

Scheme Guidelines on “Coffee Plantations for Sustainable Livelihoods (CPSL)”

1. Background of the Scheme

Coffee has emerged as one of the most profitable commercial crops among the farmers of the state due to its encouraging prospects on financial benefits and rebuilding of ecosystem mainly aimed at deriving benefits by improvement of environment. The Government of Odisha is implementing State Sector Scheme “Coffee Plantation for Sustainable Livelihoods” for the period 2022-23 to 2026-27. The hilly tracts of Koraput, Rayagada, Kalahandi, Kandhamal, Keonjhar and Gajapati districts with an altitude of 600 to 1000 meters above MSL are ideal for taking up coffee cultivation. The scheme envisages on expanding the State Coffee acreage from 10,000 acres at present to 1,00,000 acres by 2032, with 20,800 MT total production from the existing 540 MT in 10 years (2022-23 to 2031-2032) spreading across 6 tribal districts of Odisha. Over the period the value of production will increase from Rs. 21.76 crores to Rs. 832.00 crores wherein around 50,000 farm families are to be benefited.

Implementing Department

This Scheme will be implemented by the Directorate of Soil Conservation and Watershed Development under Agriculture and Farmers’ Empowerment Department. During implementation period, the Directorate will also collaborate with quality resource organisations like Coffee Board and others for productivity enhancement, capacity building and infrastructure & brand development.

2. Scheme Objectives:

- To consolidate / rejuvenate the existing Coffee plantations.
- Encourage and facilitate increased investment in area expansion, production and productivity of coffee.
- Find creative ideas and methods for rekindling interest in coffee production in the state of Odisha.
- Support Odisha’s farmers to profitably own their coffee along with the coffee value chain for sustainable livelihoods, consumer satisfaction and transformation.
- Establish a market driven system of coffee farmer enterprises and organisations to increase their household income through enhanced entrepreneurship and innovation.
- To enhance the quality of coffee through technology, training and quality control supports.
- To collaborate with high quality resource organisations including Coffee Board for infrastructure and brand development along with market linkage.

- To establish an integrated coffee specific extension service on a sustainable basis.

3. Coverage of Activities under the Scheme and Duration:

- The scheme will be implemented in six districts of the State namely Koraput, Rayagada, Kalahandi, Kandhamal, Keonjhar and Gajapati.
- 90000 acres of shade plantation and 27000 acre of coffee plantation will be taken up during the period of five years from 2022-23 to 2026-27.

SITE SELECTION

Under the overall supervision and guidance of District Collector, a team of officers consisting of local Tahasildar, B.D.O, representative of Coffee Board and representative of Programme Implementing Agency will identify suitable contiguous and compact patches of non-forest Revenue lands for the coffee plantation purpose. Existing watershed areas will be the first priority since motivation and community mobilization have already come into existence here. Individual land of the interested beneficiary up to 1 hectare will also be included.

SELECTION OF BENEFICIARIES

B.D.O. and Programme Implementing Agency will select beneficiaries in clusters through "Palli Sabha" from the adjacent villages and hamlets of the plantation site. Landless, small farmers and tribal beneficiaries should be given priority.

Each beneficiary will be provided with a maximum one hectare (2.5 acres) of land area/site, if plantation is taken up in Government land. These beneficiaries can also be grouped into SHGs, Coffee Growers Society etc. The programme implementing agencies will send the beneficiaries list to the B.D.O and Tahasildar for demarcation of site and for issuing Tree Patta / Usufructuary Rights / Permissive Possession to the beneficiaries.

Shade Plantation for Sustainable Coffee Cultivation

- The main advantage of shade trees is their ability to reduce the intensity of sunlight and temperature. Growing coffee under shade prevent excessive evaporation of moisture from soil and thus combating the effects of drought. Additionally, shade trees protect coffee plants from hailstone damages, high wind velocities and overbearing which can negatively impact coffee production.
- After selection of site and beneficiaries, the Implementing Agency will take up the Shade Plantation. Site Cleaning, pitting, raising of nursery, fencing and planting will be done through beneficiary identified for the site and his family members from the beginning.

