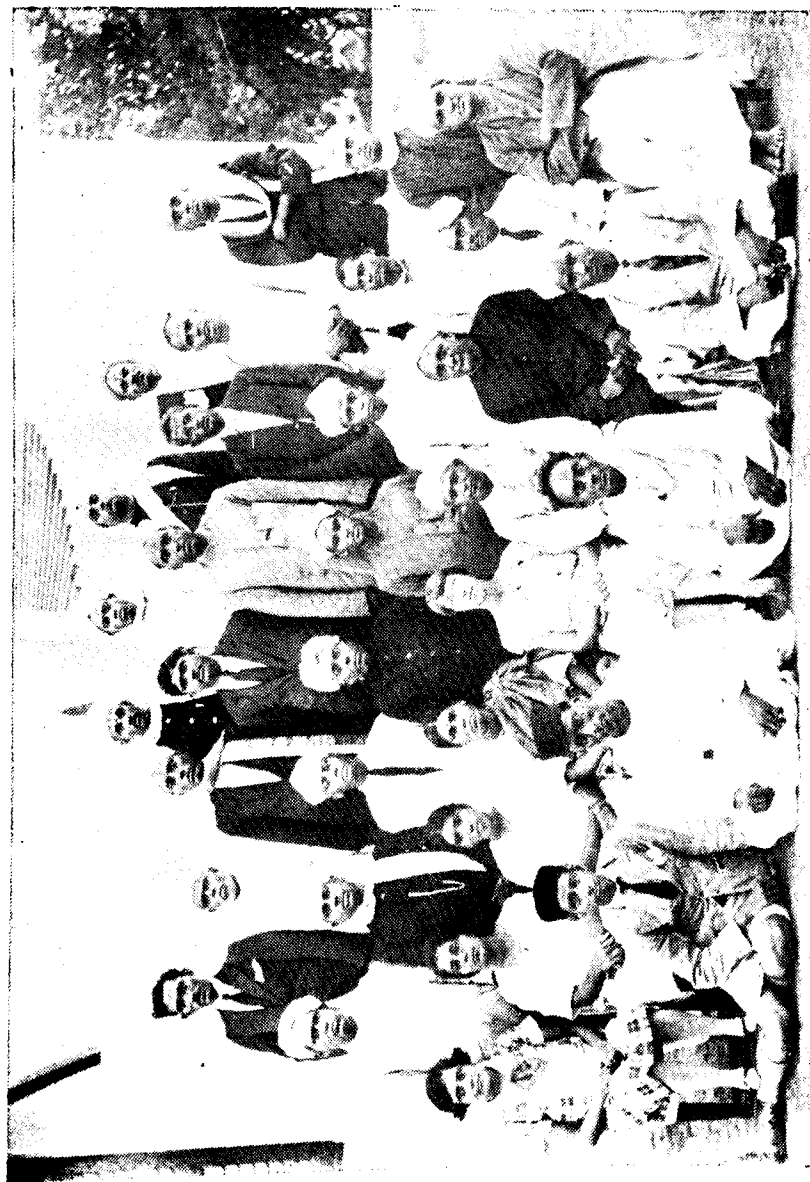


Journal of the Madras

Geographical Association

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MADRAS GEOGRAPHICAL ASSOCIATION, SUMMER SCHOOL APRIL, 1928.

— THE JOURNAL OF —

The Madras Geographical Association.

Vol. III]

April 1928.

[No. I.]

Report of the Summer School of Geography.

The Sub-Committee appointed by the Working Council to organise and conduct the Summer School of Practical Geography has the honour to present the following Report :—

At the instance of the Secretary of the Association to whom a general desire for a special course of training in Practical Work was expressed at various centres during his lecturing tours, the Working Council of the Madras Geographical Association at its meeting on 31st January 1928 appointed a Sub-Committee, consisting of Misses Lowe, Gerrard, and Birdseye, and Messrs. M. Subramania Iyer, G. D. Watkins and N. Subrahmanyam (Secretary), to organise and conduct a Summer School of Geography in April 1928.

The Committee met accordingly in the last week of February, and issued a general prospectus (Appendix I), which was addressed to all headmasters of high schools in the Presidency and published in the local press. It was therein proposed to train 30 graduate teachers of Geography for a fortnight. The response was very encouraging, and applications poured in large numbers and enquiries made.

Meantime, the Secretary interviewed the Director of Public Instruction on behalf of the Sub-Committee, and applied for financial support. The Director, in his Proceedings R. O. C. No. 345 D/28 dated 9—3—'28, approved of the idea of the Madras Geographical Association running the Summer School and promised financial support, the amount of which would be decided on submission of the financial statement of Receipts and Expenses.

The Principal of the Teachers' College also consented very kindly to place the Geography Department of the College at the disposal of the Association for the fortnight, besides permitting the

Lecturer in Geography to be engaged in conducting the Summer School. Further, he offered to make the Hostel accommodation of the College available for the teachers attending the course.

After a second meeting of the committee, a detailed prospectus (Appendix II) was issued and applications registered. In a third meeting, 30 candidates were selected, of whom 26 actually turned up (Appendix III). At the same time, a definite programme of work was settled upon (Appendix V). By special arrangement with the Principal of the Engineering College, Guindy, one of the lecturers in Surveying of that College had been engaged to give a course of training in Surveying.

On Monday the 2nd April 1928, the Summer School was inaugurated by Mr. H. Champion, M.A., Principal of the Teachers' College with a fitting speech (Appendix VI). The work went on steadily for a fortnight. Four excursions to places of geographical interest were taken on the intervening holidays. The course was felt to be a strenuous one both by the lecturers and the students.

On the last three days of the course, Messrs. Longmans, Green & Co., and Messrs. Macmillan & Co., exhibited their geographical publications, atlases, maps, and other apparatus and appliances. On the evening of the last day (14—4—'28), the course came to a close with a Social and a Group Photo (Frontispiece).

The Practical Work done by the students was valued at a committee meeting, and a certificate (Appendix IV) issued to each of them.

Receipts and Payments are shown as Appendix VII. Miss J. M. Gerrard had kindly advanced Rs. 50 for the preliminary expenses, which had since been returned with thanks; and the fees collected amounted to Rs. 270. A small printing charge still remains to be paid, and is shown in suspense account. The Accounts here presented, however, does not include the remuneration to be paid to the lecturers who actually conducted the School. This is expected to be paid out of the grant kindly promised by the Director of Public Instruction in his Proceedings quoted above.

The response to the invitation has been encouraging, and has revealed what an amount of desire to learn there is on the part of

the teachers of Geography. It has revealed also how much has got to be done in the way of adequate equipment, instruction and training on the practical side. The students that attended the course went through every portion of the syllabus with keenness and delight, unfamiliar as was to them the greater part of the subjects handled. It has served a useful purpose in forcibly bringing to light not only the fact of a desire to learn that is abroad, but also the necessity for a systematic and rigorous course so as to create a body of really competent teachers. A heavy responsibility, therefore, rests on those who would provide for adequate training and instruction. Nothing less than the best standard should be worked up to.

	(Signed) I. H. LOWE.
GOPALAPURAM,	(") E. D. BIRDSEYE.
CATHEDRAE POST,	(") N. SUBRAHMANYAM.
MADRAS,	(") M. SUBRAMANIAM.
11th August, 1928.	(") G. DAVIES WATKINS.
	(") J. M. GERRARD.

Appendix I

THE MADRAS GEOGRAPHICAL ASSOCIATION.

A Summer School.

It is proposed to run under the auspices of the Madras Geographical Association a Summer School of Geography in Madras during the first fortnight of April next for giving training in Practical Geography to the teachers of Geography.

The Summer School undertakes to give to the teacher who has already had grounding in Geography work the training which would normally require two terms' work, in the course of a fortnight, by means of intensive effort along a concentrated course of studies, judiciously chosen for their value and importance from the point of view of the teacher. The course will contain mainly of Practical Work, Field Work and Excursions, and will present the

salient points in such essential matters as map-making, map-reading and map-correlations, climate and weather, use of graphic methods and statistics, and construction of diagrams, models and appliances.

The increasing recognition of Geography as an educational subject, both in the College and High School and the opening of courses in Geography at various centres have made it incumbent that those who handle the subject shall get up now that amount of practical training, which they have not been able to obtain up till now, and will not for some time to come get otherwise. Only so will the teacher be in a position competently to handle the subject in his class and come up to the mark. It is specifically to provide this opportunity that this Association has undertaken to have a Summer School this year.

It is notorious that much of what passes for Geography is only book work, and it is to correct this tendency and to inculcate the right methods and give training in them that this Summer School is undertaken.

It is expected that Principals, Headmasters and Management will, in the interests of efficiency of Geography teaching in their institutions provide all the necessary facilities for their Geography teachers to come to Madras and undergo training in the fortnight's course. The number proposed to be trained is 30.

Applications are invited, and the applicants such as are selected will be furnished with other details regarding the course. Applications should be addressed to:—

“THE SECRETARY,
The Madras Geographical Association,
Gopalapuram, CATHEDRAL POST,
MADRAS,”

so as to reach him not later than the 20th March, 1928.

