



കേരളം केरल KERALA

CW 584735

**Memorandum of Understanding between Government of Kerala and  
Survey of India (Sol), Government of India**

The Memorandum of Understanding hereinafter referred to as "MoU" is made and entered into on the 20<sup>th</sup> day of April month of the year 2021

Between

**The President of India**, acting through **Director, Kerala and Lakshadweep GDC**, Survey of India, Department of Science and Technology, Government of India having Office at CGO Complex, Poonkulam, Vellayani PO, Thiruvananthapuram, Kerala – 695522 hereinafter referred to as Survey of India (which expression shall, unless excluded by or repugnant to the context, be deemed to include his successors in Office and assignee) of the **FIRST PART**.

(पी.वी. राजशेखर/P.V. RAJASEKHAR)  
निदेशक/DIRECTOR  
के एवं ल जी.डी.सी/K & L GDC  
भारतीय सर्वेक्षण विभाग/SURVEY OF INDIA  
तिरुवनंतपुरम/THIRUVANANTHAPURAM-695022

**R. GIRIJA DAS**  
Director of Survey & Land Records  
Govt. of Kerala

8 APR 2021



N-1-3256  
20-04-2021

Director, Sol, Kerala  
and Lakshadweep GDC

SASTHANGALAM  
VENDOR  
S. SOBHANAKUMARI



കേരളം കേരल KERALA

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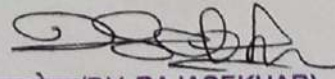
And

The Governor of Kerala acting through the Director, Department of Survey and Land Records, Government of Kerala, hereinafter referred to as Government of Kerala (which expression shall, unless excluded by or repugnant to the context, be deemed to include his/her successors in Office and assignee) of the **SECOND PART**.

WHEREAS the Survey of India is the National Mapping Agency engaged in Surveying and Mapping of whole country including Towns, Villages, Cities and States and in publishing topographical and general-purpose maps in analogue and digital form.

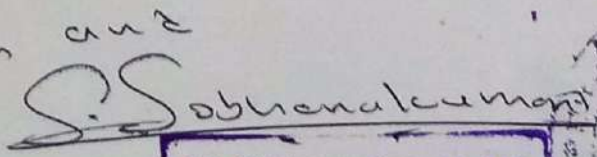
AND WHEREAS, Survey of India is the owner of its analogue and digital map data and presently engaged in updating of topographical maps of State of Kerala

AND WHEREAS, Government of Kerala has approved the project proposal of Survey of India to supply updated large scale topographical Maps of rural /urban abadi areas of Kerala in analogue as well as in digital form containing Spatial and non-spatial data dictionary and Feature description

  
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**R. GIRIJA, IAS**  
 Director of Survey & Land Records  
 Govt. of Kerala

no: 3255  
 20-04-2021  
 Director, S&L, Kerala  
 Kollwadweel GDC

  
**SASTHANINGALAM**  
 VENDOR  
**S. SOBHANAKUMARI**

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in GIS platform, Survey and updating of Survey and Settlement records Implementation in the State of Kerala.

NOW THEREFORE in consideration of mutual covenants, terms and conditions and understanding set forth in this MoU and other good and valuable considerations, the parties with the intent to be legally bound, hereby agree as follows:

## 1. BACKGROUND

Large scale mapping on 1:500 scale of the hitherto unmapped Rural/Urban abadi areas using Professional Survey Grade Unmanned Aerial Vehicle/Drone is to be undertaken (limiting the scope of work to what is prescribed under SVAMITVA Project) on priority by the Government of Kerala.

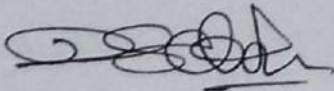
Survey of India has agreed to generate up-to-date digital topographical map of rural/urban abadi area (abadi area includes abadi land, inhabited areas contiguous to abadi and wadis/basties in rural/urban areas) covering 1665 number of villages (limiting the scope of work to what is prescribed under SVAMITVA Project) in 48 months time using Professional Survey Grade Unmanned Aerial Vehicle/Drone for Large Scale Mapping and field measurements, Continuous Operating Reference System (CORS), Geoid model and generation of maps (analogues and digital spatial and non-spatial data) including creation of Geographic Information System (GIS) database.

The rural/urban abadi property boundaries, topographical features, attribute linkage, ground validation shall be done by Sol in collaboration with Government of Kerala as per the requirement of the project for which non-spatial data shall be provided by State preferably in digital format. Project work also includes upgradation of the geodetic infrastructure in the state including Establishment of CORS Network and development of precise geoid model.

The nodal Department for this project is State Revenue Department, Government of Kerala

## 2. SCOPE OF THE WORK

2.1. Establishment of Continuous Operating Reference System (CORS) Network (wherever applicable as per SVAMITVA scheme): Survey of India to procure, establish CORS (Continuous Operating Reference System) Network covering state of Kerala including operations and maintenance for 5(five)



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years.

2.1.1. Completion of the tendering process for outsourcing

2.1.2. Site selection & recce for CORS stations

2.1.3. Civil construction work by outsourced agency

2.1.4. Installation & commissioning of CORS stations by outsourced agency

2.1.5. Establishment of Control Centre & DR by Sol

2.1.6. Operation and Maintenance of CORS Network by Sol

2.2. Development of Geoid model for entire state. Establishment of Ground Control Points (GCPs) Horizontal and vertical Control, the location, sketches, description and ids of all the control points need to be maintained in GIS (Geographical Information System) form and the co-ordinate list need to be maintained in both system of latitude / longitude and UTM-WGS 84 (World Geodetic System 1984) via CORS network.

