

COMMUNITY SEED BANK

FARMER KNOWLEDGE ENHANCE:
BIODIVERSITY, QUALITY AND QUANTITY



Submitted By

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Under

FAO (ITPGR) BSF-IV CYCLE PROJECT FOR INDIA ON

Improving Pulse Biodiversity in Rice Fallow Areas of Tribal Belts of Central and East Indian States
to bring Resilience in the Farming Practice, Provide Livelihood Support and Enhance Nutritional
Level of the Tribal Population



Food and Agriculture
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United Nations



The International Treaty
ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE



REPORT ON COMMUNITY SEED BANKS IN THE FIVE STATES

Organizer: PAIRVI, Delhi

Date	Meetings with state	Online Training	Physical Workshop
21 March 2020	Jharkhand	Completed	Completed
10 April 2020	Bihar	Completed	Pending
15 April	M.P.	Completed	Pending
20 April	Chhattisgarh	Completed	Pending
27 April	West Bengal	Completed	Pending

***Note:** Physical workshop extend till the end of November month, 2020 due to COVID-19 lockdown.

COMMUNITY SEED BANKS IN THE FIVE STATES

PAIRVI had been setting up community seed bank in five states under the project. The aim, activities, groups of plants, manpower and financial aspects are the same for the all five state's community seed bank.

The main aims of community seed bank(CSB) today:

The initial motives for founding a CSB are crop conservation and Promoting the use of local and traditional varieties that give good results. Many other objectives has greater importance like

1. crop adaptation, crop selection and crop production.
2. The creation of a movement of farmers and citizens, the creation of a local seed system, and the registration of varieties in the public domain.
3. To restore landraces into contemporary agricultural practice in such a way that benefits the community, to collect local varieties, multiply and spread them;
4. To be able to provide own seeds for seed production and to serve as an example for others.
5. Providing storages or working collections
6. Providing pools for own breeding activities

The main activities of CSB:

1. Education and training
2. Multiplication of seeds
3. Providing seed samples
4. Crop improvement
5. Storage, multiplication and providing seeds
6. Database management, crop improvement and breeding

The initial sources for plant material in the Community Seed Bank:

1. Seed collected from household survey
2. Seed approved by scientist as per local geological and climatic condition
3. Seed purchased from Village Haat (A traditional local seed market for local seed at regional level).
4. Seed given by university or state agriculture research institute for trial purpose

The Groups of Plants that keep in CSB:

A. Pulses

1. Pulses for Monsoon Season during June-July
2. Pulses for Monsoon season during August-September
3. Pulses for Relay cropping for October
4. Pulses for Post Monsoon season during November-December

B. Oilseed

1. Oilseed for Monsoon Season during June-July
2. Oilseed for Monsoon season during August-September
3. Oilseed for Relay cropping for October
4. Oilseed for Post Monsoon season during November-December

Infrastructure and Manpower:

Initial support like rent is provided by PAIRVI under project. PAIRVI trained the local youths to maintain the Community Seed Bank. **(Annexure-IV)**

Financial Aspects of Community Seed Bank:

Initial financial support was provided by PAIRVI under project. PAIRVI will make it as economical viable Community Seed Bank.

Governance:

Seed savers organisations / NGOs has the power to take the final decision in arising the dispute.

The board/ Committee and general assembly (all members of community seed bank) play role with regard to general objectives. **Annexure-II and Annexure -III**

Biodiversity

PAIRVI collected the local seeds through household survey along with approved seed from scientist for the community seed bank. **Annexure -V**

Quality

PAIRVI is working to produce quality seed through the promotion of proven scientific practices for seed quality.

PAIRVI designed the trial plot in such a way that the purity of the variety will be maintained without leaving soil, unsown. Percentage of the germination of seed will be tasted before sowing.

Quantity

Currently PAIRVI is working on screening the suitable seed. After successful screening of the seeds, PAIRVI will develop guidelines for optimum production from selected seed And will design and testing methods for multiplication of quality seeds.

