

SOIL SURVEY AND SOIL CONSERVATION DEPARTMENT

Soil Survey

An outlay of ₹ 401.00 lakh is provided to Soil Survey department for implementing the following schemes. Out of the total outlay, an amount of ₹ 150.00 lakh is provided under NABARD- RIDF.

5. Training to Soil Survey Officers

(Outlay: ₹ 12.00 lakh)

Regular training of Soil Survey Officers in various areas like modern Soil Survey techniques, Remote Sensing and GIS application, Watershed management, Natural resource management, Disaster management are essential for application of modern technologies in Soil Survey. During 2022-23 an amount of ₹ 12.00 lakh is provided for the scheme and the outlay will be used for the following purposes.

1. Deputation of officers for training in state level/national level training institutes related to soil survey.
2. Deputation of officers for training in state level/national level institutions in Remote Sensing and GIS.
3. Conduct of trainings, seminars, workshops and technical sessions related to soil.
4. Deputation of one officer for pursuing post graduate studies in Kerala Agricultural University (KAU) in the subjects pertaining to areas of function of the Department of Soil Survey and Soil Conservation. The allocation will cover only the tuition fees and no other item like hostel fee and salary. The application along with the proposal will be placed before the Working Group by the department.

6. Laboratories

(Outlay: ₹ 120.00 lakh)

The physical and chemical analysis of soil samples forms an essential component of soil survey as it supplements the field observations and enhances the quality of the soil survey reports. Presently, various analyses of all physical and chemical parameters of soil and water are being carried out at the seven laboratories under Soil Survey. In addition, pesticide residue analysis is being undertaken at Central Soil Analytical Laboratory, Thiruvananthapuram, Regional Soil Analytical Laboratory, Thrissur and Hi-tech Soil Analytical Laboratory, Kalpetta. In addition, the Central Soil Analytical Laboratory, Thiruvananthapuram is equipped with facilities for soil microbiological studies. The department is also continuing the Soil Health Management Support Service to Farmers of the State by providing them with Soil Health Cards for individual farmer's plots. The database generated by the Department of Agriculture and the Department of Soil Survey and Soil Conservation will be integrated into a common soil fertility portal by modifying the existing portal. The Director of Agriculture and Director of Soil Survey and Soil Conservation will act together to achieve the objective of developing and maintaining a comprehensive soil fertility portal for the entire state.

During 2022-23, the outlay of ₹ 120.00 lakh is provided for strengthening of analytical facilities of the labs under Soil Survey, purchase of glass wares, chemicals and laboratory equipments for analysis in these labs, AMC for mobile soil testing lab (equipment only) and major equipments, up gradation of present pesticide testing and microbial analysis facilities in the labs and preparation of soil health cards. The outlay is not for establishing mobile soil test labs and e-office activities. No hiring or purchase of vehicle will be allowed.

7. Soil Informatics and Publishing Cell

(Outlay: ₹ 110.00 lakh)

The Soil Informatics and Publishing Cell functions as a consultancy cell in various aspects of integrated management of soil and land resources, providing information support

to the local bodies for the preparation of soil survey maps and for the formulation of programmes for the optimum use of land resources.

During 2022-23, the outlay is provided for meeting the expenditure towards detailed soil survey, purchase of cadastral maps and publication of maps, Digitization special drive-intended to transfer the soil data available with the department to digital format, fuel expenses, travelling expenses, hiring charges of vehicles for field activities. Purchase of machinery and equipment, cartographic materials, other software and hardware, engaging contract staff for publication of reports and maps and generation of digital soil information. Strengthening of the Geomatics lab and the general functioning of the Cell will also be met from this.

Out of the total outlay of ₹ 110.00 lakh, an amount of ₹ 20.00 lakh is set apart for up gradation of soil museum with additional exhibits and digitization of exhibits, maintenance of existing facilities, improving reference facilities in the library attached to the museum, operational expenses including fuel expense for generator. Wages will not be allowed under the scheme.

