

Sub: General Fertilizer (Natural) Recommendation (GFR) for Natural Farming-reg
Ref: F.No. 17-2/2024-NMNF (FTS 146926) dated 13 November 2025

As per the reference cited above, General Fertilizer (Natural) Recommendation for Natural Farming inputs is to be developed for the purpose of Soil Health Card recommendation. Accordingly, draft was prepared and discussed with network centres of AINP-NF, NMNF model farms and also NCONF, Ghaziabad on 14 January 2026. The suggestions are incorporated.

General Natural Farming Input Recommendation for Soil Health Card

Natural farming recommendations are not to be interpreted as quantitative nutrient supply models, but as guidelines for regenerative agriculture. Nutrient availability under Natural Farming is driven by microbial mineralization, not by direct nutrient addition and Mulching and legume integration are non-negotiable core practices. Accordingly, the evidence from following were considered for preparing the GFR (Natural) for Natural Farming.

- Experimental evidences from ICAR-AINP on Natural Farming (2020–2025)
- Published Research papers on Beejamrit and Jeevamrit
- FAO (2018): Soil Organic Carbon & biological nutrient cycling
- NMNF Operational Guidelines (Govt. of India)

Objective: Improve nutrient availability, microbial biomass, soil structure, and crop productivity through biological processes

Basis of Recommendation

- Soil Test Indicators: Soil Organic Carbon (SOC), Available N, P, K
- Inputs: Beejamrit, Ghanjeevamrit, Jeevamrit, Bio mulch & Cropping System

1. Low Soil Organic Carbon & Low Available N, P, K

A. Cereals (Rice, Wheat, Maize, Sorghum, etc.)

Component	Recommendation	Purpose
Pre-kharif	Green manuring or multivariate cropping	Add the natural biomass in to the soil before main cropping
Seed Treatment	Beejamrit	Seed-borne disease suppression, early microbial colonization
Basal Application	Ghanjeevamrit @ 6000 kg/ha	Builds SOC, slow nutrient release
Top Dressing	Ghanjeevamrit @ 3000 kg/ha (once, 25–30 DAS)	Sustains nutrient supply
Liquid Input	Jeevamrit @ 2500 L/ha, twice/month (irrigation or 10% foliar)	Enhances microbial activity & nutrient solubilization
Cropping System	Intercropping / cover crops with legumes	Biological N fixation
Mulching	Crop residues @ 5–6 t/ha / Leguminous Cover crops, Azolla as mulching in lowland rice	Moisture conservation, SOC build-up

B. Pulses / Oilseeds / Millets

Component	Recommendation
Pre-kharif	Green manuring or multivariate cropping
Seed Treatment	Beejamrit
Basal	Ghanjeevamrit @ 2000 kg/ha
Liquid Input	Jeevamrit @ 1500 L/ha, twice/month
Cropping System	Legume-based intercropping
Mulching	Crop residues @ 3-4 t/ha / Leguminous Cover crops, Azolla as mulching in lowland rice

C. Commercial Crops (Cotton, Sugarcane, Vegetables, Horticulture)

Component	Recommendation
Pre-kharif	Green manuring or multivariate cropping
Basal	Ghanjeevamrit @ 6000 kg/ha
Top Dressing	Ghanjeevamrit @ 3000 kg/ha
Liquid Input	Jeevamrit @ 2500 L/ha, twice/month
Cropping System	Cover crops + legumes
Mulching	Crop residues @ 5–6 t/ha / Leguminous Cover crops, Azolla as mulching in lowland rice

2. Medium Soil Organic Carbon & Medium Available N, P, K**A. Cereals**

Component	Recommendation
Pre-kharif	Green manuring or multivariate cropping
Basal	Ghanjeevamrit @ 5000 kg/ha
Top Dressing	Ghanjeevamrit @ 2500 kg/ha
Liquid Input	Jeevamrit @ 2000 L/ha, twice/month
Cropping System	Legume intercropping
Mulching	Crop residues @ 5–6 t/ha / Leguminous Cover crops, Azolla as mulching in lowland rice

B. Pulses / Oilseeds / Millets

Component	Recommendation
Pre-kharif	Green manuring or multivariate cropping
Basal	Ghanjeevamrit @ 2000 kg/ha
Liquid Input	Jeevamrit @ 1500 L/ha, twice/month
Cropping System	Diversified cropping
Mulching	Crop residues @ 3-4 t/ha / Leguminous Cover crops, Azolla as mulching in lowland rice

C. Commercial Crops

Component	Recommendation
Pre-kharif	Green manuring or multivariate cropping
Basal	Ghanjeevamrit @ 5000 kg/ha
Top Dressing	Ghanjeevamrit @ 2000 kg/ha
Liquid Input	Jeevamrit @ 2000 L/ha, twice/month
Cropping System	Cover crops
Mulching	Crop residues @ 5–6 t/ha / Leguminous Cover crops, Azolla as mulching in lowland rice

3. High Soil Organic Carbon & High Available N, P, K

A. Cereals

Component	Recommendation
Pre-kharif	Green manuring or multivariate cropping
Basal	Ghanjeevamrit @ 2000 kg/ha
Top Dressing	Ghanjeevamrit @ 1000 kg/ha
Liquid Input	Jeevamrit @ 1500 L/ha, twice/month
Cropping System	Crop diversification
Mulching	Crop residues @ 5–6 t/ha / Leguminous Cover crops, Azolla as mulching in lowland rice

B. Pulses / Oilseeds / Millets

Component	Recommendation
Pre-kharif	Green manuring or multivariate cropping
Basal	Ghanjeevamrit @ 1000 kg/ha
Liquid Input	Jeevamrit @ 1000 L/ha, twice/month
Cropping System	Mixed cropping
Mulching	Crop residues @ 3–4 t/ha / Leguminous Cover crops, Azolla as mulching in lowland rice

C. Commercial Crops

Component	Recommendation
Pre-kharif	Green manuring or multivariate cropping
Basal	Ghanjeevamrit @ 3000 kg/ha
Top Dressing	Ghanjeevamrit @ 1000 kg/ha
Liquid Input	Jeevamrit @ 1500 L/ha, twice/month
Cropping System	Cover crops
Mulching	Crop residues @ 5–6 t/ha / Leguminous Cover crops, Azolla as mulching in lowland rice

Interpretation for Soil Health Card (SHC)

- SOC < 0.5% → High-dose Ghanjeevamrit + frequent Jeevamrit
- SOC 0.5–0.75% → Moderate biological inputs
- SOC > 0.75% → Maintenance dose only