

Guidelines on Establishing Mushroom Spawn Production Clusters



Mushroom cultivation refers to the artificial cultivation of mushrooms. It is an agricultural practice where mushrooms are grown in a controlled environment. Through this method, edible mushrooms can be produced in large quantities. Mushroom cultivation is economically significant as it provides farmers with a good source of income.

In mushroom cultivation, the availability of mother spawn is highly crucial. It serves as the basic material for mushroom cultivation and determines production efficiency and quality. Properly prepared mother spawn ensures successful mushroom cultivation. Through tissue culture techniques, the primary mycelium grown in Petri plates or test tubes is used to prepare the mother spawn, which is then used to produce bed spawn.

In the previous years, 94 mushroom sheds have been constructed under MGNREGS fund and working capital was given from TNSRLM fund for raising mushroom.

To scale up this effort, TNSRLM has proposed to establish 26 mushroom spawn production units for a total outlay of Rs.2.60 Crore by extending financial support of Rs.10 Lakhs to each unit.

1. Objectives:

- a. To support women farmers in taking up mushroom spawn production as a profitable livelihood activity.
- b. To encourage women farmers to actively get involved in mushroom spawn production by providing training, technical assistance, infrastructure and funding.
- c. To produce high-quality, sterile, commercial-grade spawn for mushroom cultivation.
- d. To help increase mushroom production to meet the growing domestic and global demand.

2. Selection of Districts

Districts were selected based on the following criteria to ensure viability, scalability, and sustainability of mushroom spawn production clusters:

- a. District where mushroom cultivation units were already established were prioritized.
- b. Regions with availability of input materials.
- c. Suitable climatic conditions.

3. District level Committee for Selection of Panchayats

For establishment of Mushroom spawn production cluster in the district, a **district-level selection committee** will be formed to choose the most suitable panchayat for Mushroom spawn production. The committee will include:

- a. Project Director, Mathi
- b. Assistant Project Officer (Livelihood)
- c. District Resource Person (Farm)
- d. Block Mission Managers
- e. Representative from Horticulture department.

4. Criteria for Selection of Panchayats

- a. **Panchayats** where SHGs are **already involved in mushroom cultivation**, as they will have the necessary skills and knowledge to transition into or expand into mushroom spawn production.
- b. Panchayats with moderate temperature and humidity.
- c. Areas with good transport and other infrastructure facilities.
- d. Having proximity to market or mushroom production centres.

5. Selection of Beneficiaries

- a. A **meeting** will be conducted **at the panchayat level** involving representatives from PLF and Community Resource Persons.
 - i. To explain the project objectives, guidelines, and expected outcomes of the mushroom spawn production cluster initiative.
 - ii. To highlight the benefits of taking up mushroom spawn production as a viable income-generating activity.

- **iii.** To encourage participation and address queries or concerns from potential beneficiaries.
- b. During this meeting, application should be collected from 10 SHG members interested in taking up mushroom spawn production as livelihood activity.
- c. The details of selected beneficiary should be placed in Grama Sabha and got approved.

i. General criteria for selection of Beneficiaries:

Should be SHG member for at least two years.

- a. The beneficiary should not have NPA / overdue in any NRLM fund support
- b) The Beneficiary should not be the President, Secretary, Joint Secretary or Treasurer of PLF / BLF.
- c) The beneficiary preferably not be book keeper, CST, CBC, DRP, BRP, BMM, BC or any other CRP.
- **d)** There **should not be repetition of beneficiaries** under various farm livelihood schemes in the last five years.
- e) Priority may be given for those SHG members who are destitute widow, SC, ST and poor and very poor in PIP list.

ii. Specific Criteria for selection of Beneficiaries:

- a. As mushroom spawn production needs technical knowledge, priority should be given to botany or zoology graduates having basic knowledge in tissue culture or mushroom cultivation or HSC with science group passed out members.
- b. Selected beneficiaries must sign a 3 years MoU with the BLF to properly maintain the assets created for the spawn production unit and ensure continuous production and this MoU should be renewed till repayment of the loan.
- c. Selected members should be willing to contribute minimum Rs.1000/- as membership fees. The amount collected as member

- contribution may be used for administrative reasons which may be decided by cluster members.
- d. Selected members must be willing to undergo structured training and adopt modern techniques in mushroom spawn production, maintenance and profitability.