2.3. Marking of property boundaries with Chuna lines by Government of Kerala before the drone flying in the area.

2.4. Acquisition of Aerial images using Professional survey grade drone / Unmanned Aerial Vehicle.

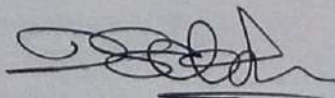
2.4.1. Procurement of Drones, Flying of Drones covering rural/ Urban abadi area of the Kerala State by Survey of India.

2.4.2. Data acquisition using professional Survey Grade Unmanned Aerial Vehicle shall be carried out at 5 cm Ground Sample Distance (GSD) for Village abadi areas and contiguous Rural/Urban areas (limiting the scope of work to what is prescribed under SVAMITVA Project).

2.4.3. Data Processing at Regional lab of Survey of India. Processing of data acquired through Drones, Data Processing Block Control and Adjustment-AT (Aerial Triangulation)/ DEM (Digital Elevation Model) Generation and DTM (Digital Terrain Model) Processing.

2.4.4. Ortho Photo Generation and 3D (Dimensional) Modelling if/ wherever needed (this will be done using DSM (Digital Surface Model)).

2.4.5. To generate topographical accurate geo-referenced digital base maps/data including Ortho-Rectified Images (ORI) covering rural/urban abadi area of state Kerala using Unmanned Aerial Vehicle /drone-based mapping technique.

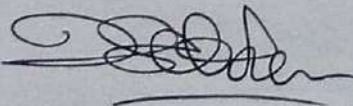


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- 2.5. Extraction of 2D/3D features, Feature description and symbols, the symbols creation of Metadata of features - the symbology and metadata shall be in-line with SVAMITVA scheme guidelines issued by Ministry of Panchayati Raj, data base of raw data of the ground survey work. Spatial and non-spatial data dictionary with feature codes, feature Geometry/type (line, points and polygon).
- 2.6. Attribute linkage to the respective features as per consolidated feature list, as defined in guidelines of SVAMITVA scheme issued by Ministry of Panchayati Raj, in addition to feature list provided by Government of Kerala preferably in digital form. Seamless digital database comprising various layers viz. topographical features/other features as per wish list will be prepared by Sol.
- 2.7. Numbering of properties / structures within rural /urban abadi area as per numbering system provided by the State government.
- 2.8. Ground-Truthing and validation of Land Parcel maps by State Government.
- 2.9. Ground-Truthing and validation of topographical features as derived from ortho- rectified images shall be carried out by Survey of India.
- 2.10. Generation of cadastral maps/ land Parcel Maps/ Base maps in suitable soft copy and hard copy form
- 2.11. To incorporate consolidated wish list (as defined by Ministry of Panchayati Raj and the list prepared by State Government), GIS ready map/ digital database in accordance to the GIS Deliverables compiled by Government of Kerala. The feature and attributes defined in the wish list shall be linked with the final Geographic Information System (GIS) ready map once the data/map/blueprint is supplied or shared by Government of Kerala with Survey of India.
- 2.12. The Land Parcel Maps (LPM) product shall comprise of base map overlain by different layers of topographical features, man-made structures, land parcel information, district/taluk/village boundaries information, etc. along with alike attributes as per the requirement of Revenue department.
- 2.13. Deliver the finalized land parcel dimensions and the land records in formats prescribed by State Government along with other deliverables. Value addition and Land Parcel Maps (LPM). Generation with Integration of textual details (Records of Right) with finalized land parcel maps in soft and hard copy form.
- 2.14. Training of technical staff will be organized by Survey of India on the operations and usage of various applications, technologies, which are to be used in the project. The state line departments will



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build in-house capacity to handle the project

2.15. Complete Drone mapping plus Land Parcel Map (LPM) creation, inclusive of attributable data as per final feature list (Feature list and attribute data to be provided by State Government for all villages/urban abadi areas in 48 months, to the satisfaction of Government of Kerala. Both Government of Kerala and Survey of India shall make efforts in completing this activity (limiting the scope of work to what is prescribed under SVAMITVA Project). (Responsibility: Government of Kerala and Survey of India)

2.16. Study Area: The project shall be carried out in the state of Kerala covering 1665 numbers of revenue villages.

2.17. Ownership of Data: The Ortho-rectified Base Maps shall be jointly owned by the Ministry of Panchayati Raj, the Survey of India, Government of India and Government of Kerala. All the processed data products and the final data products generated will be jointly owned by Ministry of Panchayati Raj, Survey of India, Government of India and Government of Kerala. All three agencies (Ministry of Panchayati Raj, Survey of India, Government of India, and Government of Kerala, shall have the rights to use the data generated under this project for their internal applications. For any 3rd party usage / sharing of data by any of the three agencies, the modalities shall be decided by Ministry of Panchayati Raj in consultation with Survey of India and the State Government.

2.18. All the serviceable capital assets depending upon the prescribed shelf life at the completion of the project created by Survey of India under this project shall be transferred to Government of Kerala after the completion of project. The Survey of India shall provide necessary training to identified technical officers of State government. There shall be proper Handing over Taking over (HOTO).

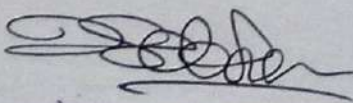
2.19. The exit management, extension of the project shall be on mutual consensus between Survey of India, Government of India and Government of Kerala.