MADRAS, }
3rd March, 1928. }

N. SUBRAHMANYAM,
Secretary.

Appendix II

THE MADRAS GEOGRAPHICAL ASSOCIATION.

Details of the Summer School to be held in April, 1928.

1. This Summer School has the approval and support of the Director of Public Instruction, Madras.
2. It is primarily intended for graduate teachers of Geography; but, accommodation permitting, a few secondary grade teachers will also be taken. A separate course for secondary teachers will be held later in the year.
3. The classes will be held in the Geography Department of the Teachers' College, Saidapet, from Monday the 2nd April to Saturday the 14th April, 1928 (both days inclusive).
4. The course will consist of:—
 - i. **Climate and Weather**: by Mr. N. Subrahmanyam, M.A., L.T., Lecturer in Geography, Teachers' College, Saidapet, and by Mr. G. D. Watkins, B.Sc., F.R.G.S., Headmaster and Lecturer in Geography, Christian College.
 - ii. **Map-reading and map-correlations**: by Miss E. D. Birdseye, B.Sc., Dip. in Geo. (London), Lecturer in Geography, St. Christopher's Training College.
 - iii. **Graphs and Statistics**: by Mr. M. Subramaniam, B.A., B.L., Editor, Journal of the Madras Geographical Association.
 - iv. **Elementary Surveying**: by one of the Instructors in Surveying, Engineering College, Madras.
 - v. Four or five **general lectures**, illustrative of geographical method and view point, e.g., 'Madras as a Regional Study,' by Miss E. D. Birdseye; 'The geography Room and its Equipment,' by Mr. N. Subrahmanyam; 'Cotton as a world commodity,' by Mr. M. Subramaniam.

(Detailed syllabuses will be issued to the selected candidates in due course. They are advised to provide themselves with mathematical instruments boxes.)

- 5 The hours of work will be from 11 A.M. to 1 P.M. and from 2 P.M. to 4 P.M. Surveying will be conducted in two batches, one batch working from 6-30 to 9 A.M. and the other batch from 4 to 6-30 P.M. There will be no regular classes on Good Friday, Easter Sunday and Tamil New year's Day; but, on those days excursions will be arranged to Pallavaram, Madras Harbour, Observatory, Botanical Gardens, and Ennore backwaters.
6. To meet the cost of stationery, excursions and other incidental charges, a fee of Rs. 10 will be charged for the entire course. This amount should be remitted to the Secretary so as to reach him not later than the 30th instant. Those whose fees are not received by that date cannot have their seats guaranteed.
7. Lodging and Boarding for those that require it will be arranged in the Teachers' College, Saidapet, and the probable expenses will be Rs. 15 for the whole period, payable in advance. Those wishing to stay in the Hostel will remit this amount to the Secretary.

GOPALAPURAM,
CATHEDRAL POST,
MADRAS,
22nd March, 1928.

N. SUBRAHMANYAM,
Secretary.

APPENDIX III.

List of Teachers who Attended the Summer School of Geography

in April 1928.

Name.	Qualifications.	School.	Remarks.
1. Chakko, Miss. M.	B.A., L.T.	L. M. Bentinck High School, Vepery.	Deputed by the Mission.
2. Chandrasekhara Dikshithar, K. G.	B.A., L.T.	Hindu High School, Kanyur.	T. A. alone paid by Management.
3. Fennell, Miss W.	Secy. grade	Church Park Training College.	Deputed by the Principal.
4. Jacques, Miss. A.	do	do	do
5. Joseph, P. K.	B.A., L.T.	St. Patrick High School, Adyar,	Deputed by the Management.
6. Joseph, S.	B.A., L.T.	St. Peter's High School, Tanjore.	do
7. Kalyanasundaram, N.	B.A., L.T.	Out of employment	
8. Kameswara Rao, V.	Secy. Grade	Board High School, Repalle.	Deputed by President, Guntur Dt. Bd.
9. Kohlhoff, J.	B.A. L.T.	London Mission High School, Bangalore.	Deputed by the Mission
10. Krishnaswami, N.	M.A. L.T.	Without employment.	Granted 'study leave.'
11. Krishnaswami Ayyangar, K. S.	B.A., L.T.	Banadurai High School, Kumbakonam.	Fees paid by Management.
12. Kunjammal, Miss. K.	Secy. grade	Lady Willington Trg. College, Madras.	Deputed by President, Chingleput Dt.
13. Nagan, S. V.	B.A. L.T.	Board High School, Uttaramerur.	Deputed by Management. [Board
14. Narasimhachari, K.	Secy. grade	P. S. High School, Mylapore.	do
15. Raj, Samuel	do	London Mission High School, Coimbatore.	do

APPENDIX IV.

The Madras Geographical Association.

Special Course in Geography,

APRIL 1928.

*This is to certify that.....
attended a special course of instruction in
Practical Geography, arranged by this
Association, including Practical Work in
Climate & Weather, Map-reading &
Map-Correlations, Statistical Work & Gra-
phic Methods, and Elementary Surveying.*

*Gopalapuram, Cathedral
Post, Madras,
June, 1928.*

(By Order)

Secretary

President.

16. Ramakrishna Sastri, V.	B.A., L.T.	Govt. Trg. School, Chittoor.	Permitted to attend.
17. Ramanuja Ayyangar, S. T.	B.A., L.T.	Zamindar's High Sch., Katuputur.	do
18. Sankarasubba Iyer, S.	B.A., L.T.	Model Sch., Trg. College, Trivandrum.	Deputed by D.P.I. Travancore
19. Satyanarayana, K.	Secy. grade.	Rajah's College, Parlakimidi.	Deputed by the Principal.
20. Sharma, K. J.	B. T. (Nat.)	National Theosophical College, Adyar.	do
21. Sivasamba Iyer, V. S.	B.A.	Board Secy. Sch., Ponneri.	Deputed by President, Chingleput Dt. Board.
22. Subramaniam, K. V.	M.A., L.T.	Board High Sch., Sulturpet.	Deputed by President, Nellore Dt. Board.
23. Srinivasa Raghavan, K.	B.A., (Hons.)	National Theosophical College, Adyar.	
24. Sundaresan, L. R.	M.A., L.T.	Model Sch., Teachers' College, Saidapet.	
25. Venkatarana Iyer, N. V.	Secy. grade.	P. S. High School, Mylapore.	Deputed by the Management.
26. Yegnaraman, N.	B.A., L.T.	The High School, Tirukkattupalli.	do

APPENDIX V.

The Madras Geographical Association.

Summer School, April 1928.

Programme of Work—forenoon.

Day.	7 to 9 A.M.	10 to 11 A.M.	11 A.M. to 1 P.M.
Mon. 2	...	Opening of the School by Mr. H. Champion.	Climate and Weather: (Pressure and Winds) by G. D. Watkins.
Tues. 3	...	...	do.
Wed. 4	...	Nature and Scope of Modern Geography N. Subrahmanyam.	do.
Thur. 5	Surveying by Batch I.	How to study the Home Region by N. Subrahmanyam.	Temperature & Rainfall (by N. Subrahmanyam.)
Sat. 7	do.	Value and method of Excursions by N. Subrahmanyam.	do.
Mon. 9	do.	Geography Room by N. Subrahmanyam.	Use of statistics and graphical and diagrammatic methods of representation by M. Subramania Iyer.
Tues. 10	do.	Geographical Equipment for a High School by N. Subrahmanyam.	do.
Wed. 11	do.	Geographical Bibliography by N. Subrahmanyam.	do.
Fri. 13	do.	Use of pictures and illustrations, by N. Subrahmanyam.	do.
Sat. 14	do.	Cotton as a world Commodity by M. Subramania Iyer.	do.

The Madras Geographical Association.

Summer School, April 1928.

Programme of Work—afternoon.

Day.	2 to 3 P.M.	3 to 4 P.M.	4 to 6 P.M.
Mon. 2	Recent ideas in Geomorphology by G. D. Watkins.	Library.	...
Tues. 3	The Position of Geography Abroad by M. Subrahmania Iyer.	Madras as a natural region by Miss E. D. Birdseye.	Library.
Wed. 4	Climate and Weather: Temperature and Rainfall by N. Subrahmanyam.	Library.	...
Thur. 5	Map-reading and Map-correlations by Miss E. D. Birdseye.	Surveying Batch II.	...
Sat. 7	do.	do.	do.
Mon. 9	do.	do.	do.
Tues. 10	do.	do.	do.
Wed. 11	do.	do.	do.
Fri. 13	Some Advanced Surveying Instruments by Dr. K. C. Chacko	...	...
Sat. 14	Irrigation and flood control by N. Subrahmanyam.	Social.	...

Programme of Excursions.

7—4—'28	The Horticultural Gardens : Conducted by Mr. M. S. Sabesan.	
8—4—'28	Pallavaram Hill	do Mr. N. Subrah-
10—4—'28	The Observatory	do do [manyam.
12—4—'28	The Madras Harbour and the Light House	do

Appendix VI.

