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CHAPTER XIV

MAPS, DIAGRAMS, REPORTS AND RETURNS

- **14.1 1:50000 Maps**. District Superintendents should see that their Supervising Officers and surveyors are supplied with the latest 1:50000 coloured maps of areas under survey. When a revised map is published, copies will be issued to District Superintendents for their use, and for the use of their assistants.
- **14.2** Every surveyor will verify the correctness of the 1:50000 map and report to Head Office during his stay at a new station, through his Supervising Officer and the District Superintendent, the amendments that are necessary.

Supervising Officers should assign areas covering approximately a radius of 5 kilometres to each surveyor for revision.

Roads should be verified in terms of the standard reference on the 1:50000 map, and they should be further classified as "metalled", "motorable" or otherwise.

Tracings showing amendments in red should be signed and dated and a reference made to the printed date of publication on the 1:50000 maps.

If there are no amendments a 'Nil' report should be sent. If there are considerable amendments involving actual survey, the surveyor will report accordingly, and arrangements will be made, if considered necessary, to have a Topographical Revision carried out.

Surveyors engaged on Engineering Surveys, Forest Surveys or Town Surveys, are exempted from this order.

- **14.3** District Superintendents and Supervising Officers should record the amendments reported by their assistants, on their copies of the 1:50000 maps. When on inspection they should always have the 1:50000 map of the area they are inspecting with them, as a considerable amount of verification can be done whilst traveling along roads by car or cycle. Amendments which have not been previously reported in accordance with paragraph 14.2 should be communicated to Head Office.
- **14.4** The information shown on the tracing will be recorded on the 'Master Copies' in Map Publication Branch and will be used in the preparation of the next edition of the 1:50000 sheets and of other maps which are compiled from the 1:50000 sheets.
- **14.5** Traverse Progress Diagrams. After the traverse diagram (see annex 1) has been prepared, the District Superintendent should forward a copy on tracing cloth to the Supervising Officer.

- **14.6** The Supervising Officer will forward this diagram each month to Provincial Office through his District Superintendent and will show there on the progress made.
- **14.7** Supervising Officers should insert all existing traverses in his area on his 1:10000 sheets, as well as on his 1:50000 maps for his own information, and for the information of inspecting officers.
- **14.8** The Supervising Officer will obtain during recess the diagrams referred to in paragraph 14.9 and ensure that the traverses are plotted on them. He will certify in the Recess progress Diagram that this has been done.
- **14.9** District Superintendent's Traverse Diagrams. District Superintendents are supplied drawing paper black copies of the 1:50000 sheets in their Districts, on which they will indicate:
 - (a) existing conformal traverses, and
 - (b) other traverses recast on conformal values and closing within the prescribed limits of error.

All traverses run in the future will be indicated on these sheets only. As they constitute a record of the traverses surveyed in the District it is essential that they should be kept up-to-date. They should be filed in special portfolios supplied for the purpose.

The existing diagrams will be cross-referenced to the new sheets and filed for reference.

- **14.10** Supervising Officer's and Surveyors' Traverse Diagrams (Sporadic Surveys). The traverses in progress as well as those proposed will be shown in Supervising Officers' 1:50000 area diagrams and surveyors' 1:50000 sheets (not tracings). For this purpose District Superintendents will send the latter 1:50000 tracings showing completed traverses in firm lines and proposed traverses in broken lines.
- **14.11 Preliminary Diagrams**. District Superintendents should issue to Supervising Officers a tracing on the 1:50000 scale before the survey of an area is started, in order that they may know what surveys have taken place in the area adjoining.
- **14.12** Area Diagrams (Sporadic Surveys). Every District Superintendent and Supervising Officer will keep a separate "Area Diagram" for each area, on which all surveys to be attended to by his Sporadic Survey Staff will be shown.
- **14.13** Diagram will be reproduced at Head office from tracings prepared in the District Survey Offices, and will be issued as required. Fresh diagrams will be used for each season.
- **14.14** The area diagrams are usually on the scale of 1:50000. They should show all roads, railways, towns, principal villages and rivers and the boundaries and numbers of villages which have been blocked surveyed, as well as the 1:50000 sheet squares.