6. Formation of Mushroom spawn production Cluster

- a. A group of 10 SHG women farmers interested / experienced in mushroom production from same or nearby villages (3 km radius) are integrated to form a mushroom spawn production cluster.
- b. Secretary and Treasurer should be elected by all 10 members of cluster to manage administrative, technical and accounting works of the cluster.
- c. A bank account should be opened in the nearby Indian Bank in the name 'with Panchayat Name as prefix TNSRLM Mushroom spawn production cluster 2025.' ".(Ex.Kattur TNSRLM Mushroom spawn production cluster 2025)

7. Implementation Strategy

- a. Mushroom spawn production may be established either in community building or a rented building. A resolution should be passed by PLF for establishment of mushroom spawn production unit by the identified SHG women in the unused Community building.
- b. If Common building is not available in Panchayat, private building of 400 - 600 sq.m with three phase power supply may be used on lease / rent for a period of three years. This lease / rent agreement should be registered and submitted to BLF before release of fund.
- c. Each mushroom spawn production cluster should prepare a proposal along with business plan for setting up a mushroom spawn production unit.
- d. The **services of Mathi Siragugal Thozhil Maiyam (MSTM)** may be used to prepare the proposal.

- e. The proposal should include details of the design of the spawn production room, specifications of laboratory equipment, working capital requirements, market opportunities, and basic information about the selected self-help group members.
- f. The proposal should clearly indicate the fund required for infrastructure support and working capital.
- g. This proposal should be **evaluated by BMM, APO LH & DRP Farm** and submitted with **a recommendation to PD (Mathi).**
- h. A **bipartite agreement** should be signed between the BLF and the Cluster, before release of funds to the cluster account.
- i. Five days technical training will be conducted at District Krishi Vikas Kendra (KVK) by experts on usage of various machinery for mushroom spawn production, besides one-day exposure visit to be arranged for the beneficiaries to nearby mushroom spawn production unit.
- j. Laboratory should be established for the quality spawn production unit and DRP Farm in close coordination with KVK scientist / mushroom spawn production expert should provide technical support to cluster members to ensure consistent production of mushroom spawn by these beneficiaries.
- k. Based on the training and guidance, the members will produce mother spawn and grain spawn following the appropriate technical procedures.
- Amount collected by the sale of spawn should be deposited in the cluster account.

8. Registers to be Maintained

- a. Beneficiaries Basic Data Register
- b. Resolution Register
- c. Cash Book
- d. Loan disbursal and collection register
- e. Mushroom spawn production and sales register
- f. Asset register.
- g. Repair and maintenance register for spawn unit.
- h. Visitor register.

9. Fund Allocation

Each mushroom spawn production cluster will receive a sum of Rs.10 lakhs, with the following fund break-up.

SI. No.	Description	Estimated Cost (Rs.)
1	Rent for any Community building or private building with 400 - 600 sq. feet area with 3 phase power supply on lease for 3 years @ Rs.12000/- rent per month	4,32,000
2	Autoclave (Sterilization Equipment)	85,000
3	Laminar Fluorescent Chamber	50,000
4	Refrigerator	20,000
5	Pressure Cooker (22 L)	5,000
6	LPG Oven & Gas Cylinder	10,000
7	Weighing Balance & Measuring Cylinders	5,000
8	Inoculation Needles & Wire Baskets	10,000
9	Miscellaneous Lab Equipment	20,000
10	Training & Exposure visit	45,000
11	Registers & Sign board	8,000
	Total	6,90,000
	Working capital	
1	Raw Materials (Grains, Chemicals, etc.)	2,00,000
2	Polypropylene Bags & Cotton	50,000
3	Electricity & Fuel	30,000
4	Glassware & Chemicals for Mother Spawn	25,000
5	Miscellaneous Expenses	5,000
	Total	3,10,000
	Grand Total	10,00,000