The Summer School organised by the Madras Geographical Association was opened at 10-30 A.M., on Monday the 2nd April 1928, in the Geography Lecture Hall of the Teachers' College, Saidapet, by Mr. H. Champion, M.A., Principal of the College. Twenty-six teachers of Geography—mostly graduates and four of them ladies—from various schools in the Presidency had gathered together for the training. A few lecturers of the College were also present.

In requesting the Principal to open the Summer School, Mr. N. Subrahmanyam, (Secretary of the Association), sketched briefly the place of Geography in this Presidency as a High School subject during the last 30 years, and pointed out the effects of allocating it under B group in the S. S. L. C. Scheme in 1911, and of the removal of it altogether from the higher classes of the High School in the revision of 1916 to make room for the History of the British Empire. He then stated how there was a dawn of a better position being accorded to it, both in the University and the High School, partly as a result of the preliminary endeavours of Messrs. Gilbert Slater and R. G. Grieve and of the activities more recently of the Madras Geographical Association. Meantime, Geography had been separated from History, and made an independent subject of training in the L. T. course during the last four years. But the number of teachers thus specially trained in geography could not yet be counted in three digits. In view of this fact as well as of the impending reorganisation of the S. S. L. C., as a result of which Geography would be accorded an important place, the Working Council of the Association appointed a sub-committee of experts to organise and run a Summer School of Practical Geography.

Mr. Champion said that it gave him very great pleasure to be there at the time and to formally open the Summer School of Geography organised by the Madras Geographical Association. That was the first thing of the kind ever done by a private association in this country, and as such the Association deserved to be congratulated.

There was one particular thing in which he specially wanted the audience to do something. It was closely connected with a

subject in which he was most interested at that time, viz, elementary education. Now one of the great problems relating to elementary education was that of the supply of good text books in vernacular. As Chairman of the Geography Sub-Committee on Text books, he had opportunities recently of looking into the existing district and taluk geographies. He was sure that Mr. Subrahmanyam would agree with him that not one of them was prepared on right lines. Everyone of those local geography books contained not less than 80 pages, but of these nearly 60 pages referred to general geography, and the remaining 20 pages contained some meagre facts of local geography, written in a logical, stereo-typed dull manner. It was in this connection that he wanted the help of the audience. They were mostly mufasil teachers and had come from all parts of the Presidency; they knew their localities well, and now they were getting a further course of training in their subject. He would suggest to them, when they went back to their places, to try and produce good text-books of local geography for the district, the taluk and the town, on quite modern lines. By doing so, they would be helping him in the cause of elementary education with which he was just then concerned.

The Secretary, then, thanked Mr. Champion for having opened the school as well as for placing the whole of the Geography Section of the Teachers' College, with the equipment and the lecturer, and the hostel with its manager—at the disposal of the Summer School.

APPENDIX VII.

Summer School of Geography (April 1928).

Receipts and Payments Account.

Rs. A. P.			Rs. A. P.		
To Fee collections	...	270 0 0	By Postage and telegrams	...	29 2 0
			„ Printing and Stationery	...	49 11 0
„ Advance from Miss J. M. Gerrard	...	50 0 0	„ Conveyance and excursion expenses	...	66 4 9
			„ Cart-hire for materials transported	...	2 0 0
			„ Purchase of apparatus, maps and blocks	...	30 14 0
			„ Binding charges	...	3 12 0
			„ Materials (clay, etc.)	...	3 5 0
			„ Photographs	...	5 10 0
			„ Salary to Survey Master	...	50 0 0
			„ Payment to peon and menials	...	9 10 0
			„ Sundries	...	0 7 6
			„ Return of advance to Miss J. M. Gerrard	...	50 0 0
			„ Balance (held in suspense for payment to the press by Contract)	...	19 3 9
Total	...	320 0 0	Total	...	320 0 0

GOPALAPURAM, CATHEDRAL P.O.,
MADRAS,
11th August, 1928.

N. SUBRAHMANYAM,
Secretary,
The Madras Geographical Association.

Checked and found correct.

MADRAS,
11th August, 1928.

V. KALYANARAMAN, B.A., G.D.A.,
Lecturer, Govt. Institute of Commerce,
Honorary Auditor.

Rural Life on the West Coast: A Study in Environment.

1. The subject 'Rural life on the West Coast' is here considered from the 'Geographic' point of view.

2. *Limits of the Region.*—In terms of administrative divisions with which we are familiar, the West Coast of the Presidency includes the districts of South Canara, British Malabar and British Cochin, and the progressive native states of Cochin and Travancore, and if we extend our vision to the sister Presidency of Bombay, the limit extends up to Surat; but it is well to remind ourselves, as it is too often overlooked, that all these form a true geographical unit, one natural region, essentially similar in its natural phenomena, such as surface features, climate, plant and animal life, and this fact is well recognised in the term 'Kerāla' popularly used to describe the whole region. I should mention, however, that my own direct experience being mainly with Malabar, the illustrations here are mainly drawn from this part of the country which is, in its essential features, typical of the whole coastal region.

3. *Scenery : Surface Features.*—Let us make an imaginary journey through Malabar, purporting to stay at some typical places and understand and appreciate its true life. Passing beyond the Palghat Gap, the gate of Malabar from this side, Buchanan, an English traveller in 1800 thus describes the scenery presented :—'The country through which I pass is the most beautiful I have ever seen—a mixture of low hills, intersected by narrow valleys, swelling grounds and rice fields, all finely wooded and peopled. The scenery of the district is varied in the extreme, and ranges from the radiant beauty of the coast with its blue sea and

white foam and green lagoons, fringed with feathery palms and sparkling sand to the stern majesty of the Western Ghats. Along the narrow strip of land near the coast generally three miles wide, the green of palm and jack tree contrasts vividly with the red streak of the road that runs beneath them. Here the country is wonderfully intersected by inlets from the sea which often run for great lengths parallel to the coast, receiving the various mountain streams and communicating with the ocean by different narrow and shallow openings. Beneath the shade of the trees nestle the houses of the natives, not huddled together as in the east coast villages on double rows, but each in its own compound surrounded by a stout thorn fence and full of giant plantations of the plantain and the cocoanut."

A mile or two inland the scenery changes and the country begins to swell towards the barrier of the Ghats, "at first in range after range of low red laterite hills with paddy flats, fringed with cocoanut gardens winding in and out of these recesses, and later in the long spurs and deep ravines and thick jungles that mark the rise of the hills."

These low hills themselves are seldom of any considerable height but in general have steep slopes and level summits; the sides possess the best soil, and in order to prevent the soil, from being washed away by the rain are formed into terraces for cultivation; it is, however, only the declivities of the hills that are formed into terraces for cultivation; the level ground on the summits of the ridges is in many places bare and exposes to our view long surfaces of naked rock. "Towering all their slopes, clothed in dense forests, the majestic mountains of the Western Ghats keep watch over the favoured land at their feet. In fact the chief glory of Malabar is the long array of these Ghats, with an average elevation of 5000 feet, but occasionally soaring up into peaks upwards of 8000 feet high."

Geological Formation.—The curiosity of the visitor is often aroused to know the origin of such a scenery and it is interesting to take a peep into the geological formation of this region as an explanation of the varied scenery. There are many indications to show that originally Malabar lay some 500 feet below its present level and that the sea washed the foot of the western ghats, and that the narrow strip of land which now divides them from the sea has been raised up by some great earthquake or a volcanic convulsion. Popular belief connects such natural phenomenon with superhuman agency and the popular name of 'Parasurama Kshetram' is significant of the belief in the reclamation effected by the patron saint Parasurama.

The effects, however, of this fact on some general aspects of cultivation should not be missed; the terraced character of the laterite plateau is probably the result of marine denudation before the general elevation of the country, the sea eroding the face of the ghats and isolated hills, and laying sedimentary deposits around them.

In connection with drainage Mr. Buchanan noticed "the declivity of the country in general is such that whenever the cultivator pleases all superfluous water can be let off and the fields may again at pleasure be inundated and by custom a regular plan of watering every valley has been established, so that the caprice or malice of those who occupy one part of it may not prevent their neighbours from receiving the usual supply."

Many of the peculiar and deeply interesting features of Malabar life—their land system, inheritance, marriage, the interesting family institution called the 'tharwad' and the widely prevalent social bar of untouchability are all probably connected in some way with the later origin of Malabar and the existence of the big wall of the Western Ghats hindering free communication.

4. *Soil, Location, Rainfall.*—The soil on the shores of the back-waters and near the mouths of the rivers on the coast is alluvial, a mixture of river sand and silt, slightly impregnated with salt and peculiarly suited to the growth of the cocoanut palm. Elsewhere the prevailing soil is lateritic in origin—for by the process of disintegration the most valuable parts of the laterite are washed down yearly by the heavy rains from the surrounding hills into the paddy flats below, the resultant soil being a well balanced mixture of clay and sand on the whole well suited to paddy and, with careful cultivation, for growing cocoanuts and arecanuts, jack, pepper and ginger.

Location.—The situation of the region against the on-shore winds of the S.W. Monsoon with the long chain of mountains near the coast has its striking effects on rainfall. The seasons of rainfall and its amount are evidently dependent on it, and, through it, the nature and seasons of the activities of the people.