(A) Nursery of Shade Plantation:

- Shade Plantation Nursery is required for raising the seedlings for planting the same in the field for facilitating coffee plantation in the area in future. 2200 No. of seedlings (1945 no. of Silver oak (*Grevillea robusta*) + 255 no. of local jack fruit, jamun, mango, fig, champa etc.) to be raised for covering 1 hectare of area of shade plantation. Seedlings for 88000 ha of area will be raised in the scheme (2022-23 to 2026-27). It has been decided that the Forest, Environment and Climate Change Department of Odisha Government will provide the seedlings basing on the requisition of Deputy Director Soil Conservation of the concerned district by June-July month of the year for timely planting in the field.
- Forest, Environment and Climate Change Department will raise the required number of seedlings from their departmental funds from the year 2024 onwards. For the 1st two years of the scheme, i.e., 2022-23 and 2023-24, seedlings can be raised by DA & FE Department through DSC&WD as the gazette notification of the scheme got published on 29.01.2024. If needed, DAFE may raise seedlings to fulfil the required plantation program.
- The estimated cost for raising seedlings of 1 ha is approved at Rs. 26,400/- which will be followed by DA&FE. Healthy seedlings of at least 18" or more height and girth of minimum 12 mm will only be allowed for planting. If required quantity of seedlings are not available at the time of planting, seedlings can be procured from outside with the above cost norm and quality following proper procurement procedures as per Odisha Government norms to achieve the target of the year.
- Women SHGs/FPOs/Other departments will be involved and encouraged to raise the seedlings.

(B) New Shade Plantation:

- Shade Plantation will be taken up in the field of both Govt. Land and private land, identified for taking up coffee plantations in the future. 2200 No. of plants will be covered in one hectare (1945 No. of silver oak and 255 No. of other identified local species).
- The spacing of 2.13 meter X 2.13 meter will be maintained for planting of shade seedlings. The cost of 1 hectare of new shade plantation is Rs. 1.00 lakh per hectare out of which Rs. 0.75 lakh will be met from the scheme and balance Rs.0.25 lakh will be met from MGNREGS/DMF/OMBADC/any other schemes through convergence.
- The shade plantations can be implemented by Divisional Forest Officer/Deputy Director Soil Conservation-cum-PDWS/ ITDA/ Horticulture/ Panchayat Samiti (PR) of the concerned district.

- The approved cost norm along with the specification mentioned above will be followed irrespective of the executing agency.
- Intercropping of suitable pulses, cereals, oilseeds crops and vegetables will be taken up in the plantations. These will be facilitated through convergence of such schemes implemented in the concerned districts.
- The beneficiaries of the shade plantations will be encouraged from the starting of the activity and will be involved from the beginning.

(C) 1st year and 2nd year maintenance of Shade Plantation:

- The newly planted shade plantations will be maintained for two years. The estimated cost approved for 1st year maintenance is Rs. 58,306/- per ha and for 2nd year maintenance is Rs. 41,250/- per ha.
- The above maintenance activities will be taken up under MGNREGS through convergence by the respective implementing agencies who have taken up the original Plantation.
- On completion of 3 years of Shade plantations (Planting year + 2 years maintenance), these will be utilised for taking up coffee plantations.

Coffee Plantation

- Coffee plant needs a period of three years to grow and develop from seed germination to first flowering and fruiting. It is a perennial plant (lives for many years), a well maintained coffee plant lives more than 40 years. It is evergreen (plants that do not shed their leaves during a specific season) in nature.
- Coffee being a perennial crop, use of high quality seeds is critical in establishing a productive coffee plantation. To raise good quality seedlings, use of authentic seed material from authorized sources is recommended. The production of quality seed involves careful monitoring at every stage of seed preparation. It starts from establishing genetically pure seed blocks, removal of off types, forcing the blossom well in advance.
- When coffee plants are young and newly planted in cleared areas, farmers can practice intercropping by growing annual crops alongside the coffee to generate additional income in incoming years and will help to control growth of weeds.