Location of Community Seed Bank:

Community Seed Bank in Jharkhand	Village-Badia; Post-Kenmankathi via Jasidih District-Deoghar, Jharkhand- 814142, India
Community Seed Bank in Bihar	Village-Basahara, Post Navadih, District-Jamui, Bihar-811303, India
Community Seed Bank in West Bengal	Village-Uttar Dhupjhora, Post -Batabari, P.S. - Matiali, District - Jalpaiguri-735206, West Bengal, India
Community Seed Bank in M.P.	Tarapur, District -Dhar- 454552, Madhya Pradesh, India
Community Seed Bank in Chhattisgarh	Village - Mandalpara, Panchayat- Bhaisarjhar, Block-Kota, District-Bilaspur-495113, Chhattisgarh, India



Fig.: Community Seed Bank in West Bengal



Fig. : Community Seed Bank in Bihar



Fig.: Community Seed Bank in Jharkhand



Fig.: Community Seed Bank in Chhattisgarh



Fig. Community Seed Bank in Madhya Pradesh

MAIN POINTS FROM FARMER'S COMMUNITY AND EXPERTS

Community Seed Bank Workshop

PAIRVI organised several Community Seed Bank meetings among which one meeting was organised physically in 21 March 2020 in Jharkhand (**Annexure-1**). The Panelist of Jharkhand meeting were Mr. Parimal Kumar Singh - Scientist, Krishi Vigyan Kendra, Sujani; Mr. Gokul Kumar- Run a Community seed bank under an NGO; Mr. Sanjay Upadhyay- Juvenile judge and run a seed certification program under ATMA (Agricultural Technology Management Agencies) for NABARD ; Mr. Rabindra Kumar Singh- B.Sc. (Agriculture) and ex- Block Development Officer and National Livelihood Mission, Govt. of India. 42 Participants were there including 28 youth. (**AnnexureX** - List of attendees).

Apart from the aforementioned meeting, PAIRVI organised many Community Seed Bank' meetings through online due to COVID -19 lockdown from April to June 2020. (**Annexure - VI**)

1. Concept of Community seed bank

Mr. Vikas Arora started with the introduction of speakers and farmers in the meeting. He spoke about the objectives and benefits of community seed bank and said that from this kind of a community seed bank, there would not be any requirement of purchasing seeds from the market. If each community has such kind of seed bank which would be full of varieties, it could be acted as an insurance with changes in the weather. When crops are grown with other varieties there is a minimal chance for harm to them during changes in weather. Therefore, it is very important to maintain the varieties in the field.

2. Importance of Breeder and Seeds

Mr. Parimal Kumar Singh, Scientist, Krishi Vigyan Kendra mentioned that farmers are being playing the role of breeder since many decades who have the foundation seeds. The certified seeds which are being purchased from the market have productivity of three years. Besides, hybrid seeds have production capacity of one year only.

3. Difference between Grain Bank and Seed Bank–

In an interactive session in the meeting, Mr. Sanjay Upadhyay asked the farmers about the difference between Grain Bank and Seed bank and also he explained in detail about the differences on the same later. Every seed can be consumed as a grain but every grain cannot be used as a seed. Seed has genetic purity, but grain does not have genetic purity. The Government of India has also some standard and law to control the seed quality. To maintain the genetic purity of a seed, it is important to maintain 3-meter distance between different varieties of seeds in a crop. The percentage of seed germination, physical damage, moisture are the important factors to control the seed quality and which are also regulated by the Government of India. The percentage of germination along with other factors are different for different crops. For an example, if foreign particles are more than 5% in wheat seeds then it would not be called as a seed of wheat. The moisture content also should not be more than 14%. The storage of grain bank is used for consumption for the whole year whereas the storage in the seed bank will be used for sowing purpose.

4. To Maintain the Quality of the Seed-

Mr. Gokul mentioned that it is important to maintain a distance of 3 meter between two varieties of a crop, otherwise this would result a mixing of the varieties during the harvesting of crops. The fresh cow dung (without converting into manure) used in pulses result in growing of weeds which could badly affect the pulses. The affected crops should be kept for producing seeds.

5. How to Produce Seeds:

- When the crops remain 10% to reach harvest maturity.
- When the colour of crops are yellow along with 10% of its colour remains green.

6. Transmission of Disease, Medium and Solution

Mr. Parimal Kumar informed that the transmission of a disease can be occurred through three mediums-

1. **Soil**-The termites found in the soil destroy the roots of the crops. The natural way to get rid of the termites is to pour jaggery solution into the soil by which ants come into the soil and eat the termites.

2. **Air**-The black powder found in wheat grain is an example of transmission through air. This type of black powder can also be found in tomatoes, chillies and eggplants. In this case, the affected plant should be removed from the root and bury under the soil or else burn them.