Rainfall.—January, February and March are the dry months when warm land winds blow; and the heat is tempered only by the cool evening breeze of the sea. Early in April the first distant roll of thunder is heard on the Ghats and the farmer knows that the time of sowing is on hand. Almost every evening storms break over the interior, sometimes extending as far as the coast. A bank of blue-black clouds gathers in the S.W., announcing the onset of the monsoon. The monsoon bursts about the second week of June when storms cease and the clouds descend in rain. In August the rains slacken, and at the end of September they die away. The winter monsoon in October and November brings some rain, and by the end of December dry weather usually sets in.

The actual amount of rain brought in by these winds is worthy of note. The S.W. monsoon brings nearly 75

per cent of the rain to the West Coast, and it rarely fails, so much so that the District Gazetteer remarks that real famine as understood elsewhere is rare here. The average for Malabar for the last 35 years is 117 inches and there are many parts receiving 300 inches in the year.

5. *Influence of Environment on Occupations.*—We are now in a position to look more closely into the relation between environment and occupations of the people.

Cultivation: Wet.—It is interesting to note that the Malabar ryot has a significant way of calculating rainfall in terms of his agricultural operations. For him the whole year falls into so many Jnattu Vela meaning literally farm work, reckoned according to the 27 constellations. One Jnattu Vela is roughly 14 days. During the first, *i.e.* Aswathi (the middle of April, Malayalam year—the beginning of Meda) even before the rainfall has set in, the first crop—the Kanni crop—is sown; for then the surface soil will have been sufficiently moistened by the early showers. Preparations of the field should have been carefully done during the previous 2 months as soon as the last crop of the season had been harvested, and by established agricultural practice the land should have undergone frequent ploughing not less than seven or eight times, and manure in the form of wood ashes and green manure—growing abundantly on most of the laterite hills—has been sufficiently added to the soil so that it is now ready for sowing. The seed is now sown dry and broadcast; what amount of rainfall may be expected in the succeeding Jnattu Vela or fortnights is at the fingers' ends for every farmer. The rain is expected to increase gradually during 'Krithikai,' 'Rohini,' and 'Makaram' (May-June) until as is well known during 'thiruvathirai' (the end of June and beginning of July) there should be, they would say, uninterrupted Itamuriyathe rainfall to facilitate a good crop. Later, as the seeds have been sown broadcast, a little weeding

is essential, which is done by hand by labourers particularly womenfolk. It is an interesting point to note that as at any moment the rain may be expected now they do this weeding, with the typical west coast palmyra leaf umbrella on, rightly called the hat umbrella *Thoppi Kuta* which would leave their hands free and yet would protect them from the rain. During the following fortnights after the paddy is in ear, rain must gradually lessen until about Kanni or September the first harvest is well in hand. During this period of growth the plants have to be watched at night, and small thatched temporary sheds appear in the farms, supported by bamboo sticks and roofed with straw.

Now the shrewd ryot expects good showers again not only to help him in preparing the field for the second crop but also to help him to raise the market price for his crop.

The second harvest is intimately connected with the N. E. Monsoon. It differs from the first crop in two respects : since the field cannot be prepared with wood-ashes and green plant manure, for there is not a long interval left, cowdung now plays a more important part in the composition of manure; and so many ploughings are not necessary. Again the seed is not sown broadcast, but seedlings prepared in nursery are transplanted. The preparation of these seedlings in the nurseries shows a great deal of adaptation to the limited rainfall at this season. To induce germination the seed is soaked in water for 24 hours, then wrapped in plantain leaves, available in plenty, and covered with a mat. On the third day it sprouts. These are then planted in nurseries. These nurseries are prepared with particular care being ploughed many times and liberally manured with ashes and liquid cowdung. After a certain period, they are transplanted in fields in bunches 8 inches apart; weeding is not resorted to in this crop as it is in the first crop.

In both crops the grain is separated from straw by beating handfuls on the ground with sticks or trodden underfoot by labourers. That which is wanted for seed must be beaten immediately after being cut and dried in the sun seven days, that wanted for consumption must all be beaten in the course of three days and requires only four days sunning to be sufficiently dry. It is winnowed by being poured out from a basket on to the threshing floor when a wind is blowing, and in the absence of the wind, fans are used.

The final stages in the marketing of paddy give rise to many bye-occupations especially to the womenfolk of the lower middle class, who carry the paddy from the farm-house to the landlord's store-house in their big bamboo baskets, six to eight feet high and three to five feet in diameter, again dry them on bamboo mats, and if rain interferes, carry the paddy into or from the verandah, later boil and then dry the paddy, and finally husk it and store it. Often in this season the pressure of such work leaves few hands free for other kinds of domestic work, and consequently wages for day labourers run higher than usual.

We have so far been concerned with paddy, the main produce of wet cultivation; some other produces raised by wet cultivation may also be mentioned. The raising of cucumbers, pumpkins, brinjals, watermelons and chillies also falls under the same head. But perhaps the most noteworthy is the '*Nendra*' plantain, the banana, so extensively cultivated. The fruit is large and coarse, used when unripe mainly for curries and frying, and when ripe, considered as a delicacy especially at the time of the popular '*onam*' festival.

Dry Cultivation.—Passing on to the dry cultivation, its chief features on the slope of the low hills which abound in the plains is the prevalent rotation of crops, ginger,

'modan' (a species of hill rice) gingelly and 'samai' or millet are the chief dry crops in rotation. Ginger comes in the first year and requires a little detailed consideration; preparations for 'modan' begin in August, and between August and the sowing of the crop in April the land is ploughed twelve times, the seed is sown with ten times its own weight in ashes and cowdung, and the crop which is weeded once is reaped in September. Gingelly is then put down and harvested in December or January. The 'samai' crop is raised in the following May and June and the land is then allowed to lie fallow for two, three or four years, according to its fertility.

As ginger is a very valuable crop and one of the distinctive agricultural products of Malabar a few details of its cultivation will be useful and interesting. A good soil and timely rainfall are its essential conditions. Operations begin in the first week of May: the ground is cleared of stones and the rank growth of the previous monsoon, and is then ploughed six times. Towards the end of the month the tubers are planted out in raised beds, twelve feet long by two feet broad, separated one from another by shallow trenches. In these beds shallow pits about four inches square are made at intervals of a foot and in each pit a tuber is placed on a small quantity of cattle manure. The tubers are then covered lightly with earth. The plot is then covered with bushes, both to act as manure and to keep off the sun. When the shoots appear above the ground at the end of June, the stems of the bushes are removed, and, by heaping up the mud round the edges, care is also taken to repair the ravages made on them by the heavy rains of the first monsoon. About the end of December the roots may be pulled out: Those intended for replanting are mixed with a little red mud and buried in a hole in the ground covered with planks; 8 or 9 days later the planks are removed and the tubers are exposed to the sun for two days,

and later put into the hole and kept covered till the next planting season.

It may be mentioned that an ordinary crop yields sixfold of green ginger, and the money return is correspondingly profitable to the cultivator; but the cultivator's stake in the crop is a very high one, a late monsoon and unusually heavy rain being alike disastrous.

Before marketing ginger, it is cured and bleached as it is on the bleaching that the flavour of ginger largely depends. The best ginger is exported to England and other European countries. We may note, too, that ginger is an important drug in the Indian Materia Medica.

Turmeric is cultivated in the same way as ginger: and when turmeric is offered for sale immediately after having been dug up, it is first boiled for a whole day in water and then for four or five days dried on mats in the sun.

Garden Cultivation.—Next to wet and dry crops comes the garden cultivation. The characteristic garden products are the cocoanut and areca-palm, the jack tree and the pepper vine, besides betal, mango, tamarind and plantain. The soil and climate of the region particularly suit the cultivation of these plants.

Economically, the most important, of course, is the cocoanut; products of the cocoanut such as oil copra, coir, yarn rope and oil cake figure largely in the exports of Malabar. In Cochin, in 1915, nearly 75 per cent of the exports valued at 232 lakhs was of these products. Apart from these commercial products every bit of the tree is also of value. It is tapped for toddy and from the toddy jaggery is prepared and arrack distilled, its leaves are used for thatching, its stem and the hard shell for fuel, its trunk is utilised for building.

The methods of its cultivation need not detain us here, as they are not essentially different from those in vogue in

the East Coast ; only four points in connection with the adjustment of its growth to the prevailing soil and seasonal conditions deserve notice :—

1. Since the soil reckoned fittest for cocoanut is a mixture of mud with a very large proportion of sand, it thrives best on the alluvial deposits of silt and sand found on the coast near the banks of rivers and inlets, and breakwaters.

2. The planting season here is generally just before the heavy monsoon showers, towards the end of May, the pits being usually $2\frac{1}{2}$ feet square and the same in depth, but in rocky places they are occasionally six feet in diameter ; in planting the young palm care is also taken to put some ashes and salt.

2. After the third year of its growth in June a trench one cubit deep is dug round the young tree at $1\frac{1}{2}$ cubits from the roots, to conserve the water near the tree during the rainy season and each tree is allowed a basketful of ashes. When the rains gradually weaken about the end of October, the whole garden is ploughed and the trenches are levelled. This process is repeated every year.