10. Fund Release

- a) The amount shall be released from SMMU to DMMU
- b) An Implementation team of APO (LH) DRP (Farm) and BMM concerned should visit the panchayat and ensure formation of mushroom spawn production cluster with 10 women as per eligibility, opening of bank account, availability of a building with minimum 400 to 600 sq.ft space & 3-phase EB connection, quotation for establishment of mushroom spawn

- production unit, readiness of all women, etc., and submit **report to PD, TNSRLM** in the format specified in Annexure 2 & 3.
- c) Also, the proposal for setting up mushroom spawn production unit must be evaluated by BMM, APO LH & DRP Farm and submit a recommendation to PD (Mathi)
- d)On confirmation of above parameters, fund should be released through FDM / ECS as detailed below in tranches:

Tranche 1:

Installation of mushroom spawn production unit:

- 1. DMMU should release 50% of fund allocated to BLF within 7 days with the narrative of mushroom spawn production cluster.
- BLF should release the fund to mushroom spawn production cluster within 7 days, following the execution of a bipartite agreement between BLF (agreement model given in annexure – 3) and the Cluster which consists clause stating
 - a) Shall utilize the funds for mushroom spawn production in the designated village.
 - b) To follow cluster approach for procurement of mother culture, medium for propagation, autoclave, grains, sawdust, and other nutrients etc., and aggregation, marketing and to carry out mushroom spawn production.
 - c) To repay the loan with 6% interest, starting from the third month.
- 3. Only the actual cost incurred for mushroom spawn production cluster will be provided as a loan. If the incurred cost is less than the sanctioned amount, only the actual cost will be disbursed. Any additional cost beyond the sanctioned loan amount shall be borne by the beneficiary.

Tranche 2: 50% may be released after installation of mushroom spawn production unit.

Tranche 3:

Fund for training by KVKs: A total sum of Rs.11.70 Lakhs will be transferred to Tamil Nadu Agricultural University, Coimbatore for

conducting training to 260 SHG women through KVKs in 26 districts for five days @ Rs.45,000/- per batch of 10 women.

Common Guidelines:

- i. The **procurement process** should be followed as per **community procurement guidelines** of TNVKP.
- ii. The mushroom spawn production unit should be installed at the supervision of the CRP Farm and in the absence of CRP Farm, BC LH should be responsible. BC LH should conduct a field visit and certify that the erection of mushroom spawn production is completed and the cluster is ready for operation.
- iii. The Asst. Project Officer (LH) and DRP (Farm) should conduct a super check through a physical field visit and recommend a release of balance second tranche based on satisfactory completion of the work.
- iv. All the transactions should be only through ECS (RTGS/NEFT)

11. Training to beneficiaries

- a. A **five days training** will be provided to the beneficiaries through **Krishi Vigyan Kendras**.
- b. Four days training as indoor session will be imparted on requirements for spawn production, step by step mushroom spawn production process, Hygienic and sterility practices, storage & handling of spawn, packaging and marketing, etc., and the beneficiaries will be taken on a one-day exposure visit to nearby mushroom spawn production unit.
- c. Among the fund of Rs.10 lakhs allocated to each mushroom spawn production cluster, Rs.45,000/- is allocated to the five days training.

S. No.	Activity	Unit cost (Rs)	No of units	Amount (Rs)
1	Food & Refreshments @ Rs.250/- per head for 10 persons for five days	2,500	5	12,500
2	Mobilization Charges @ Rs.100/- per day for 10 persons for five days	1,000	5	5,000
3	Hall Rental Charges	1,000	5	5,000
4	Demo materials, Lab Chemicals & Glass wares			5,000
5	Stationary (Note, Pen & Reading materials)	100	10	1,000
6	Honorarium @ Rs.500/- per session (2 Sessions per day)	1,000	5	5,000
7	Exposure visit – Vehicle hiring			10,000
8	Miscellaneous - Banner & Documentation			1,500
	Total			45,000

d. Based on this budget, a total sum of Rs.11.70 Lakhs will be transferred to Tamil Nadu Agricultural University, Coimbatore for conducting training to 260 SHG women through KVKs in 26 districts for five days @ Rs.45,000/- per batch.