3. **Water**-In these days of global warming, there is an uncertainty in the rainfall occurrence in the areas. In this year (2020) during the month of March, unusual rainfall occurred in the state due to which there was a bad impact on the plants. Due to this unusual rainfall, the paddy fields could be affected by the sheath blight (a fungal disease caused by *Rhizoctonia solani*) disease. To get rid of this disease, the lower part of buds of vitex negundo (commonly known as Chinese chaste tree) are buried in the moist soil around the crops and the buds grow well very soon which is also helpful for the rice crops. The buried stem provide specific angle to the birds sea ted on the top of the stem and the birds eat the insects.

7. The Climate Change and Adaptation (Suitability with Crop Sowing)

The whole crop cycle depends on time. Therefore, whenever there is time for sowing Arhar or sesame seeds, it is mandatory to sow the seeds keeping a gap of 1 week for the same quantity of seeds. By doing this, if there is unusual rain or heat, the whole crops will not be affected, only a part of the farm might be affected.

8. Seed Treatment

A. During the Sowing of Seeds

Plant growth-promoting bacteria (PGPB) are soil and rhizosphere bacteria that can benefit plant growth by different mechanisms, and P-solubilization ability of the microorganisms is considered to be one of the most important traits associated with plant P nutrition. PSB (Phosphate Solubilizing Bacteria) culture in jaggery solution, the culture sticks well to the seeds. Jaggery solution should be used to moisten the seed, so that the culture sticks to the seed coat. The PSB present in the soil of the fields of maize, onion, jasmine, sugarcane, sugar beet and tomato rhizosphere.

Thus, to increase the nitrogen uptake efficiency *Rhizobium* can be used for legume crops. *Azotobacter* and *Azospirillum* for non-legume crops.

it helps the root to absorb nitrogen from the soil. Cow dung should not be put into Moong pulses farm otherwise the seed cannot grow full fledgy. The Moong seeds should be sowed in infertile soil. The cow urine can also be used in the treatment of seeds by mixing 15-10ml of it with 1litre of water.

B. To Keep the Seeds Safe in a Year

The farmers in the meeting informed that they keep their grains safe by putting sulfatablets. If they don't do that and simply keep the crops in the storage bags then the crops get affected by the insects. A few years ago, the structure made for keeping storage of the grains were sealed which provide isolation to the grains. In these kind of structures, the grains remained safe for the whole year which was traditionally known as "mittikothia" in Jharkhand. Now a days, this practice has been extinct because there is a lot of labour into it and minimum number of grains can be stored. Some people also make storage from rice husk known as "puwal" but this structure cannot provide isolation to the seeds. Therefore, people use tablets of sulfas because it reduces the efforts of people and maximum number of grains can be stored. In this context, Mr. Rabinder Kumar pointed out that this sulfas tablets needs to be folded in a piece of cotton cloth so that the grains can be kept safe. Mr. Vikas Arora also informed that if the grains can be stored in sealed plastic bags then it will also provide isolation to the seeds and the traditional practices can also be preserved. Mr. Gokul mentioned that seeds are meant to be sowed in soil, these are not for consumption. Therefore, the seeds can also be mixed with sands and keep them in plastic bags. This will also help in keeping them safe from insects.

9. Precautions and Knowledge about Seed Germination:

Mr. Gokul informed that the farmers can also use the sweet boxes to determine the percentage of the seed germination by filling the boxes with soil.

- The seeds should not be pressurized into the soil, it should be remain in the surface.
- The seed to seed should be maintained properly in the boxes during sowing.
- If germination happens in 80 seeds out of 100, then the percentage of germination would be 80%.

10. The Feedbacks of the Scientists on the Soil Test Reports

Mr. Parimal Kumar explained on the basis of soil test report that the usage of sulphur in the soil needs to be fulfilled. In one hectare of the farm, 20kg sulphur needs to be put. Generally, From 3-4 kg oilseeds, 1 kg of oil can be extracted. But with the use of sulphur the oil content can be increased upto 2.5 kg. Sulphur also improves the smell of mustard oil. After extracting the oil, the rest parts are used to feed the domestic animals and also can be used in the farm of potato to save potato plants from fog in the winter season (January-February). But there is an issue which the farmers wanted to point out that if they use the khali for once then it should be continued each time they sow potato, otherwise the formation of roots in potato do not happen.



fig.- Advice to Farmers from Shri Parimal Kumar

Mr. Parimal Kumar mentioned that the villages of project sites are much acidic and the farmers can identify it easily by looking at the cracks in the soil surface. Whenever, the farmers water the soil the water gets absorbed by the cracks. One solution is to scatter dolomite or calcium carbonate. In one dismil (1 acre = 100 dismil = 0.405 hectare = 3 bigha = 43,560 square feet) 1kg of calcium carbonate should be scattered. One can purchase it at 6INR per kg from the market. The calcium carbonate or dolomite should be put into the soil before the rainy season so that calcium carbonate mix properly with the soil during the rainy period. After that, seeds should be sowed. By doing this process, the production can be increased and also the cracks will not be occurred in the soil surface.