4. When the tree begins to flower for the first time, a trial is made by cutting a young flowering branch to ascertain whether it will be better fit for producing nuts or palm toddy ; if the latex flows freely it is better fitted for the latter purpose, otherwise it is fit only for producing nuts.

The arecanut palm is as common as the cocoanut, and its method of cultivating much the same too ; but two differences are noticeable. 1. Separate plantations of them are not common, with the notable exception of Ponnani taluk, but they are planted promiscuously with other trees in the garden. 2. It is much more liable to suffer from drought. The planting season is the same, just before monsoon, but in planting, three arecanut palms can be

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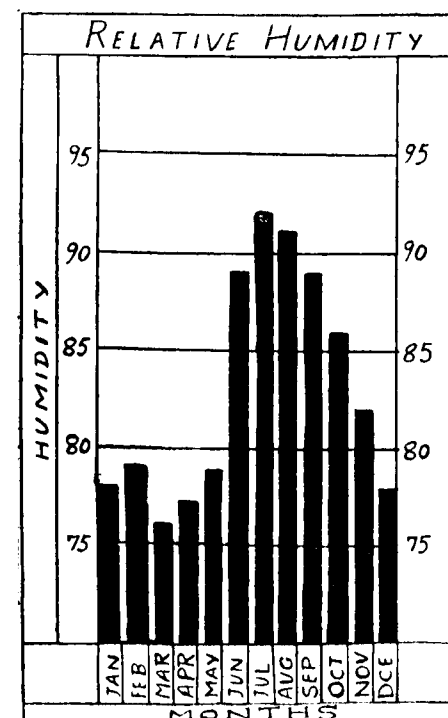
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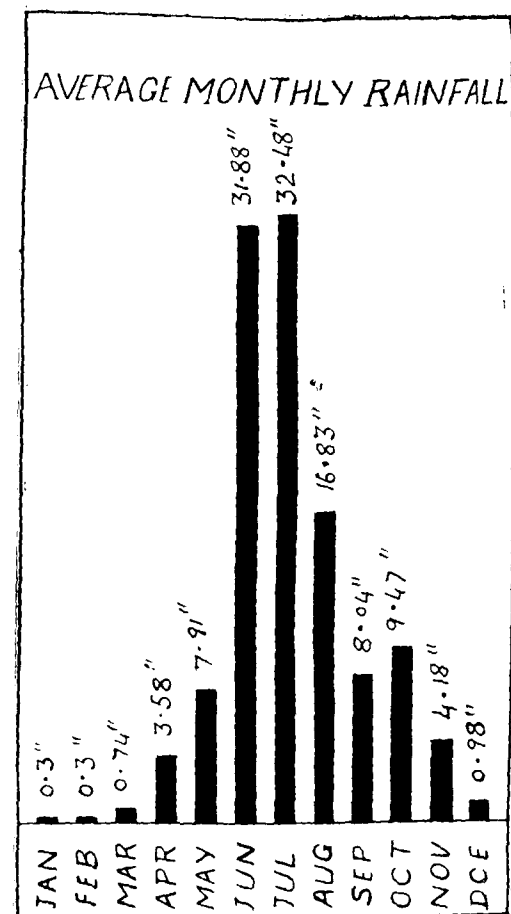
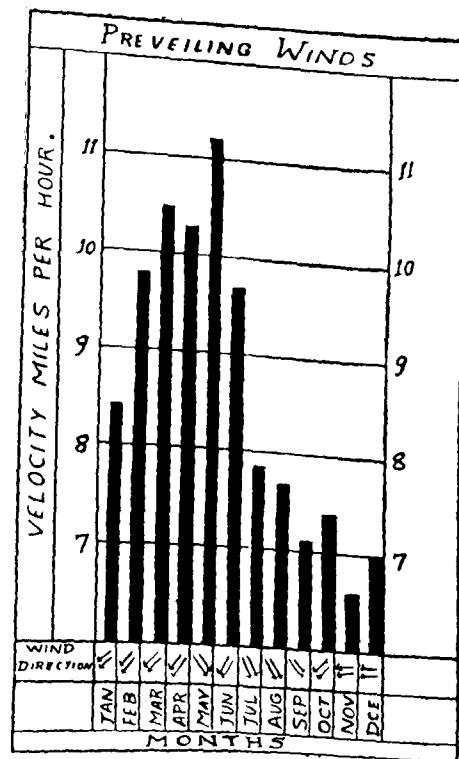
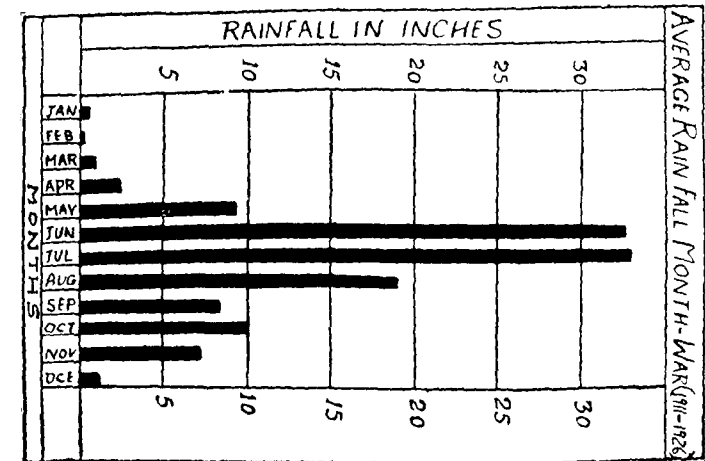
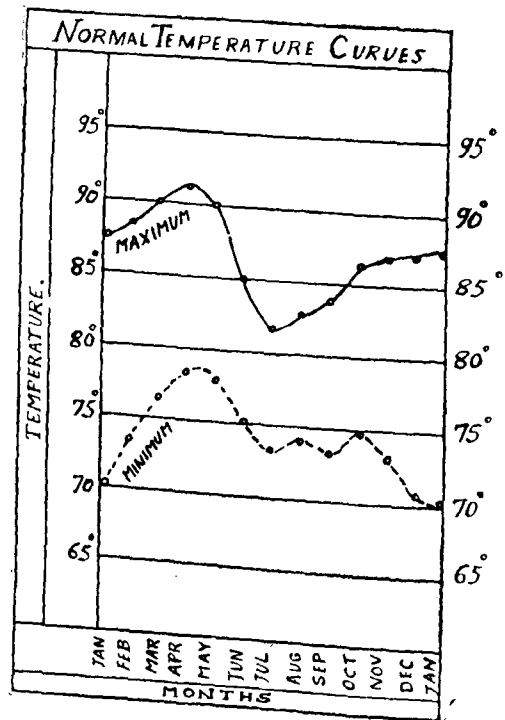
It should be noted that after the work of the organism M7 was observed by Dr. Fowler, other organisms which are nitrifiers have been found to do the work of purification in sewage; and these are availed in the Activated Sludge Process. These are two sets of organisms known as nitrosomonas and nitromonas. The nitrosomonas oxidise the ammonia in sewage to nitrous acid and the nitromonas convert the nitrous acid into nitric acid. These two organisms have been found to be quite essential for the efficient working of the process. If these organisms are not present any amount of blowing the air alone does not effect any change in the sewage. The purification of sewage takes place in three stages. In the first stage only classification or clotting of the colloidal matter takes place. In the second stage the carbonaceous matter gets oxidised, and in the third or final stage nitrification takes place where all the ammonia in the sewage gets converted into nitric acid.

These stages have been clearly observed and all these are effected in a single process. This is quite characteristic of any Activated Sludge Plant. It has also been found that under suitable conditions Activated Sludge may get acclimatised to treat different kinds of trade wastes also.

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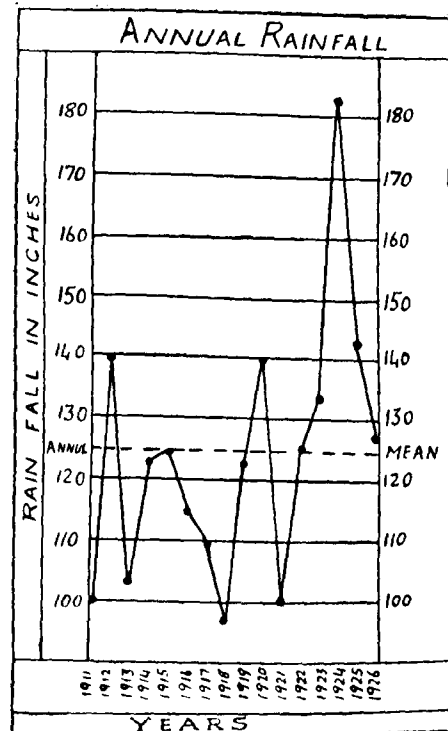
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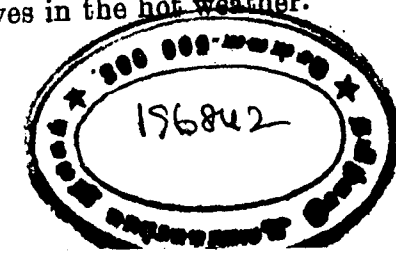


planted between two cocoanut palms; and moreover the betel-vine is also usually trained over the arecanut. The nuts are gathered thrice a year in January, February and March; its stem is very valuable, and it is recorded that the best bows in the old Malabar Wars were made of it.