12. Marketing Strategy

Before the harvest of mushroom spawn, the District Team of APO (LH), DRP Farm, DSMS manager and CRPs concerned in collaboration with the KVK Scientist / Horticulture department should support the cluster team members on the following aspects for remunerative marketing of mushroom spawn.

- a. For Marketing of mushroom spawn, DRP Farm & DS MS Manager to jointly study marketing scope, identify traders and marketing tieup first time to all mushroom production units established under TNSRLM & other mushroom units in the district for sale of mushroom spawn. Subsequently, DSMS, Manager to follow the marketing of mushroom spawn after each harvest.
- b. **DSMS Managers** should identify larger markets in urban areas for distribution of mushroom spawn.

13. Loan Repayment

- a. The amount collected by the sale of spawn should be credited in the cluster account and repayments to BLF should be done from this cluster.
- b. Loan repayment should be made at **6% interest rate**.
- c. Entire fund sanctioned under mushroom spawn production units needs to be repaid to the BLF except training, registers and name board expenses.
- d. **A moratorium period of 2 months** is permitted from commencement of mushroom spawn production, during which only interest is to be repaid.
- e. From the cluster account, the due amount (Principal and interest) for that month should be transferred to the BLF Farm Cluster Account through ECS.
- f. Following the moratorium, repayments should be made in monthly instalments. The repayment amount, along with the applicable interest, should be paid on or before the 10th of every month to the BLF account.
- g. **Repayment period will be 24 months** maximum after the moratorium period.
- h. Repayments should be recorded in a cash Book and proper receipts should be got from the BLF.
- Repaid loan amount may be used for paying lease amount and working capital for further expansion by the Cluster's existing members up to two repayment cycles.
- j. If existing members are not willing to continue mushroom spawn production in the later year or further expansion, eligible new members who are interested in joining this cluster may be included after verification by the team consisting of BC (LH), BMM and APO (LH), with prior approval from the BLF.

k. If no SHG member in the panchayat is willing to take up mushroom spawn production in later year or after 2 more repayment cycles, and fund is kept idle, BLF, with the approval from DMMU, should release the fund to another **new cluster** willing to take up mushroom spawn production as a cluster.

14. Monitoring & Evaluation

- a. CRP (Farm) should ensure timely loan repayments.
- b. BMM, Zonal BC & BC (LH) should inspect the cluster, ensure regular meetings, and oversee the expenditure made, quantity of mushroom spawns and mushroom produced and income generated besides maintenance of registers.
- c. **DRP (Farm)** should check the successful running of mushroom spawn production & provide **technical support**.
- d. **APO (Livelihood)** should inspect the cluster monthly to **monitor fund utilization** and record maintenance.
- e. PD, Mathi should visit the cluster once in two months and super check proper implementation of the scheme & marketing of mushroom spawns and mushroom.
- f. The **PD (Mathi)** should conduct **monthly review** on functioning, repayment and earnings of the cluster with APO LH, DRP Farm, BMM and BC LH.
- g. Once in six months, progress can be reviewed during convergence meeting with the Line departments under the chairmanship of District collector.

15. Expected Benefits

- a. Increased income generation for women farmers as spawn production has better profits than selling mushroom.
- b. Ensures availability of high quality, sterile commercial grade spawn to the mushroom spawn production units.

16. Way Forward

- a. Expanding the market by supplying the spawn to Livelihood Support centres of IFCs, Agriculture Input shops, Institutes running mushroom programs, etc.,
- b. Increasing the mushroom production as per the raising demand.

Annexure-1: District wise Targets

District wise target for establishment of mushroom spawn production clusters is given to 26 districts where mushroom cultivation units were set up in 2022-23.

