implementation of FARM.

GGSS acknowledges with thanks the contribution by the farmers of 15 project villages for helping in identification and collection of indigenous seeds for documentation. Thanks to all the community members for being the part of the FARM programme.





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