The betel-vine being twined about the stem of the areca palm, it shares with that palm the watering in the dry months and manuring. At the end of the monsoon in October the old vine is taken down, rolled up and buried once more at the foot of the palm with only the top showing. By the end of February it is 8 to 10 feet high and the young leaves are ready to be picked. They are picked twice a month till October, and during the monsoon months the vine is very leafy. It is a noticeable feature of Malabar betel leaf that it is often much broader and thicker than the East Coast variety. Another vine, typical of Malabar and historically very famous, is the pepper which is native to the West Coast. It requires a heavy rainfall of 100" especially in the blossoming season in June and July. Just as the areca palm is the typical prop of the betel vine, the 'murika' tree is the standing prop for pepper. It grows quickly and is planted close together about six feet apart. It is planted before the monsoon, and when it has struck root, cuttings from healthy pepper vine are planted at their stem two feet long, planted at two feet deep, about six being trained to one prop. Sometimes six or seven cuttings are taken, each a cubit in length, and put in a basket with their upper end sloping towards the tree, the basket being then filled with earth and buried in the ground at the foot of the tree. However planted, its after treatment is the same. Plantains are cultivated in between the props to provide shade, the soil is dug up twice a year, shoots of the vine are tied with fibre to the prop till it is six or seven feet high; and the roots are also covered with leaves in the hot weather.



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In June they flower ; in July and August the berries form ; and by the end of January they are ripe for gathering.

The picking is interesting to see. The men who collect the berries go up ladders with baskets slung from the neck, and with nimble fingers twist off the strings of berries and collect them in the basket ; on coming down, women and children all join in treading on berries to separate them from the small twigs, and then they spread them out in the sun for two or three days on mats or on a piece of ground purposely made smooth. The northern taluks of Malabar appear to produce the best pepper as the soil there suits it well. The export of pepper is considerable, nearly 3 per cent. of the total.

One important garden produce remains to be considered, though not commercially valuable. Jack is a substantial item in the dietary of the poor in the hot weather when grain is rather scarce and dear. It thrives best on clayey soils ; its fruit is eaten green or ripe ; its timber is valuable for carpentry and furniture ; and it also contains some useful dye-stuff.

Plantations.—Besides the wet, dry, and garden cultivation noticed above, there are special plantations, but as they are not common or typical features of rural activities, a mere mention of them is made here. They are confined to Wynad at the foot of the Ghats. The chief plantations are of chinchona, coffee, tea and rubber, the latter two being relatively more important than the former. These plantations attract, however, a number of labourers from other parts of Malabar.

Bye-Occupations.—Even a meagre survey of the agricultural occupations must pass in review the varied bye-occupations of the rural population. We have already considered some of those connected with paddy ; another

group centres round the cocoanut. Toddy-drawing is said to support nearly 50,000. The toddy-drawer's outfit is simple : " a knife in a wooden case, a bow weighted with lead, a few pots and two small rings of rope with which to climb complete the tale." The preparation of the copra and oil-pressing support a large number ; the manufacture of coir-yarn, rope and netting support nearly 40,000. It is noticeable that this industry chiefly centres round banks of water—along rivers, back-waters and creeks, as the husks of the cocoanut have to soak for 6 months or even a longer period.

Other industries are the making of palm-leaf hats, umbrellas, baskets, mats and winnowing fans. These are carried on in almost every part of the district ; the first two are peculiar to the West Coast, the quaint umbrella hat serves to protect the field labourer from sun and rain and is also largely used by the villagers ; its frame-work is made of bamboo, and it is covered with leaves of the palmyra. Such umbrellas are very cheap, too, costing between six pies and 2 annas. Coarse mats made of bamboo, cocoanut leaves, etc., are very cheap and used in all households. Good baskets are made of reeds, bamboos and rattans and used for domestic purposes and in fields for carrying seeds, manure and the like. Fans and grass mats are also common.

The predominance of agricultural occupations in regions favoured by Nature with the requisite soil and climatic conditions, should not, however, blind us to two other factors which are also dependant on the same natural conditions, viz., the abundance of forest lands, and the large number of inland Waterways and the sea.

Fishing.—The inland waterways and the sea play an important part not only in providing a convenient means of inland and coastal transport especially for the bulky goods

like cocoanuts, but also in providing occupation for a large number of labourers in making and very often repairing bridges and for an equally large number of ferry men.

They also support a large fishing population. The following description taken from the Gazetteer is interesting:—

“The arrival of the boats is the great event of the day in a fishing village. Willing hands help to drag them up the beach, and an eager crowd gathers around each boat, discussing the catch and haggling over the price. The pile of fish soon melts away, and a string of coolies each with a basket of fish on his head starts off at a sling trot into the interior and soon distribute the catch over a large area.”

Forest occupations.—Quite in keeping with the heavy rainfall of the region, the proportion of the forest to the whole area is not inconsiderable—4 lakhs of acres out of 32. Apart from their economic value reckoned in terms of timber produce, the flora of the district, which ranges through every variation of climate and soil, from the purely tropical zone of the coast to the cold mountain tops of the higher ranges of the Western Ghats, with a rainfall nowhere less than 40” and often more than 100”, is so varied and interesting. It is said that almost all the Indian Botanical orders are represented, and as an eminent writer puts it “in the monsoon months, the glorious beauty of the vegetation beggars description.” About five miles from the foot of the Ghat slopes begin the primeval forests, and from this point almost to their top-most peaks, magnificent timber trees, bamboos and rattans, giant creepers, orchids, ferns and mosses abound in endless profusion; and flowering trees are a conspicuous feature of the Malabar Flora.”

From the Geographical point of view, the forest growth of the district falls naturally into five well-marked zones,



differing in climate, soil and rainfall and the resultant flora :

1. the deciduous forests of the plains and the lower Ghat slopes up to an elevation of 1500 ft. (the chief timber trees being the teak, rosewood and 'irul');
2. the moist evergreen forests of the ghat slopes up to an elevation of 4,000 feet trees growing to giant heights and with their variety of foliage and glory of colours beautiful in the extreme, the chief timber trees being the cedar, ebony and iron wood);
3. the evergreen shola forests in the higher slopes;
4. the bamboo forests of the Wynad Plateau;
- and 5. the deciduous forests of the Wynad Plateau, differing from those of the plains in the marked absence of the valuable Irul tree.

Commercially, however, the teak forests of Nilambur are more valuable than the rest, the trees in favourable regions growing up to a height of 120 ft. and 7ft. in girth. In recent times their economic value has been one prime consideration in the expansion of Railway communication by the newly opened Nilambur-Shoranur Railway. The forests are also the home of wild elephants, whose capture and taming form an interesting feature of forest life; incidentally it may be remarked that elephants are the chief attraction of all temple festivals of Malabar.

In relation to the occupations and trade of the people, especially of the Moplah community, the forests play a prominent part. They support thousands of carpenters and sawyers, wood cutters, cask and barrel makers and furniture makers. They have made Calicut one of the most important timber emporiums in India, and the Kallayi Works near that town are justly famous. In the season the river at Kallayi is a wonderful sight, one scarcely sees the water for the thousands of logs floating on its surface. The forests also supply many valuable drugs for the trade and a good quantity of honey for local use.

Though unconnected with forests, the mention of Kallayi reminds us of another important industry of South Malabar, *viz.*, the Tile Works which are mainly in the hands of the Basel Mission Establishments. Here we have only to note how this industry has been favoured by the fine clayey soil obtained from paddy flats near river banks, which is often stored for a year, moistened with water and kneaded with river sand.

6 *The Malabari in his homestead.*—So far we have been mainly concerned with occupations of the people in relation to natural factors which have given their typical character to and largely determined them. This must now be supplemented by a glance at the daily life of the Malabari in his homestead in order to get a real picture of Malabar rural life. It may be said in this connection that the population of Malabar is almost wholly rural in distribution, 92 per cent. living in rural areas, and the rest 8 per cent. living in towns, which are much more rural in character than urban.

The rural type.—I have rather advisedly used the term 'rural' throughout because the rural settlement here is essentially different from the village type of the rest of the presidency, where people live more or less congregated. No doubt in places where there are temples, people live more closely than elsewhere, the higher castes living in the vicinity of the temple; and latterly too, there has been a tendency among the Mohamadan community who largely take interest in retail trade to build homes on both sides of the roads. But we may safely say that the temple and village do not determine the character of the Malabar rural settlements. Its typical character is its scattered nature. This rural type is in itself a geographical fact of the region.

For our purpose we need only show that essential influences of Geographical environment appear in the Malabar house building too.

House Construction.—One accustomed to the terraced house of the East Coast looks in vain for a single terraced house on the other side of the Ghats. The houses of people of lower castes are small, window-less single-roomed mud huts thatched with palmyra leaves, while the better ones are built of laterite, set in mud, the walls being smoothly plastered with *chunam* and white-washed; others are built of mud, by no means lacking in durability. They are usually thatched with plaited cocoanut leaves and leaves of the palmyra, or straw, or in the better cases tiled. The frame work to support the roof, as is to be expected, is either of bamboo or of teak and 'irul.'