### 3. METHODOLOGY

3.1. All clearances for drone flying, data vetting and final classification will be taken by Sol. [Responsibility: Survey of India]

3.2. Horizontal and Vertical Ground Control Points

3.2.1. Identification, Establishment, Densification and Utilization of Ground Control Points (GCPs): Existing Ground Control Point library points established by Survey of India / Government of Kerala shall be utilized for the project. If required densification of Ground Control Points shall be carried out

  
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using Continuous Operating Reference System Network rovers.

a. CORS (Continuously Operating Reference Stations) Network Establishment: Continuously Operating Reference Stations network shall be established by Survey of India in State. (Responsibility: Survey of India)

b. Area / site for Continuously Operating Reference Stations network installation shall be provided by Government of Kerala along with electricity and physical security of Continuously Operating Reference Stations equipment. (Responsibility: Government of Kerala.

c. The Survey of India shall be responsible for operation and maintenance of Continuously Operating Reference Stations network stations and to provide Continuously Operating Reference Stations network services to Government of Kerala for five years. (Responsibility: Survey of India)

### 3.2.2. Levelling Network Establishment

Existing Geodetic BMS (Benchmark) maintained / prepared by Survey of India shall be utilized for vertical ground control point establishment

All Continuously Operating Reference Stations shall be connected with High Precision/Precision Levelling based on Survey of India Benchmarks. [Responsibility: Survey of India]

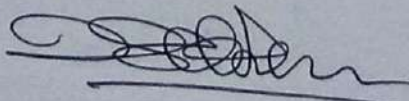
3.3. Property boundaries will be marked with Chuna lines by Government of Kerala before the drone flying in the area. Government of Kerala will organise the Gram Sabha to intimate the schedule of the survey and to sensitize the villagers about the project work and its intended benefits. (Responsibility: Government of Kerala )

3.4. Mission planning for drone flying using available maps /satellite imagery data. (Responsibility: Survey of India]

3.5. High Resolution Digital Aerial Images using professional Survey Grade Unmanned Aerial Vehicle /Drone:

3.5.1. Acquisition of Aerial images shall be carried out by the Sol using Professional Survey Grade Unmanned Aerial Vehicle/ Drone for Large Scale Mapping of entire rural/urban abadi area of state. The images captured through Drone shall be processed by Sol in its Geographic Information System lab. [Responsibility: Survey of India]

3.6. Data Processing: AT(Aerial Triangulation), DEM (Digital Elevation Model) Generation. Post processing of Unmanned Aerial Vehicle images shall be carried out by Survey of India in Geographic Information System lab. Digital Elevation Model (Digital Elevation Model) is a generic term used



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mostly for Digital Surface Model and Digital Terrain Model. The 3-D modelling as per requirement of State shall be done using Digital Surface Model) and ORI (Orthorectified Images) shall be the output of this activity. [Responsibility: Survey of India]

### 3.7. Base Map Generation and 2D Feature Extraction

3.7.1. The Ortho Rectified Images, after Unmanned Aerial Vehicle image processing, shall act as a base topographical layer from which topographical features shall be extracted. (Responsibility: Survey of India]

3.7.2. Topographical features not visible in the images shall be picked from ground. Map/ layer pertaining to "feature list", which are not visible in the Ortho- rectified images, shall be provided by Government of Kerala to Survey of India for incorporating in the topographical database. ( Responsibility: Survey of India in consultation with State Government]

### 3.7.3. 2D Feature Extraction

a) 2D topographical features shall be derived from Ortho-rectified images (as per point no. 3.7.1). Accuracy of the topographical feature extracted from Ortho-rectified images shall be the responsibility of Sol. (Responsibility: Survey of India]

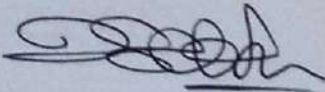
b) Accuracy of the ownership record shall be responsibility of the Government of Kerala. Open Geospatial Consortium (OGC) compliant Geographic Information System database models shall be implemented for generation of Geographic Information System layer data structure for storing spatial and attributable data. (Responsibility: Survey of India in consultation with State Government]


### 3.8. Attribute Data Collection

3.8.1. Attributes data shall be provided by concerned Government of Kerala as per feature/ wish list. A standardized data collection format shall be provided as an effort to simplify and speed up the process. The correctness of attribute data shall be the responsibility of Government of Kerala. (Responsibility: Government of Kerala)

3.8.2. The attributes collected provided (as in point 3.8.1) shall then be linked with their respective features, thereby creating a digital spatial library of all the features and their respective information. The data entry in the attributes table shall be carried out by Survey of India in coordination with Government of Kerala.