8. Creation of data bank for classification of land

(Outlay: ₹ 9.00 lakh)

Creation of databank for classification of land envisages categorization of land based on 22- fold classification of land use evolved by the National Remote Sensing Agency (NRSA). The scheme includes remote sensing technology to improve the efficacy of the soil survey by reducing the time lag in field survey based thematic map preparation and thereby making available the results of the survey, timely to the end user.

During 2022-23 an amount of ₹ 9.00 lakh is provided for meeting the expenditure related to procurement and interpretation of satellite imagery field level ground truth check based on imagery interpretation, and capacity building activities related to the scheme. No additional staff will be provided under the scheme during 2022-23 and staff provision in Soil Informatics and Publishing Cell scheme will be utilized here.

9. Architectural designing of landscape and land use plan in the Hilly regions of Idukki Thaluk in Idukki District (RIDF) – New Scheme

(Outlay: ₹ 150.00 lakh)

Detailed soil surveys provide the basic information needed to make decisions about land management including operations that must be combined for satisfactory soil performance. Detailed Soil survey information can be used to predict or estimate the potentials and limitations of soils for many specific uses. Soil surveys serve as a basis for judgment about land use and management for areas ranging from small tracts to regions of several million acres. It is a valuable tool for acquiring site-specific geo-referenced information and planning decisions.

The scheme Architectural Designing of landscape and Land use Plan in the Hilly Regions of Idukki Thaluk in Idukki District aims at developing a workable landscape design and land use plan based on analysis and interpretation of the geo-morphological, climatic, topographic and soil features of the area. During 2022-23 the Idukki Thaluk of Idukki District will be completed under this programme. An amount of ₹ 150.00 lakh is provided under NABARD- RIDF assistance for the scheme. The works under the scheme will be integrated in to the Idukki Development Package in due course.

Soil Conservation

During 2022-23, following schemes will be implemented by Soil Conservation Unit. The total outlay provided for Soil Conservation is ₹ 9500.00 lakh of which an amount of ₹ 6535.00 lakh is provided to KLDC. Out of the total outlay, an amount of ₹ 8085.00 lakh is provided under NABARD- RIDF and NIDA assistance.

Individual beneficiary oriented schemes are not included for implementation through soil conservation unit of the Department of Soil Survey and Soil Conservation. Area based projects alone will be implemented for addressing larger issues on natural resource management.

10. Soil and Water Conservation on Watershed Basis (NABARD – RIDF)

(Outlay: ₹ 1500.00 lakh)

Soil Conservation schemes on Watershed basis are implemented in selected districts under RIDF. During 2022-23, the outlay will be utilized for completing ongoing NABARD assisted projects implemented by Soil Conservation department and for taking up new projects approved under RIDF. An amount of ₹ 1500.00 lakh has been earmarked for 2022-23. The proposed amount includes allocation for the ongoing projects under various tranches of RIDF XXI-XXVI and new projects sanctioned in the forthcoming tranches of XXVII and XXVIII. The Department aims to create adequate infrastructure facilities with regard to conservation and management of basic land resources viz. soil and water with a view to conserve fertile top soil, augment ground water recharge and enhance the agricultural production in the State. Under the scheme, emphasis will be given for execution of low cost ecofriendly agronomic conservation practices.

11. Protection of catchment of reservoirs of water supply schemes

(Outlay: ₹ 65.00 lakh)

The Project aims to check siltation in the reservoirs of the water supply projects and improve their carrying capacity. During 2022-23 the scheme is being implemented in the catchments of the reservoirs of Water Supply Schemes at Aruvikkara in Thiruvananthapuram District, Sasthamcotta in Kollam District and Peruvannamoozhi in Kozhikode District. Along with structural measures of conservation, vegetative measures like planting of grasses, wild vetiver, pandanus or other suitable species will also be adopted. An amount of ₹ 65.00 lakh is set apart for the scheme.

12. Stabilization of landslide areas

(Outlay: ₹ 400.00 lakh)

The Scheme envisages adoption of scientific Soil and Water Conservation measures/management techniques for the stabilisation/reclamation of the land slide prone/affected ecosystems in the hilly terrains of the State. The projects help to stabilize/restore natural ecosystems prone to/affected by phenomena like landslide, landslip etc. The scheme activities are progressing in various land slide affected areas in Palakkad, Malappuram, Pathanamthitta, Wayanad, Kozhikode, and Idukki Districts.