Daily Life.—It is highly interesting to watch a middle class Malayali in his daily round at his house, or in the stream or temple or occasionally in the market. Early morning sees him in the neighbouring stream or tank, be it the coldest season. The tooth powder known to him is naturally the husk of the paddy burnt, unlike the stick of the margosa, so popular in the East Coast, while for cleaning his tongue he has picked up a mango leaf on the way or the small chip of the cocoanut; he loves a plunge bath, and often bathes once again in the evening, the younger folk enjoying a good swim. There is sanctity attached to the plunge bath, for the customary rule is that no one who has not his body as well as head bathed in water is considered as pure or can enter the temple or even his own house. Speaking for myself, on coming out of Malabar to these parts for the first time, I was at a loss to understand the common distinction here between '*culy*' and '*snanam*', neither of which, moreover, appears to have any connection with the right of entering a temple, much less one's own house.

The dress of the Malayali is of the simplest kind. In the hot climate, which by the way maintains a striking uniformity of temperature throughout the year, more clothes perhaps are burdensome. Gandhiji during his tour through

the district observed that men and women of Malabar were the most simply dressed in the whole of India; the length of cloth needed for the women is only four yards—a sharp contrast, as he calls it, to the Tamil sister with her ten yards. A small cloth worn over her breast completes the equipment in the case of rich ladies. The men wear a white cloth round the waist tucked in and hanging loose to the knees or the ankles as in the East Coast twisted round the legs and carry a small upper cloth thrown over the shoulder. After bath, if there is a temple in the neighbourhood, he goes over there and after offering his prayer, receives from the Nambudri priest his '*prasadam*' of '*Tulasi*' leaf and sandal paste and has his '*Pradakshinam*' round the sacred Banyan tree and comes home.

Before he arrives, the faithful maid servant in the richer houses or his own housewife has neatly cleaned the mud floor with cowdung, wiped clean with a small piece of the stem of the arecanut plant.

His staple food of course is rice, but the details are interesting in this connection. In contrast to the East Coast, even in the richest houses boiled rice is the rule. A good plantain leaf from his own house garden makes an excellent plate. Vegetables are also home-grown, especially green plantain so common, and cocoanut is invariably mixed with curries which are of course, fried in cocoanut oil. In particular seasons mango and jack, green or ripe, find a place, at other times '*Kondattams*' prepared out of the latter and fried in cocoanut oil is a delicacy. I must also mention that in the diet of those who are used to non-vegetarian dishes, fish is an important item, especially the popular "*Mathi*."

If he goes out, he uses the common umbrella of palmyra leaf, or in the more modern fashion, if he can afford a cloth umbrella, he must needs have a second covering put over it as a security against the heavy rains; if able to afford a

footwear, he goes in for wooden slippers, instead of the leather ones, evidently unsuited to a wet region.

At night he has his typically West Coast grass mat on which he quietly goes off to sleep, not forgetting to give his domestic animals, often not well off in this wet climate, their daily quota of bran and water mixed with cocoanut oil-cake besides a bundle of straw. Here incidentally we may note that the cowsheds are invariably paved with the trunk of the palmyra tree, cut in uniform pieces.

Festivals.—These little details of domestic life are probably trivial, but they are typical showing unmistakably and clearly the adaptation to one's environment which geography seeks to explain. The same adaptation is clearly brought out even in the occasional festivals which enliven the humdrum monotony of the rural area. These occasions are closely connected with agriculture which in its turn is bound up with the seasons of rainfall. The first important occasion of the year is at the end of the hot weather in April and is called the '*Vishu*' when a forecast of the agricultural prospects is made with the help of the local astrologer. Then comes the ceremony of bringing in the first fruits, the '*Nirai*' as it is called, usually in August; the house is well cleaned and whitewashed, and the first ripe fruit of the field is solemnly taken into the house with pomp and ceremony by the local priests; the lady of the house meets it with a lighted lamp, the stalk is then brought into the house—all cry '*Fill fill, increase, increase, fill this house, baskets and stomachs of the children*'—then it is carried three times round the house; the stalk is placed on a plantain leaf; offering is made to God Ganapathy and the leaves and ears of the paddy are stuck with cowdung in the front part of the house. A sumptuous feast brings the ceremony to a close. A few days later, when the harvest is in sight, *i.e.*, in September, the formal cooking and eating

of the new rice is sanctified by a ceremony called 'Puthari' meaning new rice. Crowning all, comes the famous—*Onam* festival; for everyone it is expected to be a time of comparative plenty and is an occasion of general rejoicing, and is accompanied by giving of presents, games and songs, and not the least important, sumptuous feasts; as a side issue, we notice that ryots incur more debts during this season in anticipation of the Kanni harvest.

Visit to Village Fair.—Let us close this part of our picture by a visit to a rural fair which will well serve to summarise the main points mentioned so far. Rural fairs in Malabar are held once a week. We see in a typical fair the staple articles of food, rice and fish, vegetables like brinjals, pumpkin, plantain, cocoanut, chillies, ginger and in their season mango and jack, other necessities like betel and areca-nut, ropes, palm-leaf umbrellas, bamboo mats and grass mats, young cocoanut and plantain plants, ginger and turmeric seeds, bundles of grass for cows and lastly bundles of firewood, cut from the nearest forest. Each article has of course its customers according to the varying needs of the week, and by night this market in the open air disperses to meet again the same day next week.

7. *Some Problems of Local Administration.*—Let me close this picture of simple West Coast rural life by a glance at a few of the problems of local administration which have a distinct geographic bearing. It is evident that the Government expenditure on Irrigation here is nil, but 50 per cent. of the expenditure of Local Boards has been on roads; yet the complaint is frequently heard that roads here are far from being satisfactory. The cause is obvious. The railway authorities fight shy of the enormous expenses on the up-keep of lines and bridges which by the way are more than thrice those in other parts. To witness the construction of a new railway line as for example, the recently laid Shoranur-

Nilambur line, opens one's eyes to the large part the surface features have played in delaying the opening up of rural parts by railway communication. Our general impression about Malabar is, however fairly clear; as the English traveller frankly remarked a century ago: "All Malabar may indeed be considered a healthy country and one upon which Nature has bestowed uncommon advantages."

An ordinary meeting of the Madras Geographical Association was held at 5-30 p.m. on Wednesday the 1st February, 1928, in the English Lecture Hall, Presidency College, when Mr. A. Appadorai, M.A., (Hons.) of the Ramakrishna Mission Residential High School, Mylapore, read a very interesting paper on "Rural Life in Malabar" M. A. Candeth, Esq., M.A., Bar-at-Law, Deputy Director of Public Instruction, occupied the chair.

After Mr. Appadorai's paper (printed above) was read, an interesting discussion followed.

Mr. C. V. Narayana Iyer pointed out that there is a general agreement between the life described in the Sangam literature and the life in Malabar.

Miss Birdseye wanted to know further details of the commercial aspect of the collection and distribution of cocoanut.

The Chairman pointed out that the trade in cocoanut was not well organised till about 20 or 25 years ago. It was mainly a domestic industry, every house planting its cocoanut, and collecting it mainly for its own use. The price of cocoanut was appreciably low being Rs. 20 to 25 per 1,000. Then later on, after about 1907, and later still during the war, there was a great increase in its commercial value, its price rising up to Rs. 60 and the port of Cochin helping to distribute it to the world market. He pointed out that when he was in England in 1907-10 he noted that they used to extract cocoanut oil even from the oil-cake exported from these parts. Every one that could began to plant cocoanuts in all available space, and began even to convert fields into cocoanut gardens. It was clear, he said, that this was the one industry where it was

difficult to replace the 'small man' by large-scale business men. Latterly there has also been the attempt made by Tata & Co. to find another use for the cocoanut in making 'coco-gem'; but it is an interesting fact that coco-gem does not find a good market in Malabar itself owing to its difference in taste, and partly due to religious reasons, its sale is chiefly confined to the European, centres in India.

He also pointed out that in the three northern taluks of Malabar, where the country is more hilly, the cultivation of pepper and cocoanut is more in evidence than paddy itself, and its reaction on life is seen in the less importance given to such festivals as 'Nirai' or bringing in of rice which is so important in the midland and south.

Referring to the historically very important crop, pepper, he said that, years ago pepper cost about Rs. 300 per cwt. About 1905 the price of pepper went down to Rs. 200 and 150. About three years ago it again went up to about Rs. 500, a good example of speculation, and the country land-owners were said to have made much money out of it.

Referring to the point of similarity of culture raised in the discussion, he said that Malabar is a peculiarly interesting country in this respect. The uniform Brahminic culture prevalent in the rest of India has not succeeded in crushing out the survivals of local culture. With copious references to his own personal experiences, he pointed out that many local customs survive to this very day in Malabar unlike other parts of India—the custom of sacrificing animals on occasions of house-building, the primitive idea of shedding human blood, the prevalence of magic, the little regard paid to breeding and looking after cows, snake worship, etc., the simple yet elegant clothing of women in Malabar, their extreme conservatism until recent times, as is evidenced by the fact that in his own home region only one woman had crossed a certain river until 1907 the crossing of which is prohibited—only 4 by 1910, and even now many do so under the fiction of making a pilgrimage to the temple at Guruvayur in the South. But he said that all these points of local custom, though deeply interesting, did not have much of geographical bearing and so he would stop.