3.9. Boundaries of properties and numbering of properties/structures within abadi area will be as per

  
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numbering system provided by state of Kerala. [Responsibility: Survey of India]

3.10. GIS (Geographic Information System) ready Land Parcel Maps creation

Generation of updated Land Parcel Maps (LPM) in suitable soft copy and hard copy form. The Land Parcel Maps product shall comprise of base map overlain by different layers of topographical features, man-made structures, land parcel information, district/taluk/village boundaries information, etc. along with alike attributes as per the requirement of Government of Kerala. (Responsibility: Survey of India)

3.11. Ground-truthing, validation of Land Parcel Maps shall be carried out as under

3.11.1. Ground-Truthing and validation of topographical features as derived from Ortho rectified images shall be carried out by Survey of India. (Responsibility: Survey of India)

3.11.2. Ground-Truthing and validation of Land Parcel maps and layers pertaining to feature list shall be carried out by Government of Kerala [Responsibility: State Government]

3.12. Land Parcel Maps correction (if required)

3.12.1. Correction and incorporation of parcel boundaries based on ground-truthing.

3.12.2. Reconcile the survey data with the available records and finalize the dimensions of each land parcel. [Joint Responsibility- Survey of India and State Government of Kerala]

3.12.3. Land Parcel Maps Generation with Integration of textual details (Records of Rights) by providing the final Land Parcel Maps in the form of soft copy form as desired by Government of Kerala [Responsibility: Survey of India]

3.13. Deliver the finalized land parcel dimensions and the land records in prescribed formats along with other deliverables as mentioned in point "4" below.[Responsibility: Survey of India]

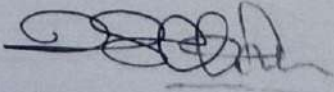
3.14. State Government of Kerala shall store, host and update (as per requirement) the data created under the SVAMITVA scheme [Responsibility: Government of Kerala]

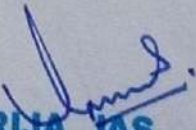
#### 4. DELIVERABLES

Following shall be output of the entire project covering entire consolidated Feature list:

4.1. CORS Network RTK service of  $\leq 5$  cm horizontal accuracy for five (5) years. (To be kept if this component is funded under the project)

4.2. Accurate geo-referenced digital maps using established control survey network based on National

  
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Spatial reference framework of the country.

4.3. Geodetic network with co-ordinates and sketches of the control points showing their description and location. GCP (Ground Control Points) – the location and ids of all the control points need to be maintained in GIS (Geographical Information System) form and the coordinated list needs to be maintained in both system of latitude/longitude and UTM (universal Transverse Mercator) - WGS 84 (World Geodetic System 1984) Coordinate System zone via CORS (Continuous Operating Reference System) network.

4.4. Metadata of features, raw data of the ground survey work.

4.5. Proper indexed map with proper sheet number on the following scale with accuracies as listed below:

a. Vertical Accuracy  $\pm 20$ cm for Rural/Urban abadi area

b. Village map on 1:500 scale and Ortho Rectified Images at 5 cm GSD (Ground Sampling Distance);

c. Horizontal accuracy  $\pm 10$  cm for Rural/Urban abadi area.

4.6. Mosaic map of village, spatial and non-spatial data dictionary with feature codes, feature type (line, points and polygon), feature description and symbols.

4.7. DEM of  $\leq 20$  cm vertical accuracy for the village abadi area.

4.8. Hard copy maps on 1:500 scale, 4 Numbers each for a village on good quality 90GSM paper along with pdf copy for future printing purposes.

4.9. Training courses for technical staff of Kerala at various levels in IISM, Hyderabad

## 5. ROLES AND RESPONSIBILITIES

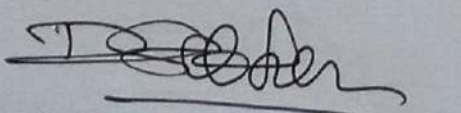
5.1. Survey of India (Sol)

a. Project shall be executed in Survey of India premises under close supervision of Survey of India. Workspace to the 3rd party or modernization of available space in terms of computers/peripherals/servers/data centre shall be provided or looked after by Survey of India.

b. Activities given in clause 3, (Methodology) shall be executed as per responsibility and model mentioned against each activity/sub activity.

c. Sol shall be responsible for Project planning, Execution & monitoring of activities and shall adhere with the norms as laid by Government of India.

d. For outsourcing of any activity under the project, Sol will be responsible for preparation of



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RFPs/Bids, Processing of bids, Award of work, Supervision, Quality checking and Work execution as per contract agreement and the norms laid down by Government of India.

e. Ground-Truthing and validation of topographical features as derived from ortho rectified images shall be carried out by Survey of India

f. Data Processing: Post processing of Unmanned Aerial Vehicle images shall be carried out by Survey of India (Sol) in Geographic Information System lab at Sol regional centre. The Sol shall use their own hardware and software.

g. No salaries and overheads will be charged by Sol in the estimated or final cost in lieu of the joint ownership of the data generated in the project.

## 5.2. Government of Kerala

a. Each Drone/ Unmanned Aerial Vehicle flying team shall be accompanied by at least one employee from Revenue Department and one employee from Police Department.

b. Government of Kerala shall provide the land for the Continuous Operating Reference System at the sites mutually decided as per technical requirement. The sites should have electricity supply, cellular network coverage, Uninterruptible power supply (UPS) and physical security of equipment.

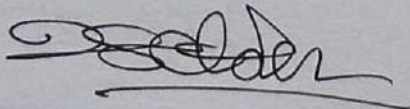
c. Government of Kerala shall provide the logistics support to Sol field team viz. Government accommodation (as per availability), associated state Government staff as per functional requirement of the work, field vehicles, helpers or local labours or Multi-Tasking Staff (MTS), permissions (if required in the area of work) for the field survey activities.

d. Feature layers and types other than land parcels to be decided by Survey of India in consultation with the State Government.

e. Land records such as cadastral maps/land parcel maps to be provided by Government of Kerala. State Project Management Unit shall also be deployed at Government of Kerala who has understanding of their AOR (Area of Responsibilities) and its extent as well as one who can interpret the blueprint/data/maps provided by Government of Kerala for Survey of India for feature extraction. The said nodal officer shall also help during linkage of attributed information w.r.t. the features of their respective Area of Responsibilities.

f. The Government of Kerala shall be responsible for correctness of supplied attribute data.

g. The attributes data shall be provided by the Government of Kerala preferably in digital format.