- **14.15** Surveys will be located, but not marked, on the 1:50000 topographical sheets or village diagram, and their positions transferred to the area diagram by means of the sheet lines. They will be shown as far as possible in the correct villages, but if there are too many in one village they may be shown to one side of the diagram with an arrow to indicate the position. Conventional signs are shown in Appendix 3.
- **14.16** The Head Office number will be written in black ink in the figure so that the extent can be inserted in pencil under, it, if necessary. The approximate extent should be shown on surveys larger than 10 hectares
- **14.17** The letter "A", "B", "C" or "D" denoting the class of each Requisition for Survey will be inserted beside it on the area diagram.
- **14.18** The distribution of work will be shown by ringing the surveys issued to the different Supervising Officers or surveyors, other than itinerators, in pencil or by putting the surveyors' initials against them.
- **14.19** Each Surveyor will keep a diagram, or diagrams, showing the Requisition for Survey in black and landmark depots in blue, in accordance with Appendix 4. The position of the surveyor's camp should also be shown on this diagram.
- **14.20** These diagrams will be made on sheets of tracing paper, on which the symbols showing the work and its progress can be drawn, and will be attached to 1:50000 topographical sheets by a narrow folded margin gummed to the back of the sheets. The same copy of 1:50000 sheets can thus be used many times. Mounted copies of 1:50000 sheets should be used.
- **14.21** Office Progress Diagrams. District Superintendents will keep an office progress diagram, which must be kept up-to-date. This diagram shows the action taken on surveys completed and sent to the District Survey Office by the field staff, and records the examination and disposal of such surveys.
- **14.22** Surveyors' Journals. All surveyors should keep journals on form S 406. This should be entered at the end of each day.

The work performed by the surveyors and the Manum Sahayakas should be shown separately and entries made to the nearest half-day. When the figures thus entered to do not give a clear indication of the volume of miscellaneous work done, a concise note should be made in the remarks column.

Surveyors engaged on GPS/EDM traversing or special surveys should amend the headings in the form to suit such work.

The overall cost per kilometre surveyed or its equivalent levelled is the total expenditure divided by the total number of kilometres surveyed and /or half of the kilometres levelled during the month on all types of works.

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The cost per kilometre cleared is the cost of the entire team of Manum Sahayakas for days spent on clearing only (excluding days spent on surveying and transporting landmarks, &c.) divided by the number of kilometres cleared for the month.

14.23 Two forms should be taken up each month, one of which will be sent to the Supervising Officer at the end of each week and brought up-to date on receipt from him. All remarks made by him should be copied in red on to the master copy.

At the end of the month the surveyor will file that copy (shuttle copy) and forward the master copy to the Supervising Officer by the 5^{th} of the subsequent month, after complying with paragraph 14.31.

- **14.24** Details must be entered separately for each survey so that extents number of landmarks, &c, can be obtained for bills of cost.
- **14.25** Ministry's Progress Review. District Superintendents should forward the physical and financial progress reports of their districts to reach Head Office by the end of each month. These reports have to be forwarded to the Ministry at the Ministry's progress review meeting by the S.G.
- **14.26** Annual Reports. Every Supervising Officer will send annually a report consisting of a resume of the work of his party for the year to the Superintendent; the latter will compile an Annual Administration Report for the District.
- 14.27 Monthly reports, returns and diagrams should be forwarded by Supervising Officers to reach the District Superintendents by the 2^{nd} working day of the following month, and to reach Head Office through Provincial Office by the 10^{th} of the month.
- **14.28** Annual reports should reach Head Office by the 10th of January each year.
- **14.29** Cost of Work. It is the duty of every surveyor to keep the cost of his work as low as possible, and it is the duty of every Supervising officer to watch the cost of his surveyors' work carefully in order that this a end may be attained.
- **14.30** Every surveyor will enter the equivalent cost of his work per kilometer at a standard salary and all allowances per month for the last completed season in cage 7 of his confidential report form, and this cost will be taken into account when his increment or promotion is under consideration.