The meeting then dispersed, after the usual votes of thanks.

Annual Meeting of the Association.

The Second Annual Meeting of the Association was held at 5 p.m. on 31—3—28 in the English Lecture Hall, Presidency College, with Mr. A. Swaminatha Iyer in the Chair.

The Annual Report was read and adopted.

The Secretary then made a statement on the proposed Summer School of Geography, explaining its origin and prospect of its success, and assured the general body that no part of the cost would be thrown on the general funds of the Association.

The election of office-bearers for the new year then took place with the following result:—

President: Rao Bahadur M.R.Ry. H. Narayana Rao
Avl., M.A.

Vice-Presidents: Miss I. H. Lowe, M.Sc., F.R.G.S.

Miss E. D. Birdseye, B.Sc., Dip. in
Geo.

Secretary: N. Subrahmanyam, M.A., L.T.

Treasurer: K. K. Raghavacharya, B.A.

Moffusil Member: K. Rangaswamy Iyengar, B.A., L.T.

Other Members of Council: M. Subramania Iyer, B.A.,
B.L. (Editor of the
Journal).

G. D. Watkins, B.Sc., F.R.G.S.

A. Swaminatha Iyer, B.A.

On the proposal of Mr. C. V. Narayana Iyer, a vote of thanks was carried to the Members of the Working Council of the previous year.

The Meeting closed with a vote of thanks to the Chair.

Regional Surveys.

Fifth Form.

During the last two years of the S.S.L.C. course, the tendency is for the subject of Geography to be forgotten. The Syllabus has no place for the subject in its time table, and so it is taught only in a very few schools in these forms. It is hoped, however, that before long Geography will find a place in the work of these two classes. Of course the S.S.L.C. Syllabus will need to be changed considerably, and that curious hybrid, called Historical Geography, will have to be decently buried in a place where resurrection is impossible, and then we can begin our work in earnest. Whatever else we do with Geography, however, it is to be hoped that some room will be reserved for the work of a Regional Survey of the local area.

So far, in our examination of the work, contributed by the various classes to this Survey, we have found that the foundations of the Survey have been laid there. The physical factors of rock, soil and water-supply in the area have been reduced to the form of maps, and on this bed-rock, the facts of flora and fauna have been built. The facts of climate in the district have also been plotted, and a working knowledge obtained for future work. As it were, the background for the study of the human element in the area is now filled in, and it remains for the Vth and VIth Forms to deal with the work of Man in the area.

The work of the Fifth Form is then to trace the historical development of the area, showing how the village or town grew, or the port evolved, and why the area under discussion is such as it is commercially, industrially, and socially. Now is the time for the pictures gathered together in the lower classes to be studied scientifically. Perhaps some of them are pictures of the area in earlier times, and if so, they should be arranged in chronological order to help in the work later.

The first thing to do is to draw maps of the area at different periods in its history. Old records will often yield such maps,

showing the tract at different periods in its history. When as many as possible of these maps have been gathered together, they will be placed in chronological order, and the class will begin its questionings. What is there in the physical map to cause a town to spring up just there? Perhaps it is that just there a break occurs in the long range of hills, or perhaps a long river takes a sudden turn at this point, so that merchandise will tend to leave it here, and take to the roads.

Perhaps two important roads cross here, or perhaps a good natural harbour is found at this point. Again, it may be that the town or village has grown around a shrine, temple or fair, or that certain facilities for some industry are to be found here, and not elsewhere. In any case the boys will find it great fun to hazard guesses, and then ascertain from the maps and from early records whether this was so or not.

Now having discovered the reason for the origin of the town, it is necessary to trace its development through the centuries. The old maps will help in this respect, for being placed chronologically they will give ideas of the directions in which the town grew. Again questions arise as to why the place grew in those directions, and not in others. The reasons will soon suggest themselves if the history of the place is taken along with its geographical development. This extension can be seen to be due to the growth of the harbour, and that later one to cope with the growth of the industrial area. Then this next one, in chronological order, is an extension towards the railway workshops, as people sought to live near their work. Later still the growth of these suburbs suggests that the congested area of the old town is being deserted for better and healthier environments, only to be found in the purer air of the country-side.

So the study goes on until we come to the most recent map showing the position of the town to-day. This is the finished product of our study. Alongside the work, just outlined, other very interesting work can be done. Pictures of the main buildings have already been gathered, and if the date of building of each of these is also ascertained, and the pictures arranged in order of date an interesting record of the development of architecture is thus compiled.

for the district. In a fairly large centre the comparison of architecture belonging to different peoples such as Hindu temples, Mohammedan mosques and places of worship belonging to other types of religion forms a very good exercise.

Other exercises will no doubt occur to the mind of teachers as they think over this question of a historical survey of the area, and not least of these will be the possibility of future developments of the district. This will lead us to the question of the work of the Sixth Form in this Survey and that can be dealt with next time.

News and Notes.

The Annual Meeting, which was held on 31st March, 1928, marks the completion of the second year. The work done in this year has been mainly of an evangelical character, preparing the mind of the educated public here to a just and proper conception of Geography as a science and as a subject of Academical Studies. The record of progress in this year as in the past has been satisfactory.

The Summer School of Geography organised by this Association has been a welcome departure from the usual routine of business transacted by similar bodies. Those that gathered at Saidapet, in April 1928, have come from all over the Presidency; some were deputed by Mission Bodies, District Boards, and Native States, others paid from their own pocket. They were mostly teachers, and, among them were Masters of Arts in different subjects, B.A.'s and L.T.'s. Some of them had grown grey in teaching Geography in the High Schools. Everybody had a strenuous time of it during the fortnight the school was run; and a crowded programme was got through, variegated with excursions and practical work, and lectures.

It is not to be expected that the work done in such short time could be of permanent value. But the ice has been broken; the existence of sound material and great enthusiasm has been brought to light; there has been a keener realisation of the importance of

practical work (which is only too often lost sight of in academical syllabuses here); and the students have had a Pisgah-sight of the promised land.

Attention is invited to the fact that the Madras University is making up for lost time by adding largely to the Geography Section of the University Library.

BOOKS AND JOURNALS RECEIVED.

Geography in Education and Citizenship: by W. H. Barker. (University of London Press.) Price 6sh. net.

Essentials of Commercial Geography: by M. L. Mukerji and L. D. Stamp. (Longmans, Green and Co.) Price 2 Rs.

An Intermediate Commercial Geography: Part I. Commodities and World Trade: by L. D. Stamp. (Longmans, Green and Co.) Price 7sh. 6d.

Bacon's Excelsior Geographies: Part I—Physical: The Sun's Influence upon Life on the Earth: by E. R. Shearmur. (G. W. Bacon & Co., London.) Price: Paper 2sh.; Cloth 2/6d.

Indian Agriculture: (India of To-day, Vol. VIII) by A. Howard and G. L. C. Howard. (Oxford University Press.) Price Rs. 2-8-0.

Climate and Geography: by O. J. R. Howarth. (Oxford University Press.)

Regional Geography of Europe: by N. E. Macmunn and G. Cosser. (Clarendon Press, Oxford.) Price 4sh. 6d.

The World and India: by P. C. Wren and A. J. Herbertson. (Oxford University Press.) Price Re. 1—4.

Man's Work: by V. Seymour Bryant and T. H. Hughes. (Clarendon Press, Oxford.) Price

Rambles in the West: by Dewan Bahadur C. V. Visvanatha Sastri.

Enlarged Atlas for Indian Schools: W. and A. K. Johnston's (Macmillan & Co., Madras.

Elementary Exercises in Map Work: by V. C. Spary. (London University Press.) Price 9d.

Intermediate Mapping Book : by V. C. Spary. (London University Press.) Price 9d.

Senior Exercises in Mapping and Map-reading : by V. C. Spary. (London University Press.) Price 1sh.

The Students' Own Contour Atlas and Geography : (The Grant Educational Co., London).

The British Isles (5d.); **Europe** (5d.); **America** (6d.); **The British Colonies** (7d.); **The World** (7d.).

Report of the Department of Industries, Madras, for the year ended 31st March, 1929 (Superintendent, Government Press, Madras.) Price 12 annas.

Digest of the Operations of the Department of Agriculture, Madras, in December 1927 : Digest No. 66. (Superintendent, Government Press, Madras.)

Rural India : Vol. II, No. 8, February 1928.

The Educational Review : Vol. XXXIV, Nos. 1 and 2, January and February, 1928.

The Journal of the Travancore Teachers' Association : Vol. VII, No. 1, March, 1928.

The South Indian Teacher : Vol. I. Nos. 1, 2, and 3, February, March and April, 1928.

The Quarterly Journal of the Andhra Historical Society : Vol. II, Part 2, October, 1927.

The Cross-Words Magazine : Vol. I. No. 1, March, 1928.



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