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- h. Activities given in clause 3, (Methodology) shall be executed as per responsibility and model mentioned against each activity/sub activity including ground-truthing and validation of individual register, ownership details would be undertaken by Government of Kerala
- i. Ground-Truthing, validation of Land Parcel maps shall be carried out by Government of Kerala.
- j. Store (Hard Copy, digital data and GIS data), Host and update (as per requirement) the data created under the project.
- k. Finalization of the revenue records duly following the inquiry process & dispute resolution (if any) for issuance of property cards or ownership rights will be the responsibility of the state of Kerala
- l. To complete the inquiry process & dispute resolution.
- m. Updation of Property data and maps - The State Government shall be responsible for any future updation of Rural /Urban abadi property data and survey as per period stipulated in SVAMITVA Scheme Guidelines issued by the Ministry of Panchayati Raj.

### 5.3. Joint Responsibility

- a. As part of Ground Control provisioning, existing GCPs available (if any) with Government of Kerala and Survey of India will be used for densification of control.
- b. Expenses towards travelling, lodging, boarding of Kerala personnel for training at ISM, Hyderabad will be borne by Government of Kerala. Expenses towards tuition fee, training material, External expert faculty etc will be borne by SoI.

## 6. MONITORING & IMPLEMENTATION COMMITTEE

- 6.1. Survey of India (SoI) will establish a separate Project Wing with one dedicated Nodal Officer exclusively responsible for execution of the project in the State.
- 6.2. Government of Kerala will set up State Steering Committee (SSC) for endorsing plans submitted by the implementing agencies & forwarding the same to National Steering Committee in Ministry of Panchayati Raj (MOPR) for approval, and for monitoring the scheme, etc. Project to be monitored under the supervision of the SSC constituted by State Revenue Department, comprising of officials from State Panchayati Raj department, State Revenue department, representative of Finance Department, Survey of India (State Representative), MOPR official not below the rank of Under Secretary. State shall have the authority to co-opt additional members. The SSC shall have oversight and monitoring functions and shall provide guidance for the smooth operation of the scheme in the



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भारतीय सर्वेक्षण विभाग/SURVEY OF INDIA  
तिरुवनंतपुरम/THIRUVANANTHAPURAM-695022



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Director of Survey & Land Records  
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respective state. It will also provide update to National Steering Committee (NSC), Constituted at Ministry of Panchayati Raj. The structure and terms of reference may be defined on mutual agreement with all the parties.

6.3. District-level Monitoring and Review Committee (DMRC) would be constituted under the Chairpersonship of the District Collector/Deputy Commissioner/District Magistrate, along with ADMs/SDMs dealing with land revenue matters, CEO/Executive Officer of the Zila Parishad, Sub-district Registrar, Survey & Settlement/Consolidation Officer having jurisdiction over the district, District Panchayati Raj Officer and Block Development Officer. Representative from Sol may be involved as per the need as special invitees. The Committee will review the progress of implementation of the Programme at least once a quarter or as prescribed in the Scheme Guidelines to be prepared by the ministry of Panchayati Raj, and the District Collector/Deputy Commissioner shall submit report to the State Steering Committee. Also, the committee would monitor/ oversee the use of IEC (Information, Education and Communication) funds.

6.4. Survey of India shall prepare detailed Annual Plans in accordance with the SVAMITVA Scheme Guidelines for appraisal and approval by the NSC.

6.5. SVAMITVA scheme will be implemented through the regular departmental mechanisms, which will be assisted by Programme Management Unit at the State levels.

6.6. Online monitoring, reporting, and fund management dashboard for SVAMITVA Scheme will be developed by Ministry of Panchayati Raj (MOPR).

## 7. UPDATION OF PROPERTY DATA & MAPS

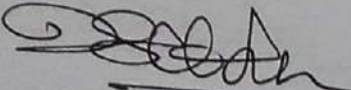
The Government of Kerala shall be responsible for any future updation of rural / urban abadi property data and survey as per period stipulated in SVAMITVA Scheme Guidelines issued by the Ministry of Panchayati Raj.

The mechanism and surveying agency shall be decided by Government of Kerala for future update of Property data and maps.

## 8. TIME SCHEDULE

The entire project (limiting the scope of work to what is prescribed under SVAMITVA Project) will be completed in 48 months. The Project is divided into three Phase:

Phase I: Implementation of Pilot Phase of SVAMITVA Scheme, Establishments of CORS Network in

  
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**R. GIRIJA, IAS**  
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Govt. of Kerala

Kerala for a period of April 2021-October 2021.

Phase II: Complete survey of 500 villages of Kerala from November 2021 to March 2022 for generation of Property card, maps and GIS database.

Phase III: Complete survey of 1165 villages of Kerala from April 2022 to March 2023 and generation of Property card, creation of maps and GIS database.

## 9. SERVICE LEVEL AGREEMENT:

Timelines for completing this activity would be as per the Guidelines of SVAMITVA Scheme issued by Ministry of Panchayati Raj (MOPR).