(D) Raising of Coffee Nursery

- Seedlings of coffee plantation will be raised from the seeds supplied/certified by Coffee Board, GoI only.
- 2200 No. of seedlings are needed for 1 hectare of coffee plantations.
- *Arabica* coffee seedlings will be raised for plantation under the scheme.
- Healthy, disease free seedlings with 5 pairs or more leaves will only be used for plantations in the main field.
- The cost of raising of seedlings for 1 ha, i.e., 2200 Nos. is approved at Rs. 31,050/-. Women SHGs will be engaged for raising of coffee seedlings for which they will be provided with the certified seeds by the Deputy Director, Coffee Development, Koraput/ Deputy Director, Soil Conservation-cum-PDWS of the concerned districts.
- Seedlings attaining proper stage of planting will be procured by the Deputy Director, Coffee Development, Koraput/ Deputy Director, Soil Conservation of the concerned districts within the cost approved as above, i.e., Rs. 31,000/- per ha.
- If WSHGs will not be able to raise the seedlings for planting, the Deputy Director, Coffee Development, Koraput/ Deputy Director, Soil Conservation-cum-PDWS of concerned districts can raise the nursery or procure certified seedlings from others within the approved cost norm.
- Proper procurement procedures as per Odisha Government norms and approval from competent authorities are to be obtained in above cases.

(E) New Coffee Plantation:

- Coffee Plantations will be taken up under the shade plantations which are feasible both in Government and Private land. The cost of 1 ha of new plantation is Rs. 2.00 lakh covering 2200 No. of plants with a spacing of 2.13 meter X 2.13 meter.
- One beneficiary can be provided with maximum 1 ha of coffee plantation. If the land is Govt., then usufruct rights only be given to the beneficiaries. The beneficiaries for these categories will be approved by the Grama Sabha with the approval of the District Magistrate and Collector of the concerned district.
- Coffee Board subsidy applicable from time to time will be availed for the plantation. The beneficiary share will be 10% of the estimated cost which can be availed through execution of equal costs of activities included in the estimate. The balance fund will be met from State Plan.
- Intercropping of black pepper and other spices crop suitable to the location will be taken up in the Coffee Plantation.

(F) 1st year , 2nd year & 3rd year maintenance of Coffee Plantation:

- The newly planted coffee plantations will be maintained for three years. The estimated cost approved for 1st year maintenance is Rs. 1,15,000/- per ha , for 2nd year maintenance is Rs. 1,00,000/- per ha, and for 3rd year maintenance is Rs.90,000/- per ha.
- The above maintenance activities will be taken up under State plan.
- 10% of the estimated cost would be contributed by the beneficiary.
- Coffee board subsidy as admissible will be availed within the estimated cost.

(G) Creation of Irrigation Sources:

- Irrigation plays a crucial role in different stages of coffee growth. To ensure the successful growth of young coffee plantations, it is essential to irrigate them well below root zone during dry months. During the flowering period, adequate water is necessary to prevent premature flower drop and floral abnormalities. As the berries enlarge, they require sufficient water to prevent it from falling off the plant or failing to reach full size. Lastly, during the bean development and hardening stage, if soil moisture is inadequate, irrigation ensures high quality, dense beans.
- Irrigation facilities to the coffee plantations will be provided to the beneficiaries by construction of bore wells/micro river lift projects through convergence of ongoing schemes implemented by the Directorate of Agriculture and Food Production, DAFE, Odisha.
- After successful construction of the irrigation sources, microirrigation (Drip/ Sprinkler) will be provided to the beneficiary through PMKSY-PDMC scheme implemented by the Directorate of Horticulture, DAFE, Odisha or any such other scheme implemented in the state.

(H) Supply of Coffee Baby Pulper Machines:

- 50 % of the cost of baby pulper machine will be the subsidy of Coffee Board. The balance amount of the cost will be provided from the scheme (Maximum one no. per one family).
- The claim of subsidy will be initiated by the nodal department, i.e., DAFE through the Directorate of Soil Conservation and Watershed Development represented by the district officers of DSC &WD as per the procedure followed by the Coffee Board, GoI.

(I) Construction of drying yards:

- Each beneficiary of coffee growers under the scheme may avail the benefit of subsidy from Coffee Board, GoI for construction of drying yard limited to 400 square feet size. 50 % subsidy of the unit cost is provided by the Coffee Board, GoI. Balance fund will be provided from the scheme.

(J) Post-Harvest Support:

- Post-harvest support, i.e., cleaning, grading, packing, storage facility, processing etc. will be provided through FPOs/WSHG Federations/Farmer Group etc. The modalities will be finalised following the SOP of other similar commodities included in the State.