Like this, for sesame crops also, the sulphur is required to increase the oil content of the seeds upto 15 percent. 10 Kg of sulphur is required for land of one acre. Usually, 1kg of sulphur cost 70INR in the market now a days. Sulphur is also a micronutrient for the crops which is readily available in the market. To increase the organic content in the soil, it is necessary to use dung manure in the soil. To fulfil the requirement of phosphorus, the leaves of *Butea monosperma* (also known as Palash tree) can be used in the soil.

11. Biodiversity of Pulses and Soil Fertility

Mr. Parimal Kumar described that in the period of February-March, summer moong is cultivated and monsoon moong is cultivated during the period of June-July. In this way, monsoon sesame can be cultivated in June-July months. The sesame crop can be used as live-fencing/ guard crop. The soil used for growing moong pulses, there is no requirement of DAP NAD Urea in the soil as it fulfil the requirement of nitrogen in the soil.

ANNEXURE-I



AGENDA

Improving Pulse Biodiversity in Rice Fallow Areas of Tribal Belts of Central and East Indian States

Training Workshop on Conservation of Genetic Diversity And Sustainable use of Community Seed Bank 21st March 2020

Place

Community Seed Bank

(Run by PAIRVI under FAO project)

Village-Badia; Post-Kenmankathi via Jasidih, District-Deoghar, Jharkhand- 814142, India

Organizer- PAIRVI, New Delhi

Panel

- Mr. Parimal Kumar Singh - Scientist, Krishi Vigyan Kendra, Sujani
- Mr. Gokul Kumar- Run a Community seed bank under an NGO
- Mr. Sanjay Upadhyay-Juvenile judge and run a seed certification program under ATMA (Agricultural Technology Management Agencies) for NABARD
- Mr. Rabindra Kumar Singh- B.Sc. (Agriculture) and ex- BDO and NLM, Govt. of India.
- Mr. Vikas Arora-Project Coordinator, PAIRVI

Time	Sessions
9.30 AM	Introduction and Welcome
10.30 AM	Concept of Community Seed Bank
11.30 AM	Management and Administration of community seed bank <ul style="list-style-type: none">-Seed characteristic and collection- Seed entry in register and Seed rotation-Seed selection and treatment for storage-Seed Storage-Techniques for percentage of seed germination
1.30 PM	Lunch
2.30 PM	Community discussion to make rules/constitution to sustainable use of community seed bank
4.30 PM	Discussion and selection of plants for live fencing around the trial farms
5.30 PM	Tea

RULES AND REGULATION FOR INTERNAL ADMINISTRATION OF COMMUNITY SEED BANK

1. The persons who join community seed bank as member they will have to register themselves at first and the bank will issue them passbook. The Bank will exchange seeds with members only through passbook.
 2. Community seed bank shall choose a committee of 5 members among the members/passbook holders. The committee shall consist of minimum 2 members from Below Poverty Line category, 2 women members and 2 educated members (who has completed minimum 10th board examination).
 - 2.1 This committee shall be known as “BijRakshak Samiti” which means seed saviour committee
 - 2.2 This committee shall decide the charge on seed exchange. This charge or fee will be given to person, nominated via section 2.6.
 - 2.3 The committee will bear the post for the tenure of two years.
 - 2.4 This committee will decide the format for passbook and other related documents.
 - 2.5 The committee shall nominate the qualified candidate to fulfil the requirements of seed collection, seed quality control and distribution.
 3. Seed Exchange Passbook:
 - 3.1 The registered member will exchange the seed from community seed bank via seed exchange passbook.
 - 3.2 The seed given to the members of community seed bank will be free of cost to farmers/members, but members shall deposit minimum two times of amount of seeds in the bank after the end of harvesting. The quantity of those seeds will be decided by the committee.
 - 3.3 The committee shall release a list of available seeds in the seed bank, minimum 15 days before the date of distribution through the seed bank. This committee will announce necessary advertisement for seed biodiversity in the seed bank for distribution.
 4. The passbook issued by the community seed bank
 - 4.1 The passbooks will be issued for members only.
 - 4.2 The passbook accounts for the entries of exchange of seeds.
 - 4.3 Each passbook will have entries based on the receipt of which there will be two copies; one is for the issuer and the other is for the consumer.
 5. There will be a book for stock registration/ledger in the bank.
 6. The community seed bank reserves the right of acceptance or rejection of seeds based on the seed quality. The seeds will be treated as the property of the community seed bank.
- This list is prepared by Mr. Vikas Arora, project coordinator after physical meeting in Jharkhand and online meetings with partners' states in May 2020.