During 2022-23, an amount of ₹ 400.00 lakh is provided for continuing Land slide stabilization schemes in Palakkad, Malappuram, Pathanamthitta, Wayanad, Kottayam, Kozhikode, and Idukki Districts and to take up new projects in areas affected by landslides and related natural calamities. Out of this, an amount of ₹ 100.00 lakh each is set apart for Idukki and Wayanad districts.

13. Training programme for departmental staff and others

(Outlay: ₹ 150.00 lakh)

The outlay of ₹ 100.00 lakh is provided for organizing training programs on soil conservation and related areas for the officers of soil conservation and other government agencies/line departments/LSGIs involved in soil conservation activities, public awareness campaigns at schools/colleges on the need to conserve natural resources and for participating and conducting exhibitions, expenses for the deputation of officers for mandatory training programme at IISWC, Dehradun. The amount required for training KLDC officials may also be met from this scheme. An amount of ₹ 15.00 lakh is provided for this.

During 2022-23 an amount of ₹ 15.00 lakh is provided for Exposure visit of officers and other government experts to development projects within the state and within the country for acquiring field level experience in soil and water conservation models as a part of capacity building programs.

An amount of ₹ 50.00 lakh is set apart for the completion of construction works in IWDMK without any change in the existing arrangements for construction. No new construction of buildings or purchase of vehicles will be considered under the scheme during 2022-23. Amount required for ongoing projects may be sanctioned only after careful and stringent scrutiny of physical progress of work.

14. Application of Information Technology & Monitoring and Evaluation

(Outlay: ₹ 50.00 lakh)

During 2022-23, the outlay is provided to introduce e-office system in the sub offices and for the functioning of Monitoring and Evaluation Cell, which will be functioning at Thrissur. The cell will undertake the regular monitoring of the schemes and works carried out throughout the state. The outlay is also provided for the evaluation of soil and water conservation schemes implemented by the department by a third party agency selected by the government through a committee chaired by Agriculture Production Commissioner and having highest credentials. No purchase of vehicle will be provided under the scheme.

15. Revival of Water Bodies

(Outlay: ₹ 200.00 lakh)

The scheme aims at the revival and development of the traditional water bodies, springs and various drainage courses for augmentation of ground water potential and mitigating the severity of drought faced by the agricultural sector. Under this, project activities for revival of traditional water bodies, thalakulams, springs etc. with the objective of harvesting maximum rain water for agricultural purposes will be taken up. The treatment of various drainage courses, tributaries/rivulets of major rivers, will also be carried out by adopting scientific water conservation methods. During 2022-23 an amount of ₹ 200.00 lakh is set apart for the revival of water bodies.

16. Development of Micro Watersheds

(Outlay: ₹ 300.00 lakh)

The state needs to work towards mitigating and containing the ill-effects of soil erosion and work in a coordinated manner towards conservation of soil moisture. At the same time we need to work towards building productive and sustainable enterprises through micro watershed development in the post flood – post landslide scenario. It will help to promote

climate resilient agriculture. An amount of ₹ 300.00 lakh is provided for development of Micro Watersheds.

In order to bring a successful completion of the continuing special area programmes in Kattakada and Taliparamba an amount of ₹ 200.00 lakh is provided for micro watershed development in Taliparamba Assembly Constituency, and an amount of ₹ 100.00 lakh is provided for Kattakada Constituency within the overall allocation.

**17. Participatory and sustainable micro watershed projects in 9 Local Self Government Institutions in Taliparamba LAC in Kannur (NIDA assistance from NABARD) –
New Scheme**

(Outlay: ₹ 300.00 lakh)

During 2022-23 an amount of ₹ 300.00 lakh is provided towards availing support as NIDA assistance from NABARD is set apart for undertaking soil and water conservation activities in 9 Local Self Government Institutions in Thaliparamba constituency in an area of 1000 ha, as per the terms and conditions of the agreement signed with NABARD. The allocation will be co-terminus with the terms and conditions of the above said agreement.