## 10. FINANCIAL TERMS AND CONDITIONS

### A. Cost:

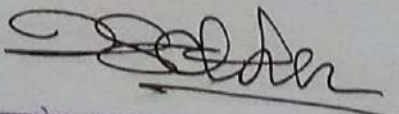
The total cost of the project is estimated to be @ Rs 4800/- per village plus total approx. cost of the CORS network establishment i.e. Rs 8.0 Cr. Both the parties understand and do agree that the actual cost of the project, worked out on the basis of the actual no of villages surveyed and calculated after the completion of the project.

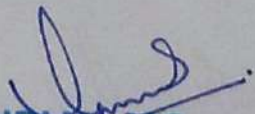
As per the guidelines of SVAMITVA Scheme issued by Ministry of Panchayati Raj (MOPR), the cost of following components would be borne by MOPR:

- i.a.i. Establishment of the CORS Network in Kerala
- i.a.ii. Large Scale Mapping of rural /urban abadi area using Drone survey technique
- i.a.iii. IEC (Information, Education and Communication)
- i.a.iv. State Project Management Unit

### B. Release of Payment

Payment to above mentioned component would be released as per Guidelines of SVAMITVA Scheme issued by Ministry of Panchayati Raj (MOPR), Government of India.

  
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तिरुवनंतपुरम/THIRUVANANTHAPURAM-695022

  
**R. GIRIJA, IAS**  
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Govt. of Kerala

## 11. OTHER ASPECTS OF MoU

### 11.1. Arbitration

In the event of any dispute or difference relating to the interpretation and application of provisions of this MoU, such dispute or difference shall be referred by either Party for Arbitration to the Sole Arbitrator i.e. The Secretary to the Government of India, Ministry of Panchayati Raj. The Arbitration and Conciliation Act 1996, and the Arbitration and Conciliation Act 2015, shall not be applicable to arbitration under this clause. The Award of arbitrator shall be binding upon the Parties to the dispute, provided, however, any party aggrieved by such Award may make a further reference for setting aside or revision of the Award to the Law Secretary, Department of Legal Affairs, Ministry of Law and Justice, Government of India. Upon such reference, the dispute shall be decided by the Law Secretary or the Special Secretary/Addl. Secretary, when so authorized by the Law Secretary, whose decision shall bind the parties finally and conclusively. The Party to the Dispute will share equally the cost of Arbitration as intimated by the Arbitrator.

### 11.2. Indemnity

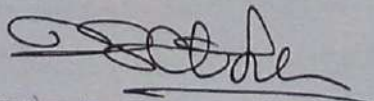
Each party shall indemnify and hold harmless the other party and its trustees, officers, employees from and against any claims, actions, damages, expenses (including reasonable fees and costs), liabilities and costs arising from or relating to the services of either party under this Agreement.

### 11.3. Relationship - Principal to Principal

All dealings between Survey of India and Government of Kerala shall be as Principal to Principal. This MoU does not in any way create, establish or deem to imply the relationship of principal and Agent or partnership between Survey of India and Government of Kerala

### 11.4. Force Majeure

Neither party shall be held responsible for non-fulfilment of its respective obligations under this MoU to the exigency of one or more of the force majeure events lying beyond the responsible control of affected Party, such as but not limited to, Acts of God, War, Flood, Earthquakes, Epidemics, Riots, Civil commodities etc. provided on the occurrence and cessation of any such events, the party affected thereby shall send a notice in writing to this effect to the other party immediately after, but not later than one month of such occurrence and/or cessation. The period between the occurrences and cessation of such events will be excluded while calculating the period during which the party has to perform its obligations under this MoU. If the force majeure conditions continue beyond six months, the parties



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तिरुवनंतपुरम/THIRUVANANTHAPURAM-695022



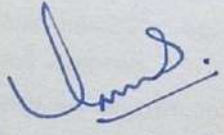
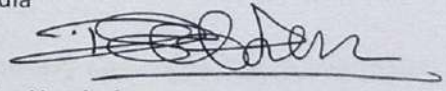
**R. GIRIJA, IAS**  
Director of Survey & Land Records  
Govt. of Kerala

shall then mutually decide about the future course of action. The party affected thereby shall send a notice in writing to this effect to the other party immediately but not later than one month of such occurrence.

11.5. Governing Law and Jurisdiction

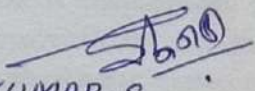
This MoU shall be governed by and constructed in accordance with Indian laws

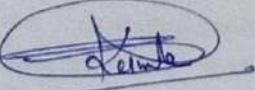
IN WITNESS WHEREOF the Parties hereto have duly executed this MoU as on date written above.

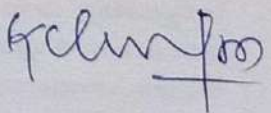
Government of Kerala	Survey of India
By signing this MoU , I also confirm that I am authorized to sign on behalf of and under order of the Governor of Kerala represented by the Director Survey And Land Records, Government of Kerala	By signing this MoU, I also confirm that I am authorized to sign on behalf of and under order of the President of India represented by Director, Kerala and Lakshadweep GDC, Survey of India
By the Hand of Signature: 	By the Hand of Signature: 
Name: ..... R. Ginja IAS	Name: P. V. RAJASEKHAR
Designation: Director	Designation: Director
Date: ..... 20.4.2021	Date: 20.04.2021

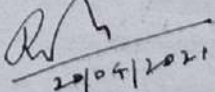
PARTIES OF THE FIRST PART	PARTIES OF THE SECOND PART
---------------------------	----------------------------