SI. No.	District	No. of Clusters				
1	Chengalpattu	1				
2	Coimbatore	1				
3	Cuddalore	1				
4	Dharmapuri	1				
5	Dindigul	1				
6	Kallakurichi	1				
7	Kanniyakumari	1				
8	Karur	1				
9	Krishnagiri	1				
10	Madurai	1				
11	Namakkal	1				
12	Pudukkottai	1				
13	Ramanathapuram	1				
14	Salem	1				
15	Sivagangai	1				
16	Tenkasi	1				
17	Theni	1				
18	Thoothukudi	1				
19	Tirunelveli	1				
20	Tirupathur	1				
21	Tiruppur	1				
22	Tiruvallur	1				
23	Tiruvannamalai	1				
24	Vellore	1				
25	Villupuram	1				
26	Virudhunagar	1				
	Total 26					

Approved by Managing Director

<u>Annexure -2</u> Recommendation for fund release from DMMU to BLF.

S. No.	Particulars	Details			
1	Name of the Block				
2	Name of the Cluster				
3	Name of the Panchayat				
4	Grama Sabha approval date of selected Beneficiaries				
5	Date of Account opening				
6	Bank Name				
7	Branch Name and IFSC code				
8	Account Name as per bank passbook				
9	Account Number				
10	Secretary Name and Mobile Number				
11	Treasurer Name and Mobile Number				
12	Beneficiary eligibility (Sub format enclosed) for number of Beneficiaries whether verified				
13	Per member contribution in (Rs.)				
14	Conduct of Regular meeting				
15	Name of the Register Maintained				
16	Nearby mushroom market (mentioned area and distance)				

Cluster	format	ion and	selection	of b	eneficiaries	are	verified	as	per
guidelines	and	recomm	nended	for	release	of	funds	S	to
the	clu	uster of			_PLF in _			_Bl	ock
through BLF.									

Block Coordinator (LH)

Block Mission Manager

Asst. Project Officer (LH)

<u>Annexure -3</u> Sub Format for Eligibility of Beneficiary Identified***

S.No	Particulars	Details
1	Name of the Beneficiary	
2	Name of the Husband/ Guardian	
3	Address	
4	Date of Birth/Age	
5	Mobile Number	
6	Name of the SHG	
7	Number of years as an SHG member	
8	NRLM member ID No.	
9	Community (SC/ST/MBC/BC/Others)	
10	Whether comes under special category	
	(Diff. abled / Widows/Destitute widows)	
11	Aadhar card Number	
12	Smart card Number	
13	Do you have MGNREGA card? If yes, provide card number	
14	PIP Number and Category	
15	Total area of Land owned / leased(cents)	
16	Whether the member presently cultivates mushroom?	
17	Experience in mushroom cultivation or tissue culture	
18	Area of land where mushroom cultivation is taken up (in sq.ft)	
19	Any loan availed under livelihood activities	
	a. Name of the scheme:b. Loan amount availed in Rs.	

20	Any overdue / NPA in Rs.	
I declar	e that the above details are correct and in line	e with my consensus.
Date: Signatu	ıre	Beneficiary
Place:		
The abo	ove details were verified by me and found cor	rect
Nam	e of the CRP(Farm):	
CRP(Fa	rm) Mobile Number:	

Attachment:

1. Aadhar Card Xerox Copy

Signature of CRP(Farm):

- 2. Smart Card Xerox Copy
- 3. MGNREGA Xerox card
- 4. SHG Resolution copy for the number of years as an SHG member
- 5. SHG Resolution copy not to be a office bearer in BLF/PLF
- 6. SHG Resolution copy for No overdue or NPA in any Bank/institution
- 7. Patta copy/Lease agreement copy
- 8. Selected Member Grama Sabha approval copy