ANNEXURE - III

To improve the quality of Internal Management of Community Seed Bank the following items designed and published:

For keeping at Community Seed Bank

- 1. Seed-Account Opening Form**
- 2. Ledger**
- 3. Deposit and Withdrawal Receipt: (Hindi and English)**
- 4. Quality Control (Seed) Receipt: (Hindi and English)**
- 5. Seed Packaging and Labelling Form**
- 6. Seed Treatment Chart**

For keeping at Farmers

- 1. Seed Bank Passbook (**Annexure-VII**)**

For Awareness in Community

- 1. Poster: How Community Seed Bank Works (**Annexure-VIII**)**
- 2. Poster: Good Seed (**Annexure-IX**)**

This list is prepared by Mr. Vikas Arora, project coordinator after physical meeting in Jharkhand and online meetings with partners' states in May 2020.

ANNEXURE -IV

Materials/ Items needed for Community Seed Bank

1. Shelves for Seed Sample
2. Seed Bin (Try to make by local materials like bamboo or tin)
3. Seed (Purchase local Seed, Collected through Survey, Multiplication)
4. Weighting Machine
5. Sealing Machine
6. Polythene for airtighting the seed bin
7. Sprayer
8. Seed packaging polythene
9. Natural Treatment of Seed during storage like Neem oil etc.
10. Seed treatment during sowing like Tricoderma

List is prepared after online consultation with five states in May, 2020

BIODIVERSITY IN COMMUNITY SEED BANK

Source of Seed:

1. Household survey
2. Village Haat
3. Approved Seed
4. Collection from Region

Biodiversity in Bihar Community Seed Bank:

The following table showing biodiversity, which is sowing the till date June 2020 and sowing number of collected seed does not represent the varieties. Varieties will be identified after harvesting of crops.

Crop Name	Arhar	Groundnut	Urad	Moong	Kudrum	Ghaghra	White Til
	Pulses	Oilseed	Pulses	Pulses	Oilseed	Pulses	Oilseed
Farmer's Seed (Varieties)	5	-	0	6	2	5	—
Approved/certified Varieties	2	2	2	2	—	—	2
Total Varieties	7	2	2	8	2	5	2

Biodiversity in Jharkhand Community Seed Bank:

The following table showing biodiversity, which is sowing the till date June 2020 and sowing number of collected seed does not represent the varieties. Varieties will be identified after harvesting of crops.

Crop Name	Arhar	Groundnut	Urad	Moong	Kudrum	Ghaghra
	Pulses	Oilseed	Pulses	Pulses	Oilseed	Pulses
Farmers's Seed (Varieties)	4	-	1	1	1	5
Approved/ certified Varieties	2	2	2	2	—	—
Total Varieties	6	2	3	3	1	5

Biodiversity in Madhya Pradesh Community Seed Bank:

The following table showing biodiversity, which is sowing the till date June 2020 and sowing number of collected seed does not represent the varieties. Varieties will be identified after harvesting of crops.

Crop Name	Arhar	Chawla	Urad	Moong
	Pulses	Pulses	Pulses	Pulses
Farmers's Seed (Varieties)	4	3	1	4
Local Varieties	1	1	1	1
Approved/ certified Varieties	2	2	1	2
Total Varieties	7	6	3	7

Biodiversity in West Bengal Community Seed Bank:

The following table showing biodiversity, which is sowing the till date June 2020 and sowing number of collected seed does not represent the varieties. Varieties will be identified after harvesting of crops.

Crop Name	Arhar	Urad/ Black gram	Moong	Kulthi
	Pulses	Pulses	Pulses	Pulses
Farmers's Seed (Varieties)	1	5	2	7
Approved/ certified Varieties	0	1	1	0
Total Varieties Introduce	1	6	3	7

Biodiversity in Chhattisgarh Community Seed Bank:

The following table showing biodiversity, which is sowing the till date June 2020 and sowing number of collected seed does not represent the varieties. Varieties will be identified after harvesting of crops.