In the presence of witness

1)   
 ANILKUMAR.S  
 Head draftsman, Residing at  
 Nendazem, Gandhi Nagar, Sembayem  
 Thiruvananthapuram

2)   
 SIVAKUMAR.K  
 First Grade Draftsman  
 Residing at TC 24/1255  
 Valiyasala, Edele P.O  
 Thiruvananthapuram

  
 1) (K. CHANDRAN) OS  
 K&L ADC, SOI,  
 Residing at "Aushika",  
 PLRA, 97(B), Pattom  
 Thiruvananthapuram

2)   
 (R. SIVADAS), Officer Surveyor  
 K&L ADC, Survey of India,  
 Residing at  
 "SREEKRIPA", Ron Garden,  
 Mukhola, Vettayam. P.O.,  
 Thiruvananthapuram - 695 013



159187/2021/T DSLR

"ഭരണഭാഷ- മാതൃഭാഷ"



കേരള സർക്കാർ

സംഗ്രഹം



റവന്യൂ വകുപ്പ് - SVAMITVA പദ്ധതി സംസ്ഥാനത്ത് നടപ്പിലാക്കുന്നതിന് സർവ്വെ ഓഫ് ഇന്ത്യയുമായി ഏർപ്പെടുത്തേണ്ട ധാരണപത്രം ഒപ്പ് വെയ്ക്കുന്നതിന് സർവ്വെ ഡയറക്ടർക്ക് അനുമതി നൽകി ഉത്തരവ് പുറപ്പെടുവിക്കുന്നു.

റവന്യൂ (ഇ) വകുപ്പ്

സ.ഉ.(സാധാ) നം.1459/2021/റവ.

തീയതി, തിരുവനന്തപുരം, 31/03/2021

പരാമർശം: 1 18/11/2020ലെ കേന്ദ്ര പഞ്ചായത്തു രാജ് മന്ത്രാലയത്തിന്റെ Do.No.N-1911(35)/1/2019-e Panchayath നമ്പർ കത്ത്

- 2 07/01/2021, 06/02/2021 എന്നീ തീയതികളിലെ സർവ്വെ ഡയറക്ടറുടെ DSLR/3151/2020-B9 നമ്പർ കത്തുകൾ.

3 23/03/2021 ലെ സ.ഉ.(സാധാ)നം.1421/2021/റവ

ഉത്തരവ്

സംസ്ഥാനത്തു 2021-2022 സാമ്പത്തിക വർഷത്തിൽ SVAMITVA പദ്ധതി നടപ്പിലാക്കുന്നതിന്റെ ഭാഗമായി സംസ്ഥാനവും സർവ്വെ ഓഫ് ഇന്ത്യയും തമ്മിലുള്ള ധാരണപത്രം ഒപ്പു വയ്ക്കണമെന്ന് പരാമർശം (1) പ്രകാരം കേന്ദ്ര പഞ്ചായത്ത് മന്ത്രാലയം അറിയിക്കുകയുണ്ടായി.

സംസ്ഥാനത്ത് റീസർവ്വെ ജോലികൾ ത്വരിതപ്പെടുത്തുന്നതിന് കേന്ദ്ര പഞ്ചായത്ത് മന്ത്രാലയം ചെലവ് വഹിക്കുന്ന SVAMITVA പദ്ധതി പ്രകാരം പ്രോൺ സർവ്വെ കൂടി ഇതോടൊപ്പം നിർവ്വഹിക്കുന്നത് കൂടുതൽ സഹായകരമാകുമെന്നും SVAMITVA കർമ്മ പദ്ധതിയുടെ 2021-22 സാമ്പത്തിക വർഷത്തിൽ കേരളം ഉൾപ്പെട്ടിട്ടുള്ള സാഹചര്യത്തിൽ സർവ്വെ ഇന്ത്യയുമായി ചർച്ച ചെയ്ത് ധാരണ പത്രം ഒപ്പ് വെയ്ക്കുന്നത് ഉൾപ്പെടെയുള്ള പ്രാരംഭനടപടികൾ സ്വീകരിക്കുന്നതിനും ഇതിലേയ്ക്കായി ഒരു നോഡൽ ഓഫീസറെ നിശ്ചയിക്കുന്നതിനും, തദ്ദേശ സ്വയംഭരണ സ്ഥാനപങ്ങളുടെ സഹകരണം ഉറപ്പാക്കി ടി പദ്ധതി സംസ്ഥാനത്ത് നടപ്പിലാക്കുന്നതിനുള്ള നടപടികൾ സ്വീകരിക്കണമെന്നും ആയത് ടി പദ്ധതി സംസ്ഥാനത്ത് നടപ്പിലാക്കുന്നതിന് സർവ്വെ ഓഫ് ഇന്ത്യയുമായി ഏർപ്പെടുത്തേണ്ട ധാരണപത്രം അംഗീകരിച്ച് നൽകുന്നതിനും ആയത് ഒപ്പ് വെയ്ക്കുന്നതിന് സംസ്ഥാനതല നോഡൽ ഓഫീസറെ ചുമതലപ്പെടുത്തിക്കൊണ്ട് ഉത്തരവ് നൽകണമെന്നും സർവ്വെ ഡയറക്ടർ പരാമർശ(2) കത്ത് പ്രകാരം അപേക്ഷിക്കുകയുണ്ടായി.