*** This format to be collected for each beneficiary separately and attached to the Annexure-2 for fund release to BLF.

Annexure-4 BIPARTITE AGREEMENT

This Bipartite Agreement is made on this day of, 20 at
Among:
1. Block Level Federation (BLF), a community-based organization constituted under the guidelines of the [Tamil Nadu State Rural Livelihoods Mission], having its office at, represented herein by its
President/Secretary, Shri/Smt, hereinafter
referred to as the "First Party" (which expression shall, unless excluded by or
repugnant to the subject or context, include its successors and permitted assigns);
AND
2 Cluster, a collective of cultivating SHG women
farmers functioning under the aegis of the First Party, with its
registered/recognized office at, represented by its
Cluster Leader/Representative Selvi/Smt
hereinafter referred to as the "Second Party";
 WHEREAS: The First Party is responsible for facilitating and overseeing Cluster initiatives at the Block level. The Second Party manages implementation and support at the cluster level.
NOW, THEREFORE, THIS AGREEMENT WITNESSETH AS UNDER:
1. Roles and Responsibilities
 1.1 First Party (Block Level Federation) Shall: Facilitate capacity building, training, and support services for(Agriculture/Horticulture/Sericulture/Animal Husbandry) Mobilize and release funds/grants/subsidies received under any government or non-governmental scheme to the Second and/or Third Party, as per approved norms.
• Release the cluster funds of Rsreceived
from the District Mission Management Unit to the Second Party's bank account
 within 7 days from the date of receipt of funds. Participate (through any one of its representatives) in the monthly meeting of
the cluster and monitor the cluster activities and progress.
Monitor the proper maintenance of registers by the cluster.

• Provide conflict resolution support and maintain oversight over operations.

• Monitor and evaluate the implementation of the project and ensure adherence to prescribed guidelines.

1.2 Second Party (_____ Cluster) Shall:

- Coordinate procurement, input supply, training, and market linkages.
- Maintain records of disbursements, training, production, and sales.
- Utilise the amount of Rs._____ against activities such as within 7 days of receiving funds from the First Party.
- Utilize the funds strictly for the purposes they are meant for and shall not divert the funds for any other purpose.
- Repay the loan with 6% interest starting from the 3rd month from the date of receiving funds from the first Party and pay only interest during the first two months.
- Properly maintain all assets acquired under the scheme and shall not sell or transfer them to outsiders without prior approval from the First Party.
- Participate in training, share production data, and allow inspections as required.
- Ensure cleanliness in units, and follow standard protocols.

2. Duration

This Agreement shall remain in force till the repayment of loan unless extended by mutual consent or terminated earlier as per Clause 5.

3. Financial Terms

Disbursement and utilization of funds shall follow the installment structure detailed in Section 1.2.

All repayments with interest shall be made as per the repayment schedule.

Refer to Annexure A for detailed repayment schedule. (Model repayment schedule attached for reference)

4. Dispute Resolution

Disputes, if any, shall be resolved amicably at the Panchayat level first. If unresolved, they shall be escalated to the Block Level Federation and DMMU under the [TNSRLM].

5. Termination

This Agreement may be terminated:

- By mutual consent of all parties;
- By the First Party upon breach or non-performance by the Second Party;
- By the Second Party upon return of all assets and repayment of funds as applicable, with 30 days written notice.

6. Miscellaneous

The Agreement does not constitute an employment or agency relationship.

All annexures, rules, guidelines, and communications relating to the scheme are binding components of this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

Signature of First Party (BLF Secre	tary & Treasurer)
Name:	Name:
Designation:	
Seal:	Seal:
Signature of Second Party (Cluster Secretary & Treasurer)
Name:	Name:
Designation:	Designation:
Seal:	Seal:

Annexure A:

Repayment Schedule

Na	me	of	the	cluster	or	Activity	:
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Name of the Beneficiary with Father or Husband Name:

Name of the SHG:

Total Loan Amount:

Interest rate:

Repayment period:

S.	Month	Repayment A	mount (Rs.)	Total amount to be repaid
No.	Fioriti	Principal	Interest	Герин
1				
2				
3				
4				
5 6				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
	Total			

Signature of the BLF
Secretary and Treasurer

Signature of Cluster
Secretary and Treasurer