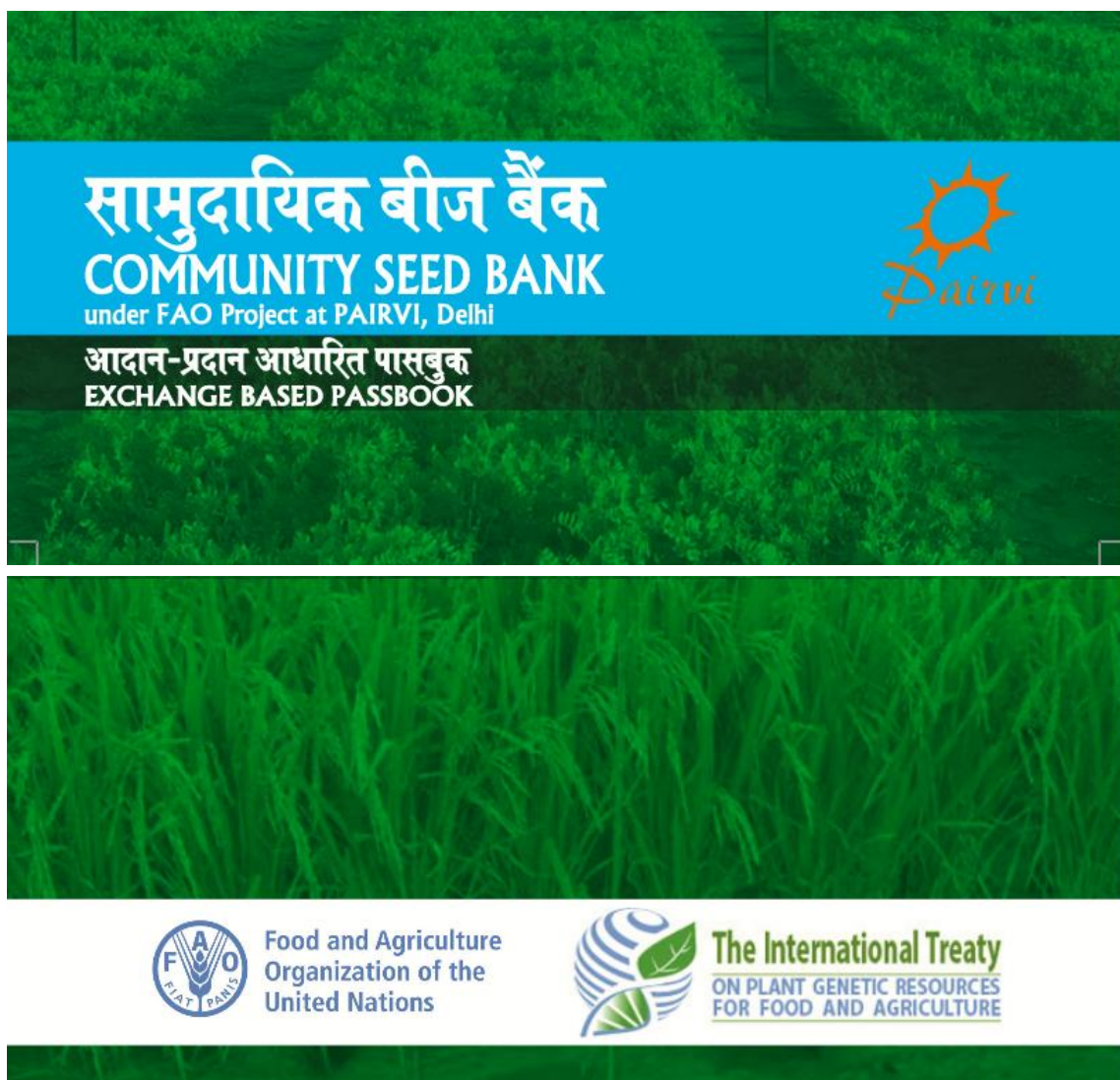
Crop Name	Arhar	Urad	Moong	Baturi	Kulthi	White Til
	Pulses	Pulses	Pulses	Pulses	Pulses	Oilseed
Farmers's Seed (Varieties)	21	6	22	7	15	0
Approved/ certified Varieties	1	2	1	0	0	2
Total Varieties	22	8	23	7	15	2

ANNEXURE - VI

SEED SAVERS ORGANISATIONS/NGOs

Seed Savers NGOs	State	Person
Lok Vikas Sansthan	Bihar	Shri Subhash Dubey
Lok Vikas Sansthan	Jharkhand	Shri Upender Kumar
IRDC	West Bengal	Shri Dhananjay Ray
Adivasi Mahila Sanchetna Sansthan	M.P.	Shri Manohar Lal
SEWA Sansthan	Chhattisgarh	Shri Pradeep Sharma

PASSBOOK



POSTER: HOW COMMUNITY SEED BANK WORKS

सामुदायिक बीज बैंक

तिलहन और दलहन के बीज के लिए



अब बीज हुआ आपना

सामुदायिक बीज बैंक कार्य कैसे करता है ?