സർക്കാർ ഇക്കാര്യം വിശദമായി പരിശോധിച്ചു പരാമർശം (3) പ്രകാരം SVAMITVA പദ്ധതി സംസ്ഥാനത്ത് നടപ്പിലാക്കുന്നതിനുള്ള നോഡൽ ഓഫീസറായി സർവ്വെ ഡയറക്ടറെ ചുമതലപ്പെടുത്തി ഉത്തരവ് പുറപ്പെടുവിക്കുകയുണ്ടായി. കൂടാതെ സംസ്ഥാനത്ത് റീസർവ്വെ ജോലികൾ ത്വരിതപ്പെടുത്തുന്നതിന് സർവ്വെ ഓഫ് ഇന്ത്യ മുഖേന CORS നെറ്റ് വർക്ക് സ്ഥാപിക്കുന്നതിനുള്ള നടപടികൾ സ്വീകരിച്ചുവരുന്ന സാഹചര്യത്തിൽ കേന്ദ്ര പഞ്ചായത്ത് മന്ത്രാലയം ചെലവ് വഹിക്കുന്ന SVAMITVA പദ്ധതി പ്രകാരം പ്രോൺ സർവ്വെ കൂടി ഇതോടൊപ്പം നിർവ്വഹിക്കുന്നത് കൂടുതൽ സഹായകരമായതിനാൽ ടി പദ്ധതി സംസ്ഥാനത്ത് നടപ്പിലാക്കുന്നതിന് സർവ്വെ ഓഫ് ഇന്ത്യയുമായി

159187/2021/T DSLR

ഏർപ്പെടുത്തേണ്ട ധാരണപത്രം ഒപ്പ് വെയ്ക്കുന്നതിന് സംസ്ഥാനതല നോഡൽ ഓഫീസറായ സർവ്വെ ഡയറക്ടറെ ചുമതലപ്പെടുത്തിയും ഉത്തരവാകുന്നു.

ടി ധാരണപത്രത്തിന്റെ അനുബന്ധമായി ഈ ഉത്തരവ് കൂടി ചേർക്കേണ്ടതാണ്.

(ഗവർണ്ണറുടെ ഉത്തരവിൻ പ്രകാരം)  
ഡോ .എ .ജയതിലക് ഐ.എ.എസ്  
പ്രിൻസിപ്പൽ സെക്രട്ടറി

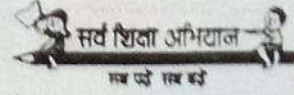
സർവ്വെ ഡയറക്ടർ, തിരുവനന്തപുരം  
റിജിയണൽ ഡയറക്ടർ, സർവ്വെ ഓഫ് ഇന്ത്യ, കേരള & ലക്ഷദ്വീപ് GDC  
പ്രിൻസിപ്പൽ അക്കൗണ്ടന്റ് ജനറൽ (ഓഡിറ്റ്) കേരള, തിരുവനന്തപുരം  
അക്കൗണ്ടന്റ് ജനറൽ (എ&ഇ) കേരള, തിരുവനന്തപുരം  
ധനകാര്യവകുപ്പ് (Exp-B3/48/2021-Fin പ്രകാരം)  
നിയമവകുപ്പ് (3688/Convey1/2021/Law)  
ഇൻഫർമേഷൻ & പബ്ലിക് റിലേഷൻസ് (വെബ് & ന്യൂ മീഡിയ) വകുപ്പ്  
കരുതൽ ഫയൽ/ ഓഫീസ് കോപ്പി.

ഉത്തരവിൻ പ്രകാരം

സെക്ഷൻ ഓഫീസർ



भारतीय सर्वेक्षण विभाग  
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भारत के महासर्वेक्षक का कार्यालय  
Office of the Surveyor General of India  
हाथीबढ़कला एस्टेट, डाक बक्स सं. 37  
Hathibarkala Estate, Post Box No. 37  
देहरादून 248 001 (उत्तराखण्ड), भारत  
DEHRADUN - 248 001 (UTTARAKHAND), INDIA

No. T- 592 /1147-Project (LSM-SVAMITVA)/ Coll. 03

Dt: 15 April, 2021

To,

The Director,  
Kerala & Lakshadweep GDC,  
Thiruvananthapuram.

**Sub: Finalization & Signing of MoU between Sol & State Govt. under SVAMITVA scheme – Reg.**

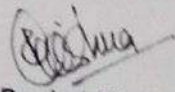
- Ref. i) This office letter No. T- 460/1147-Project (LSM-SVAMITVA)/ Coll 03  
dt. 18.03.2021  
ii) The Telephonic discussion on dated 15.04.2021 with SGI on finalization &  
signing of MoU under SVAMITVA scheme.

This is regarding Finalization/ Signing of MoU under SVAMITVA scheme You are hereby authorized to signed the MoU with states/UTs within area of your responsibility (AoR)

In continuation of this office letter under ref. (i) it is also informed that the scope of work under the MoU should not exceed the one prescribed for the SVAMITVA Project i.e. limited to Abadi area for which no cadastral record exists or equivalent area only It should not be signed for full area of village which is sometimes being pressed upon by the state Govts. The other terms and conditions of MoU including CORS network establishment will remain same, which was given in the form of standard format MoU under reference (i)

An urgent action in the matter for signing of MoU is solicited

Encl : As above

  
( Pankaj Mishra )  
Deputy Surveyor General  
for Surveyor General of India

Copy to : The Addl. SG, Southern Zone, Bangaluru for information please