Cost of work is an important factor in considering the relative merits of surveyors engaged on the same type of work.

A high cost of work does not, however, necessarily detract from a surveyor's merit and allowance will be made for the nature of the country and of the work done.

- 14.31 Surveyors should keep a monthly cost of work on form S 406 in duplicate. The original should be sent to the Supervising Officer by the 5^{th} of the subsequent month. See paragraph 14.23.
- **14.32** Supervising Officers should forward to the District Superintendent a cost of work on form S 329 for each month, compiled from their surveyors' journals, to reach him by the 2nd day of the following month: -

Separate forms should be sent for each of the following categories:

Demarcation Surveys Other Requisitions in Block Survey Areas Engineering Surveys (separately for each major scheme) Framework Traversing Levelling (primary, secondary and tertiary) Town Surveys, separately for each town: Acquisition Surveys Village Tank Contour Surveys, separately for each tank Staking-out under major development scheme Staking-out under village tanks Landmarking under major development schemes Landmarking under village tanks Staking-out village expansion allotments Landmarking village expansion allotments **Miscellaneous Requisitions** Air Surveys **GPS** Surveys Cadastre Surveys under land titling program

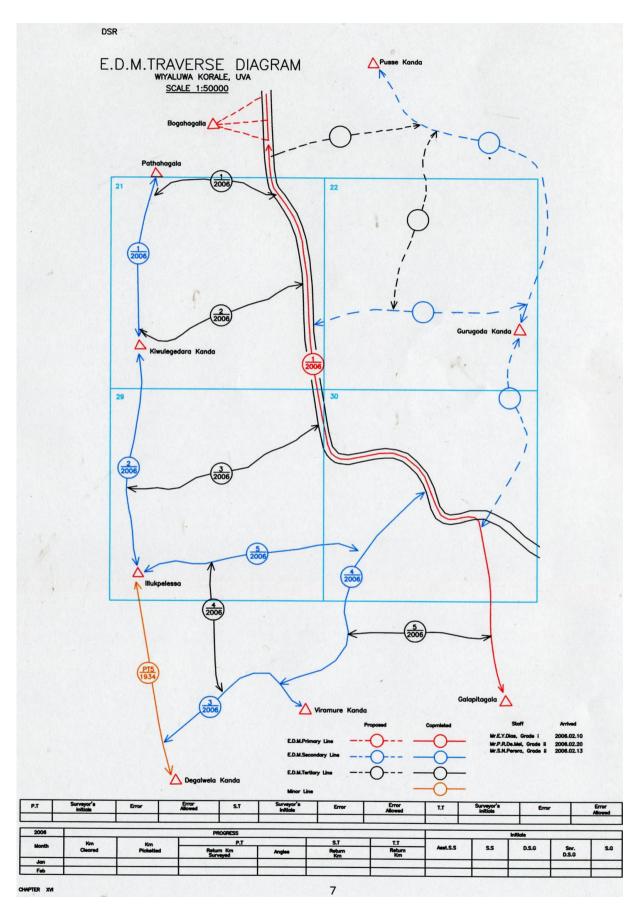
14.33 The District Superintendent should forward to Provincial Office an annual cost on form S 408 for each type of survey, compiled from the Supervising officers' returns referred to in paragraph 14.32.

In Block, Engineering and other extensive surveys, he should also send to Provincial Office a cost of work on form S334, for each scheme or party, from the commencement of field work to the end of recess.

In Engineering and Village Tank Surveys, he should send, in addition to the above, a cost of work on form S 334 for each financial year in respect of each scheme or village tank.

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CORRECTION SLIPS

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