- 1** जब आपकी फसल की कटाई पूरी हो जाए, बीज को बीज-बैंक में जमा करवाएँ।
- 2** इसके लिए सबसे पहले सामुदायिक बीज बैंक में जाकर अपना बीज-खाता खुलवाएँ।
- 3** बीज बैंक से निःशुल्क पासबुक एवं बीज खाता संख्या प्राप्त करें।
- 4** जब आपको बीज जमा करवाना हो बीज बैंक में जाकर बीज जमा करने वाली रसीद भरें और बीज करवाने हेतु दें। इस प्रक्रिया में आपसे कोई शुल्क नहीं ली जाएगी।
- 5** बीज जमा कराने से पहले आपको क्यू.सी. में बीज जाँच हेतु फॉर्म भरना होगा, जिसकी शुल्क मात्र 10/- रुपये है। फॉर्म भर कर फॉर्म नंबर प्राप्त करें।
- 6** पाँच दिन में आपके द्वारा दिए गए बीज की जाँच-रिपोर्ट आने के बाद स्वीकृत होने पर आपका बीज बैंक में जमा कर लिया जाएगा, जिसकी शुल्क मात्र 30/- रुपये है।
- 7** शुल्क अदा करने के बाद जमा किए गए बीज की पासबुक में एन्री कराएँ।
- 8** आपको जब भी मौसम के अनुसार दलहन या तिलहन के बीज की जरूरत हो, तब बीज निकासी रसीद भर कर जमा करें। बीज निकासी की शुल्क मात्र 30/- रुपये अदा करें और तुरंत बीज प्राप्त करें व पासबुक में एन्री कराएँ।



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NBA

POSTER: GOOD SEED

सामुदायिक बीज बैंक किसान: बीज का असली उत्पादक



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खेत में अच्छा बीज कैसे बनाएँ...

1.



आपके नजदीकी 'सामुदायिक बीज बैंक'
से शुद्ध बीज प्राप्त करें।

2.



जिन फसलों को बीजों के लिए तैयार
करना है उनको लगाते समय किस्मों को न
मिलाएँ अन्यथा बैंक से लिए गए बीजों की
आनुवांशिक शुद्धता समाप्त हो जाएगी।

3.



जो फसल सबसे अच्छी निकल कर आई
हो, उसका बीज बनाने के लिए चयन
कीजिए।

4.



चुनी हुई फसलों से बीज निकालने के लिए
उन्हें जोर-जोर से न कूटें अन्यथा बीज खराब
हो जाएगा।

5.



जिस स्थान पर बीज निकालें उस स्थान को
अच्छे से साफ कर लें, गोबर से लेप लें।
इससे आपके बीज में मिट्टी, कंकड़ एवं अन्य
अवांछित तत्व नहीं मिलेंगे।

6.



बीज एकत्र करने के बाद इन्हें सूखी जगह पर
रखें। नमी से आपके बीज खराब हो सकते
हैं और नमीयुक्त बीज 'बीज बैंक' में जमा
करवाते समय जाँच में फेल हो सकते हैं।

7.



अच्छे से बीज को एकत्र करें, 'सामुदायिक
बीज बैंक' में बीज जमा करवाएँ और उगाई
का सीजन आने पर बीज प्राप्त करें।

ANNEXURE-X

LIST OF ATTENDEES

Attendance list

Training -Workshop on Conservation of Genetic Diversity And Sustainable use of Community Seed Bank
(Under Project -Improving Pulse Biodiversity in Rice Fallow Areas of Tribal Belts of Central and East Indian States)

21st March 2020| Place : Community Seed Bank
(Run by PAIRVI under FAO project)
Village-Badia; Post-Kenmankathi via Jasidih
District-Deoghar, Jharkhand- 814142, India ✓