(K) Training and Capacity Building:

- Training and Capacity Building Programme will be conducted for the coffee growers, workers, field officers and line department officials during the period of implementation of the scheme for knowledge dissemination, awareness generation. One day training, short duration trainings, exposure visits, workshops etc. will be organised for all stakeholders involved in coffee plantation and value chains.
- The cost norm of ATMA, OLM, Coffee Board etc. will be followed for conduct of training programmes. The cost norm for workshop and exposure visits within the state and outside state will be on actual basis prevailing for the state.

(L) Human Resource Support:

- Human Resource Support is required to execute the programme at the grass root level. Hence, field level supervisors, block level staff, State programme management unit are required for timely and quality progress of the scheme. These persons will be engaged through outsourcing agency following the Govt. guidelines and procedures applicable from time to time. The remunerations of the staff will be uniform throughout the State implementing Coffee Plantation Program.

(M) Administrative Cost:

- The administrative cost including contingencies for the scheme will be limited to 2 % of fund utilised by the district under State Plan Budget provided in the Scheme.

Other important issues:

- The area of Coffee plantation may be extended to other districts, if found suitable for coffee plantation within the project period.
- **In case proposed convergence of fund is not available under the respective schemes, the same will be met from the proposed state scheme after concurrence of Finance Department for successful implementation of scheme by making suitable inter-componential changes marked for a specific year.**
- 10% of the estimated cost for the coffee plantation, pulper, drying yard will be contributed by the beneficiary in shape of labour/cash/kind. The subsidy will be given for maximum one ha of area for one family.
- The cost norm of each activity can be changed from time to time due to change in labour and material cost, change in policy of State Govt., Central Govt., Coffee Board. In such cases the Administrative Department may revise the cost of each activity as admissible.
- If Govt. desires to include other activities or to delete some activities which will be in the larger interest of the public and the State, the same can be done with the approval of the Chief Secretary of the State.

4. Mode of Execution and Convergence:

This Scheme will be implemented departmentally by the Directorate of Soil Conservation and Watershed Development under Agriculture and Farmers' Empowerment Department. Convergence with other schemes like MGNREGS and Dept. Of Forest, Environment and Climate Change will be made for raising of shade and coffee nurseries. Women SHGs will also be involved in raising coffee nurseries. During implementation period, the Directorate will also collaborate with quality resource organisations like Coffee Board and others for productivity enhancement, capacity building, infrastructure and brand development.

Role of Coffee Board

Coffee Board has vital role for success of coffee plantation programme. Coffee Board will render all technical guidance and extension activities from identification of areas, raising of nursery, planting of coffee, to after care. Procurement and supply of high yield coffee *Arabica* as well as coffee processing equipments shall be done by Coffee Board. Demonstration and training programmes, tours and exposure visit of trainers and beneficiaries shall be organized by Coffee Board. They will act as motivator for crop diversification and encourage intercropping by the growers for better return.

5. Source of funding for the Scheme

- It envisages an expenditure of Rs. 1144.00 Cr for a period of five years from 2022-23 to 2026-27, out of which Rs. 567.00 Cr will be met through State Plan and Rs. 577.00 Cr will be met through convergence with other Schemes.

6. Programme Outcome:

- 27000 Acres of New Coffee plantation area will be established.
- The production of clean coffee will increase from 544 MT at present to 20,800 MT by 2032.
- The net revenue generated from Coffee of Rs.21.76 crores at present will increase to Rs. 832.00 Crores by 2032.
- 50,000 farm families (mostly tribals and small, marginal farmers) will directly benefit by owning 2 acres of Coffee plantations of their own.
- Each beneficiary will get a net income of about Rs.80000/- per acre per annum (Average) from 5th -45th year of coffee plantation.
- Migration of labour from the project areas will reduce substantially as coffee farming requires manual labour throughout year.
- Soil health of the crop areas will be preserved and favourable eco system will be developed.
- Scope of tourism will increase in the program districts.

7. Monitoring & Evaluation Mechanism

- Mid-term and post project evaluation will be done by Third Party after completion of 3rd year and 5th year of project duration, i.e., after March 2025 and March 2027 respectively.

8. Forms for application by the Beneficiaries (if any) to be annexed:

- To be designed at the time of implementation from next year onwards.