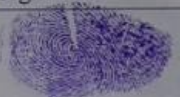


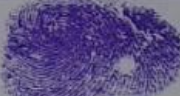


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No- 1

Sl. No	Name	Organization	E-Mail	Phone/Mobile	Signature
01	राहुल कुं आदव	o perwiderhi		9835439327	राहुल कुं आदव
02	राजकुमार आदव	"		9355161626	राजकुमार आदव
03	आनंदी आदव	"		8969491740	आनंदी आदव
04	राजीव रंजन आदव	"		6299354218	राजीव रंजन आदव
05	खंडेलाल आदव	"		9262828712	खंडेलाल आदव
06	अंजली मुखी	"		6205851424	अंजली मुखी
07	लाडकुमारी मुखी	"		8294736941	लाडकुमारी मुखी

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Sl. No	Name	Organization	E-Mail	Phone/Mobile	Signature
08	पानवलि देवी	perwidelhi			
09	मिली कुमर	"			
10	गंगा कुमारी सिन्हा	"			
11	रूपर देवी	"			
12	सती हेमरम	"			सती हेमरम
13	कुशी कुमर	"			
14	कुशियं देवी	"			

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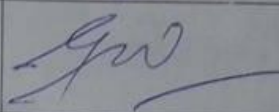
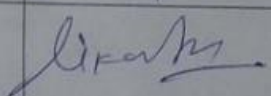
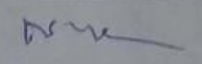
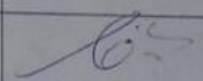
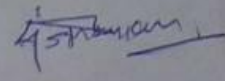
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Sl. No	Name	Organization	E-Mail	Phone/Mobile	Signature
15	मोला मोहन			8292376700	मोला मोहन
16	कांग्रेस कुली			कांग्रेस कुली	कांग्रेस कुली
17	सुधांशु शेरग			9431311328	सुधांशु शेरग
(18)	अमरेंद्र पाठक				अमरेंद्र पाठक
(19)	सीताराम			9430322686	Siyaaram
20	अपेन्द्र राम			9572869100	अपेन्द्र राम
21	लीजमणी शर्मा				

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Sl. No	Name	Organization	E-Mail	Phone/Mobile	Signature
(22)	गिरीश एन				
(23)	Gokul Padya	SAMRAT Madhupur	gokulnet @gmail.com	9430559815	
(24)	Vikas Anand	PAIRVI	g2020vikas 2021@gmail.com	9999062203	
(25)	Nandoo Kumar	SWP Com		912007774	
(26)	Parimala Singh	KVK, Sujau	pk Singh9431@ gmail.com	9852455918	
27	R.K. Singh	Govt of India MLA	rkssingh @rediffmail. com	9431132723	R.K. Singh
28	Sanjay Upadhyay	SWORD, Deoghar	skudra@gmail. com	7004523880	

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Sl. No	Name	Organization	E-Mail	Phone/Mobile	Signature
29	पंचमनंद झा	जमीन	M		पंचमनंद झा
30	बालकी ठाकुरी	कृषि सेवा	11		बालकी ठाकुरी
31	Sudhansu Kumar	L.V.S. Jamui		9031934146	Sudhansu kumar
32	Sudhansu Chandra	L.V.S. Jamui	lv.sansikam (a) krcsft mail. com	7319853175	Sudhansu
33	बालक पाठक	बादिमा	-	-	बालक पाठक
34	रंजित पाठक	11			रंजित पाठक
35	दिलीप डोरे	11			दिलीप डोरे

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Sl. No	Name	Organization	E-Mail	Phone/Mobile	Signature
36	सुभाष दुबे	बादिमा			सुभाष दुबे
37	विष्णु झा	कोवाकह			विष्णु झा
38	होषन मारडी	हुमना रोड			होषन मारडी
39	कोशिका देवी	बादिमा			कोशिका देवी
40	गुडिमा देवी	"			गुडिमा देवी
41	कान्हु देवी				कान्हु देवी
42	गिरिजा देवी	बादिमा			गिरिजा देवी



Fig. The beneficiary from Madhya Pradesh

सामुदायिक बीज बैंक

शाखा
Branch: ...तारापुर...

शाखा कोड
Branch Code: ...454552...

पता
Address: ...ग्राम तारापुर, तहसील धरमपुरी, जिला धार (म.प्र.)...

खाता क्र.
Account No.: ...454552-01-0005...

खाता प्रारंभ दिनांक
Date of Account Opening: ...17/06/2020...

खाताधारक का नाम
Name of Account Holder: ...सुभद्रा w/o. अमरसिंह कनेल...

जन्म तिथि
Date of Birth: ...01/01/1978...

पता/Address: ...ग्राम तारापुर, तहसील धरमपुरी, जिला धार (म.प्र.) - 454552...

आधार नं० - 373564567914




Fig. Account open in Community Seed Bank, M.P.

